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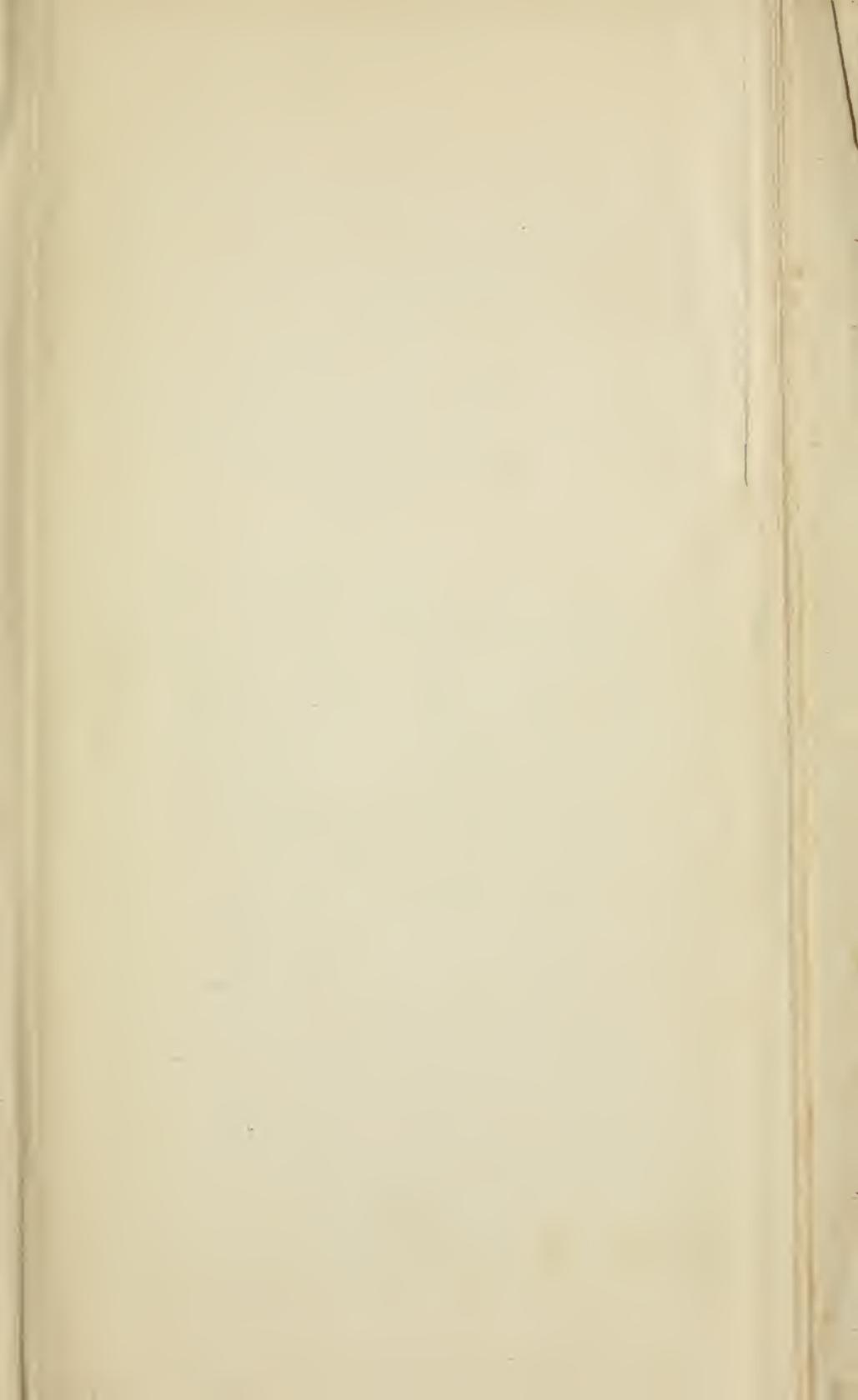
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THE CAPE OF GOOD HOPE. .







CAPE TOWN 1874

FRANK WATERS





DESCRIPTIVE HANDBOOK  
OF  
**THE CAPE COLONY:**

ITS CONDITION AND RESOURCES.

BY

**JOHN NOBLE,**

CLERK OF THE HOUSE OF ASSEMBLY, CAPE OF GOOD HOPE.

WITH MAP AND ILLUSTRATIONS.

CAPE TOWN: J. C. JUTA.

LONDON:

E. STANFORD, 55, CHARING CROSS.

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1875.

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## PREFACE.

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A LITTLE more than twelve months ago, it was represented to me that a Descriptive Handbook of the Colony, for the information of intending emigrants in England and elsewhere, was highly necessary, and I was solicited to undertake the preparation of one. A personal acquaintance with the greater part of the country, as well as knowledge of its recent remarkable advancement in material prosperity, induced me to accept the task, although fully conscious that there were others more qualified for the work, if they had only the inclination or time to do it.

The object I set before myself was to present an impartial account of the aspect and condition of the various divisions of the Colony; to inform the reader of its liberal land laws, its agricultural and pastoral resources, its mineral wealth, its industries, and its commercial progress; and thus to direct attention to the favourable field it offers for the profitable employment of intelligent industry and moderate capital, as well as to the moral and social advantages it

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possesses, compared with many new countries, from having been for a long time occupied by settled European society.

There was no lack of material in the shape of public and private information from which to compile this work: the difficulty was to compress it within the compass of a small handbook, and at the same time to pourtray all the principal features and matters of special interest throughout the Colony. I have endeavoured to do this as briefly as was consistent with general accuracy, and without any pretension whatever to literary finish or excellence. A desire expressed to limit the Handbook to about three hundred pages, has caused me to leave over extended notices of the Political and Civil Institutions, the Flora and Fauna, and other subjects, for a larger publication, hereafter to be issued, which will embrace a description of the Border States and Territories.

In the statistical information given in the body of the present volume, I was compelled to adopt, in regard to population and stock, the returns of the official census taken in 1865, supplemented by later statistics obtained from several reliable authorities, from Parliamentary papers, and from the Tables of Trade furnished by the Customs Department. The difficulty and delay in the execution of the printing, arising from circumstances beyond control, has,

however, enabled me to append a portion of the results of the Census of the present year.

I now beg to acknowledge my obligations to those gentlemen, official and private, in various parts of the Colony who have assisted me with information, and among whom I may take the liberty of specially mentioning the Honourable the Colonial Secretary, the Surveyor-General, Mr. Hellier, Mr. Reitz, Mr. Dowling, and Dr. Atherstone.

JOHN NOBLE.

Chambers, House of Assembly,  
Cape Town, April, 1875.



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## ILLUSTRATIONS AND MAP.

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THE LITHOGRAPH OF THE ALFRED DOCKS is executed by Messrs. Hanhart of London, from a photograph taken by Mr. Moore of Cape Town, for the Table Bay Harbour Board. It shows distinctly the entrance and inner basin, with the mail packets lying at their usual berths,—the Union Company's steamer *Nyanza* at the East Quay, and the Donald Currie's steam-ship *Windsor Castle*, with the coasting steamer *Florence* alongside, at the North Quay. The excavations for the Graving Dock, now in progress, are noticeable at the left corner of the picture.

PORT ELIZABETH MARKET-SQUARE AND TOWN-HALL (page 170) is from a photograph by Mr. Bruton, of Port Elizabeth and Cape Town.

THE MAP OF SOUTH AFRICA, originally compiled by H. Hall, Esq., R.E.D., but revised and corrected to date, is issued specially for this volume, from the geographical establishment of Mr. Stanford, London. It represents all the Districts into which the Colony is at present divided, and shows the lines of the proposed new railways. It also embraces the Territories and States adjoining the Colony, to nearly the 25th parallel of south latitude, and gives the territorial limits of each, as recognized by Her Majesty's Government.

## ERRATA.

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The reader is requested to correct the following misprints:—

- In page 4, line 7, for "west boarder" read "west *border*."  
" " 24, " 23, for "1851" read "1850."  
" " 27, " 20, for "a knowledge" read "*or* knowledge."  
" " 75, " 29, for "250" miles read "300 miles."  
" " 171, " 15, for "W. Dunn & Co." read "*Mackie*, Dunn & Co.'s"  
" " 176, " 30, for "Belham's" read "*Brehm's*."  
" " 177, " 30, for "200,000 bales" read "100,000 bales."  
" " 188, " 21, for "cressulas" read "*crassulas*."  
" " 191, " 4, for "modulates" read "*moderates*."  
" " 192, " 34, for "orations" read "*oratorios*."  
" " 203, " 12, for "Glen Thorn" read "Glen Lyndoch."  
" " 204, " 2, for "valued at" read "returned at."  
" " 215, " 9, for "25,000 lb. per acre," read 2,500 lb. per acre."  
" " 227, " 4, for "East London" read "East Griqualand."  
" " 234, " 9, for "north-easter" read "*south-easter*."  
" " 268, " 35, for "100 chickens" read "200 chickens."



## PHYSICAL FEATURES.

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A reference to the map will give the reader some idea of the vast extent of territory which has been colonized by Europeans in South Africa. From the extreme promontory where Cape L'Agulhas fronts the Southern Ocean in lat.  $34^{\circ} 50'$  S., towns, villages, and settlers' homesteads and flocks stretch northwards over the country till about the twenty-second parallel of latitude. The area thus occupied, which may be roughly estimated at about 500,000 square miles, comprises five separate settlements, namely:—1, The Cape of Good Hope; 2, Griqualand West; and 3, Natal,—all under British dominion; 4, The Orange Free State; and 5, The Transvaal,—which are under independent Republican governments.

The "Cape Colony"—as the Cape of Good Hope is commonly termed—forms the greater part of this South African possession. The present boundaries are: On the north, the Orange River, which stretches from east to west, over about two-thirds of the Continent, separating the Colony from Great Namaqualand, Griqualand, and the Free State Republic; on the east and north-east, the Drakensberg or Quathlamba Mountains, and the course of the Indwe and Great Kei Rivers; while on each side, east and west, it has a very extensive sea-board—that overlooking the Atlantic being upwards of 500 miles, and that on the Indian Ocean about 700 miles in extent.

Unlike the Australian and North American colonies, there has been no regular systematic survey of this country, so that none of the published maps, whether by Arrowsmith, Wyld, Peterman, or Hall, are accurate representations of its geographical and topographical features. The early charts were mostly derived from the peregrinations of naturalists or travellers, and filled in from estimates by eye or imagination; in later years they were constructed from imperfect surveys by different surveyors, and rough military reconnaissance sketches; but in neither case could these be relied upon as the means of judging correctly of distance, direction, area, or difference of level. The value of the maps may be gathered from the fact mentioned by Sir T. Maclear (late Astronomer-Royal), that, in Arrowsmith's map of 1843, the town of Clanwilliam was twenty-one miles from its position, and fourteen miles seemed to have been wedged in near the north horn of St. Helena Bay, dislocating all to the north as far as the boundary. The surveyors engaged during 1874 in laying out the authorized lines of railway to the Midland divisions, likewise found Graaff-Reinet and other towns considerably out of position in Hall's map, although it, as the latest publication, has been rectified as far as it was possible to do so from the material to hand, and is the best at present published. The Government has lately, however, had its attention directed to the subject of setting on foot triangulation surveys for the construction of a really trustworthy map; and Mr. A. de Smidt, the Surveyor-General of the Colony, has already commenced the work in a manner which promises to ensure ere long the accomplishment of so desirable an object.

The Colony is exceptionally fortunate in possessing a thoroughly trustworthy basis on which the requisite triangulation may be founded. The measurement of a base line, always a delicate, difficult, and costly opera-

tion, is rendered unnecessary by the existence of a great number of points on commanding summits along the western and southern coast, fixed in latitude and longitude with rigorous accuracy, and marked by solidly-built beacons. The first step in this direction was made as far back as 1752, when Lacaile, the French astronomer, measured an arc of the meridian, of seventy-three geographical miles in length, between a point in Cape Town and a point at the north end of Piketberg. Nearly a century after, in 1840, the British Admiralty authorized the verification and extension of Lacaile's survey, and the fixing of geographical points available for further surveys; and this was carried out by Sir Thomas Maclear, who completed a chain of triangles from L'Agulhas to Cape Point, and thence northward to the Bushmanland plain adjoining the Orange River. In 1859 the work was taken up at the expense of the Colony, and Captain W. Bailey, R.E., and some men from the Ordnance Survey Department at home, were selected by Government for the purpose. Their operations were concluded in 1862, and embraced a principal triangulation along the coast, and extending inland from Capoc Berg and Table Mountain on the Atlantic side, eastward to the frontier of the Colony on the Great Kei River. The computed results were tested by the measurement of a base of verification and astronomical observations (near Graham's Town) which proved indisputably the reliability of the survey, and showed that throughout the work the computed distances and geographical determinations of points are very near the truth, so that the probable mean error of the final distances does not exceed about an inch a mile.

By the geographical points thus fixed, a very careful survey of the sea-coast was carried out by the Admiralty, furnishing what is even of greater

importance—correct charts of the Cape shores. With certain exceptions, the old charts were founded upon a running survey. Captain Owen's party, fifty years ago, swept the sea-board from Table Bay round to the Fish River, and afterwards proceeded along the Eastern coast laying down the shores of Delgoa Bay, Qullimane, and Mozambique. The west boarder had been swept a few years earlier by another officer. Table Bay was pretty closely surveyed by Captain Owen, and afterwards touched up by Captain Stanley, Sir Edward Belcher, Lieuts. Dayman and Skead. False Bay was also surveyed by Captain Owen's party. The sad fate of H.M.S. *Birkenhead*, off Danger Point, led to a closer survey of the distance between Capes Hanglip and L'Agulhas. The Lords Commissioners of the Admiralty sent out an able hydrographical surveyor, with an assistant, to execute this survey and any other that might be needed provided sounding marks were laid down by the Colony, which was subsequently done by Captain Bailey. The geographic points established by Sir T. Maclear enabled Lieutenant Dayman to execute the work with a degree of accuracy unparalleled on the Cape shores; and the splendid chart of these dangerous headlands, now published, was the result. Subsequently, the hydrographical survey to the Eastward was continued by Lieutenant Skead, and afterwards by Lieutenant Archdeacon, and the coast-line of the whole Colony may now be said to be completed from the Orange River on one side to the Great Kei on the other, and on to Natal.

The geographical features of the Colony are varied—hills, mountains, and valleys succeeding each other as one advances from the coast inland for nearly two hundred miles; then very wide and tolerably level plains—over which are scattered low rocky ridges—stretch away to the bed of the Orange River.

One or two districts near to the coast are pretty well clothed with woods, but generally the mountains and hills are bare, and the plains are quite treeless and barren-looking, although affording excellent pasturage.

The mountain chains, ranging from 1,000 to 9,000 feet high, which intersect the country from the west to north-east, rise in successive steps, attaining as they recede a gradual increase of altitude. Beginning with the range nearest Cape Town, we have the Drakenstein and Hottentot's Holland Mountains, at an average of 4,000 feet, running eastward, as the Langebergen, Onteniqua, and Zitzikamma, to Cape St. Francis. Behind them there is a parallel chain, averaging 5,000 feet high, forming the Cold Bokkeveld and Zwartbergen, bounding the Karoo plains, and running eastward, as the Little Winterhoek and Zuurbergen. And still further inland there is another terrace, averaging about 6,000 or 7,000 feet, commencing in Namaqualand, and extending through the Roggeveld Karoo, the Nieuweveld, and the Sneeuwbergen of Graaff-Reinet and Middelburg, on to the Stormbergen on the north-east frontier, and thence to the Drakensberg, on the border of Natal. There are, besides these, many distinct mountains and groups of hills, whose fantastic peaks, flat, serrated, or conical, are well-known landmarks.

Of the numerous rivers draining the Colony, it is unfortunate that none are available as highways. The largest—the Orange River—has a breadth of bed varying from 200 yards to two miles, with a length of probably 1,000 miles. In many places it forms magnificent reaches, but throughout its course there are islands, rapids and falls which render it useless as a channel of communication from the coast to the interior. The next largest—the Sunday's, Fish, and Gamboos Rivers—have their sources in the central

mountain range of the Sneeuwbergen; but they run off rapidly along the sloping plains, over a length of between 200 and 300 miles, to the sea, where their mouths are blocked with sands thrown up by the winds and currents on the coast. The other rivers such as the Berg, the Breede, the Olifants, the Gouritz, and the Kowie and Buffalo, are of lesser extent, and only two or three are navigable for short distances from their estuaries.

Of the many harbours or ports along the sea-board, there are at least a dozen available for commerce, and frequented by steamers and other vessels engaged in transmitting supplies or receiving produce. Table Bay, with its breakwater, docks, patent slip, and other facilities for shipping, may be considered first in importance. Close to it is the commodious harbour of Simon's Bay,—the naval station and dockyard for her Majesty's vessels. Saldanha Bay, St. Helena Bay, Hondeklip, and Port Nolloth, are the other ports on the West Coast. Eastward of Cape L'Agulhas, are the harbours of Mossel Bay, Knysna, Plettenberg's Bay, Algoa Bay, Port Alfred, and East London, most of which afford friendly shelter to vessels unable to beat to the westward against the wintry north-west gales. Algoa Bay is the principal port of trade on the whole of the eastern coast of Africa; Mossel Bay is advancing in importance; and the same may be said of Port Alfred and East London,—both of which are river harbours, at present available for ships of medium capacity, but where extensive marine engineering works are in progress, designed to render them more accessible and secure.

Lighthouses have been erected, and are maintained by the Colonial Government, at the various ports and headlands on the coast. The position and character of these are:

In Table Bay—1. Robben Island; fixed dioptric,

1st order, white light; visible 20 miles round horizon; 154 feet above high water; cylindrical tower, red and white bands. latitude  $33^{\circ} 48' 52''$ ; east longitude  $18^{\circ} 22' 33''$ ; longitude of Cape Observatory  $18^{\circ} 28' 45''$ —2. Green Point; flashing dioptric, 3rd order; flashing every 10 seconds, white light; visible 13 miles, 65 feet above high water, square tower; 400 yards from low water. Latitude  $33^{\circ} 54' 4''$ ; east longitude  $18^{\circ} 24' 3''$ —3. Mouille Point, harbour light; fixed dioptric, 4th order, red light, visible 10 miles; 44 feet above high water; cylindrical tower, painted black and white bands, 100 yards from low water. Latitude  $33^{\circ} 53' 56''$ ; east longitude  $18^{\circ} 24' 46''$ .

At Cape Point, the entrance to False Bay, a revolving catoptric, 1st order, 16 reflectors, white light, bright for 12 seconds every minute; visible 36 miles; on the Point, 816 feet above high water, iron tower, painted white. Latitude  $34^{\circ} 21' 12''$ . East longitude  $18^{\circ} 29' 30''$ .

In Simon's Bay, harbour light, South Roman-rock; covered at high water; catoptric revolver, 8 reflectors, white light, bright for 12 seconds every half minute; 54 feet above high water; visible 12 miles; circular iron tower, lower half black, upper white. Latitude  $34^{\circ} 10' 45''$ . East longitude  $18^{\circ} 7' 30''$ .

At Cape L'Agulhas; fixed catadioptric, 1st order, white light, 128 feet above high water; visible 18 miles; circular tower, red and white bands alternately. Latitude  $34^{\circ} 49' 46''$ . East longitude  $20^{\circ} 0' 37''$ . Longitude east of Cape Observatory  $1^{\circ} 31' 54''$ .

At Mossel Bay, Cape St. Blaize; fixed dioptric, 3rd order; 240 feet above high water; red light, visible 15 miles; a square white tower. Latitude  $34^{\circ} 11' 10''$ . East longitude  $22^{\circ} 9' 31''$ .

At Cape St. Francis a light will shortly be erected, a liberal grant of money for the purpose having been made by the Legislature.

At Cape Recife; dioptric, 1st order, revolver, 93 feet above high water; white light; a ray of red light visible between the bearings, S. by W. to S.W.  $\frac{1}{2}$  S., clears the Roman Rock. Revolves every minute; visible 15 miles; tower painted, four horizontal bands, red and white alternately. Latitude  $33^{\circ} 1' 43''$ . East longitude  $25^{\circ} 42' 12''$ .

At Port Elizabeth, harbour light on a hill at the back of the town, S.  $\frac{1}{2}$  E., 25 yards from Donkin's Monument. A fixed dioptric, 6th order, red light, visible between the bearings of N.W. to N.W. by W., white light from N.W. by W. to S.W. by W. The white visible 12 miles, which kept in sight clears all danger; 225 feet above high water; tower stone colour. Latitude  $33^{\circ} 57' 45''$ . East longitude  $25^{\circ} 37' 0''$ .

At Bird Island; fixed red light, 3rd order; dioptric, 80 feet above the main sea level, and can be seen from a ship's deck of 15 feet at a distance of  $14\frac{1}{2}$  miles in ordinary weather.

At Buffalo River, East London, on Reef, south side of entrance; a harbour light, fixed dioptric, 6th order, 45 feet above high water, white light; visible 12 miles; tower painted red and white, alternate bands. Latitude  $33^{\circ} 1' 5''$ . East longitude  $27^{\circ} 55' 2''$ .

At Port Natal, revolving dioptric, 2nd order, on the Bluff; 282 feet above high water; revolves every minute, white beams, visible 24 miles; tower iron, conical, painted white. Latitude  $29^{\circ} 52' 50''$ . East longitude  $31^{\circ} 3' 35''$ .

The geographical nomenclature of the various districts of the Colony which appears on the map may seem rather a strange jargon to the English reader. Some of the terms are aboriginal, but generally they are those which were adopted by the early Dutch settlers, and to the colonist very expressly describe the peculiarities of feature, soil,

and situation of the different parts of the country. Mr. Hall (whom we have already mentioned as the compiler of the latest and best existing map of the Colony, and who has also published an excellent manual on its geography) freely adopts these African-Dutch names, and says, "they frequently convey a much better idea of this very irregular portion of the earth's surface than the modern titles of the division or district can give. The words 'bergen,' 'kop,' and 'kopjes,' represent the several forms, classes, and grades of hills, isolated or otherwise, while minor elevations are clearly defined by 'hooghte,' equivalent nearly to our height. 'Rand' is almost untranslatable, but signifying literally edge or margin, and colonially applied to the high land bounding a river valley, as the Fish River Rand, Suikerbosch Rand. 'Nek' is a depression between two hills, over which a road generally leads, ill-translated by our neck, which may be a low, sandy isthmus, or any other connecting feature. 'Hoek,' literally corner, is a colonial term, generally understood as a retired mountain valley, with a narrow entrance—a quiet glen you can get into, but where, unless by the same way, there is a difficulty of egress—as Fransch Hoek, Zwager's Hoek, or Mostert's Hoek, 'Ruggens,' literally 'backs,' are a collection of low hills, often bushy, as the Zwarte Ruggens in Graaff-Reinet, Uitenhage, and elsewhere. 'Poort' may be defined as a mountain ravine, the bed of a torrent through which a road passes, as Brookhuisen's Poort, Howison's Poort, Meiring's Poort, Seven Weeks' Poort, &c.—a very roundabout translation certainly, but using the English word 'pass,' in the sense it is received here, will not define it. Colonists use 'pass' only when some extensive work has been executed, as often over the top of a mountain, or through its valleys, as Sir Lowry's Pass, over Hottentot's

Holland Mountains, or Montagu Pass over Cradock Mountain. 'Kloof' is literally a cleft or split, and we know no English word perfectly equivalent to it; for certainly neither cliff, ravine, or glen, come exactly to our colonial idea of a kloof; but in the dialect of the Lowlands of Scotland, 'kleugh' is probably derived from it. 'Krantz' literally signifies a wreath or crown, and is colonially applied to the steep cliffs which crown the summit of so many of our mountains, or form the sides of our river valleys. Hangklip conveys the idea of a mountain overhanging its base, as Cape Hangklip and the picturesque Hangklip in the Queen's Town district, and of which Hangrock would be but a clumsy translation. Klip is rock, and is generally applied to some remarkable boulder, as the Paarklip, Hondeklip, &c., like the Black Rock, Roman Rock, &c., of English charts. And Praam Berg, Tandjes Berg, Tooren Berg, Theebus Berg, Tafel Berg, all describe clearly the shapes of the mountains respectively as inverted boats, rugged-like teeth, towers, tea-caddys, table or flat-topped, &c. 'Spitskop' may be translated peak or sugar-loaf, while an illustration of the many Leeuwkops may be found in the immense masses of sandstone or basalt forming the summit of many of our hills, in some cases assuming the form of a lion couchant, as on Lion's Head. The English collective 'Highlands,' as the Highlands of Scotland, Abyssinia, &c., has hardly any equivalent in our colonial nomenclature. We say, 'in the bergen,' as he has a farm 'in the Sneuwbergen,' &c. We may generally know the character of our African mountain regions by the names given them; thus the term Zuurbergen denotes a range of hills covered with sour herbage; Sneuwbergen, mountains covered occasionally with snow; Wittebergen, mountains with white quartzose summits or sides; Zwartebergen, mountains appearing

of a black or dark-blue tint; Stormbergen, ranges remarkable for the violence of the storms that break on their summit; Winterbergen, a cold, cheerless, naked mountain region; Boschbergen, mountains densely wooded, &c. The 'rivier' of the Dutch, be it a flowing stream or a dry watercourse, is translated indifferently into English as a river; but we can hardly give an equivalent for the term 'spruit,' which signifies the feeders that supply the parent stream near its sources. The long reaches of deep water which are found in many of our watercourses, even when they do not flow, are locally called 'Gats,' which would be badly translated by either of its literal meanings, hole or channel. The Dutch equivalent of our English brook, rivulet, stream, torrent, &c., seldom or never appear among our African rivers. The word 'Vallei,' generally written here 'Vley,' has, colonially, a double meaning, one signifying a valley, the other, as it is generally understood, a hollow surface, in which, in wet seasons, water accumulates, forming a shallow lake, as De Beer's Vley, Verloren Vley, Vogel Vley, and many others. The proper names of most of the rivers are generally given either from their form (as the Groote, Breede, Kromme, Zonder End), or peculiarities in their water (as Zout, Brakke, Zwarte, Witte, Blink, Modder, Zand), their agricultural qualities (as Vette, Karnmelk, Milk), or from the animals which are found living in them, or near their banks (as the Visch, Zeekoe, Eland, Rhenoster, Bosjeman, Buffels, Olifant's, &c., &c.) For large flat surfaces, Vlakte is generally used, our equivalent for which is flats. The Dutch Plein is generally used for a large open space within a town. No Dutch word has superseded the old Hottentot 'Karoo' in describing the vast interior deserts of the Colony. Duin, or Duinen, well describes the sand hills near

the coast. There are other words constantly occurring, either in our maps or books of travels in this Colony, such as Drift, the colonial Dutch for a ford; Kuil, a hole where water collects; Puit, a well; Kraal, a cattle enclosure or native village, and Bosch, a forest or wood, great or small, applicable to the general thickety and scrubby nature of our South African forests. But besides all these particular denominations, there is a very expressive nomenclature, chiefly compounds of the words 'veld' and 'land' (field or country), which also tends very much to add to our ideas of the face of the country. Large tracts are thus described, quite independent of the political divisions. For instance, there is the unoccupied and ungranted country called "Trekveld," which literally means Movefield (a country where farmers go to in certain seasons with their flocks); the extensive Nieuwveld, or new country, now forming the northern part of the districts of Beaufort and Fraserberg; the Koudeveld, or Coldfield, on the summits of the Camdebo Mountains, and the Winterveld (Richmond and Hope Town) extending north to the Orange River. The geographical nomenclature of the Cape Colony has thus, like the Dutch language spoken in the Colony, in a certain degree adapted itself to the country it describes, and as it seems plainly to be understood by every one who has resided here any length of time, it would be a piece of superfluous labour, in constructing a new map of the Colony, to endeavour to get rid of the anomalies everywhere presenting themselves in the jumble of Dutch and English and native words."

## PAST HISTORY.

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A LITTLE more than two centuries ago, the Dutch East India Company, under the charter granted to them by the States-General of the United Provinces of the Netherlands, established a garrison on the shores of Table Bay. European possession of South Africa may date from that time, although the Portuguese and English had long before then visited and even formally claimed dominion here. At first it was simply occupied as a station or place of resort for the Dutch ships trading to the eastward, where they could get water and fresh supplies, and recruit their sick crews. There was no attempt at planting a Colony until several years afterwards, and then it was of so anomalous a character, and under such peculiar circumstances, as to contrast most curiously with similar movements elsewhere.

The early settlers came from what was the most industrious and liberty-loving of countries, Holland, and they were followed by exiled Huguenots, some of the best blood of sunny France. They made their home here, not long after the Pilgrim Fathers from the "Mayflower" landed on the shores of Massachusetts and founded New England. They had as rich a country, a much milder clime, and more docile and friendly natives to deal with than their European brethren encountered across the Atlantic; and it might reasonably have been expected that their

progress would be in some degree contemporaneously marked and prosperous. The result, however, was widely different, owing to the extraordinary monopolising colonization policy adopted, to which is attributable the comparatively slow growth of the Cape Settlement during the century and a half of the Dutch Company's occupation. The New Englanders, from the outset, happily enjoyed in their new home perfect political liberty, as well as the fullest and freest development of their industry; but the South Africans were trammelled, fettered, and repressed in every conceivable way by a Government which has been aptly described as—"in all things political, purely despotic, and in all things commercial, purely monopolist." Wherefore things were so may be better understood by a brief historical retrospect.

Jan Anthony Van Riebeck, a surgeon, in the employ of the Dutch East India Company, who had directed the attention of his masters to the advantage of establishing a rendezvous at the Cape of Good Hope, for the refreshment of their fleets, was the first officer commissioned to occupy the Cape Promontory, and build a fort and lay out gardens in Table Valley. Accompanied by about a hundred souls, he arrived under the shade of Table Mountain on the 5th April, 1652. His followers were officers and servants of the Company, a few of whom, after landing, were released from their engagements, and permitted to become "free burghers," or cultivators of the soil, on payment of tithes and other restrictive conditions of servitude. The daily life they led, and the progress made, are minutely detailed in the quaint and interesting "journal" and "despatches" of Van Riebeck, which are still preserved in the archives of the Colony. These show that the settlement was simply regarded as a dependency of the

Company, and its affairs administered with no other view than that of protecting and supporting the commercial interests of that body. The principal object was to supply its ships cheaply and plentifully—to get as much profit as possible out of the burghers and the natives on whom it was dependent for these supplies—and to prevent them engaging in exchange or barter with any other than the Company's officers,—thus monopolising all trade for its own advantage. Van Riebeeck was very zealous in carrying out the instructions and policy of his principals, and in his relations with the natives was tolerably just and friendly. For the ten years of his administration, the Settlement, which scarcely extended over the area now occupied by the City of Cape Town, seems to have answered expectations. It was nothing as a Colony, but it was considered a flourishing establishment of the cabbage-garden order, and that was all it was then desired to be.

During the following years the Company was advised by some of Van Riebeeck's successors, and notably by Governor Van der Stell, to make something more of its Cape dependency—to grow corn, wine, and other products, which might yield rich returns. For this purpose it was urged that the number of residents should be strengthened, as there was land of excellent character in abundance, but labourers were required to till it. The want of industry, it was said, was the great obstacle to success; and, in order to remedy this, the directors of the Company in Holland determined upon reinforcing their garrison with a number of settlers of the agricultural class. Their policy, as set forth in one of their despatches, was prompted by the consideration that “he who would establish a new colony may be justly compared to a good gardener who spends a large sum upon a young orchard, with the prospect

of his labour and capital being repaid in due time." Had such a policy in its integrity been acted upon, the subsequent history of the country would have been very different. In the above and other expressed aims and intentions of the Company there was much that was good and beneficent; but, practically, in all that affected the encouragement, or even the toleration, of trade and industry amongst its subjects, everything was held secondary to immediate profit.

A small party of Dutch and German farmers were the first to recruit the young Colony, and they were shortly afterwards followed by a most valuable body of emigrants—French and Piedmontese refugees, exiled by the political and religious troubles following the revocation of the Edict of Nantes. The latter thoroughly understood the culture of the vine, as well as some handicrafts, and were therefore commended to the special consideration of the Governor, who was told to assist them "in all things whereby service could be done to the Company in particular, and to the Church of God." Their total number did not amount to more than two hundred men, women, and children, and most of them were settled on lands in the Stellenbosch district and along the valley of the Berg River, afterwards named Drakenstein and Paarl, where many of their descendants still dwell. They were received, according to the words of Governor Van der Stell, "with love and sympathy, and an assisting hand, to the refreshment and comfort of their sufferings and persecutions," as being "likely to benefit and strengthen the Colony in a wonderful degree, and to excite much emulation among the Netherlanders." Aided by a gift from the Government of India, the poorest of them were enabled to obtain seed, implements, and other requisites, and so marked was their industry that two years after their settlement they became a self-supporting community.

They were not long, however, in discovering that the "freedom" which they had been led to expect in their exile was but the shadow of a name. Their language was prohibited to be used at public services, and their children soon became incorporated with the Dutch around them. Any attempt to exercise the most ordinary rights and privileges, such as the election of their own church vestry, was denied them, and even their industry and commerce were controlled by the all-powerful officers of the Company. In fact, they found, as one of their number states, "that the great tyranny of the French monarch from which they had fled was reflected in the petty despots who governed uncontrolled at the Cape of Good Hope."

Before leaving Holland, the emigrants had been required to take an oath of allegiance to the Company, and of compliance with the general or local regulations imposed by its officers. These local regulations were of the most illiberal character. Under them they could not purchase anything except from the Company's store, and at the Company's price; they were forbidden any commercial dealings with the natives, or with the crews of ships visiting the port; all produce they were bound to sell only to the Governor for a sum fixed at his discretion; a tithe of their yield was taken as a yearly tax; and when production passed a certain point, directions were given that "no lands shall be granted for the cultivation of corn, wine, or other crops of which the excess is burdensome to the Company!" Of course, there was dissatisfaction and remonstrative opposition to such restrictions, but these were sternly repressed as turbulent and seditious attempts against the lawful authority, and punished with imprisonment, or deportation to Mauritius or Batavia. At length, however, in 1705, an opportunity was obtained of secretly for-

warding an appeal to the Company in Holland, by one of its homeward bound fleets, in which the "grievous oppression" endured by the people at the hands of the Governor and his officers, was fully set forth. This simply led to the censure and removal of the Governor and his counsellors—"for the restoration of tranquility"—but to no change in the policy of the Company, which was avowed to be the enrichment of itself and not of its colonists. The compilers of the annals of the country during this period assure us that under the system which prevailed even the Garden of Eden could not have been successfully colonised. The recovery of the tithes assessed on all crops raised and stock pastured was farmed out; and severe penalties were enacted to enforce their payment, and to secure the delivery of all produce at an arbitrarily fixed rate. Corn farmers complained that, under this monopoly, they were compelled to part with their grain for half the price at which it was charged to the Company; wine farmers that they had to deliver their vintage at ten to twenty rix-dollars per leaguer, while it was sold to ship captains at one hundred and fifty rix-dollars; grantees of land, who wanted their title-deeds, that they could not obtain them unless the solicitation was accompanied with the necessary *douceur*, "for the Governor listened readily to reasons that jingle;" and altogether the state of things was ruinous to the material as well as the moral well-being of the people.

Many of them, unable to endure the system any longer, moved away into the Interior, beyond the reach of authority, and began that nomad habit of "trekking," which on our borders has continued until the present day. The Colony was in this manner extended several hundred miles inland, towards Uitenhage on one hand and Graaff-Reinet on the other; and a small population, greatly to its detri-

ment, was spread over an immense area, isolated, uncared for, and consequently, in some degree, drifting away from civilization. Happily, most of the people carried with them an attachment to the simple teaching and religious observances of the Reformed Church, whose beneficial influences prevented them and their descendants from altogether relapsing into semi-barbarism; and to the present time the traveller in the Interior will find the scattered "trek-boers," rough and uncouth, salute their Maker at early dawn with prayer and praise, while every evening the patriarch of the family reads the accustomed chapter from the cherished Bible.

Those who lacked courage or inclination to follow these pioneers of the country into what was then "the desert," continued their representations and entreaties to the Government to abolish the restrictions on trade, so that their industry might have its legitimate reward; but not until near the commencement of the present century—just as its domination was coming to a close—did the old Dutch Company realize that there was any mistake in its grasping commercial policy, or were steps taken to remedy the abuses which had been committed in its name. During the brief interregnum of British authority between 1795 and 1803, some restrictions were removed and beneficial changes introduced into the general administration of affairs. This was followed by an extension of privileges under the Batavian Republic, who, for a short time resumed the Government, and whose last and best representative, General Janssen, in 1805 announced the new principle that "the Colony must derive its prosperity from the quantity and quality of its productions, to be improved and increased by general civilization and industry alone." It was this officer who urged upon the farmers the introduction of merino sheep and the growing of wool—prophesying that the prosperity of

the country would be the certain result. But his plans for the improvement and better administration of the settlement were destined to be carried out by other hands; for in 1806, the Cape was finally captured by British arms, and in 1814, was by treaty ceded in perpetuity to the British Crown and admitted to share in the importance of the mother country and in the benefits of her commercial power.

Although the conquest of the Colony and its cession to England has been termed "the first charter of liberty to all inhabitants of European descent, who had not high office or high official connection," there was not an immediate bound into the invigorating air of Freedom and Progress. Many abuses were rectified, and free scope given for the development of the resources of the country; but a conservative regard for old laws and old institutions prevailed for a long time. The Governors were as before absolute rulers. There was no free press. The functions of courts of justice were limited to Cape Town. The country beyond the first range of mountains was comparatively *terra incognita*. There was no postal communication. The schoolmaster was not yet abroad; there were only four churches in the whole country, and clergymen had to get official permission before they could teach or preach. Public meetings even could not be convened without leave having been first obtained from the Government; and politically and socially there was a feeling of habitual submission to and dread of those in authority which made men afraid to think, speak, or act out of the ordinary groove. To quote the testimony of the late Judge Cloete, "the slightest personal dislike of, or a supposed offence given to, the Governor or the Colonial Secretary, marked at once the ruin of any honest man in society, and that neither character nor talent was proof against the proud man's contumely or the inso-

lence of office." It required the lapse of several years thereafter to eradicate the evils which the absolute despotism of the period created; and there are men still living amongst us who during that time laboured long and earnestly in the successive constitutional struggles which have now secured for the colonists the amplest rights and privileges accorded to any people in the world.

The growth of the Cape of Good Hope as a free Colony, properly so-called, may date from the first British Immigration in 1820—just fifty-four years ago. Prior to that the only accessions from the United Kingdom were a few merchants and traders, and the civil and military officers appointed to the station. The Eastern Frontier was then sparsely occupied by adventurous pioneer farmers who were continually subject to plunder by bands of Kafirs who came out from the country beyond the Fish River on cattle-lifting raids. Governor Sir John Cradock called out a commando to clear the tract then known as the Zuurveldt, and when this was done declared it "neutral ground," in the hope of preventing any intercourse or collision between the colonists and the Kafirs. But this territorial vacuum was not long maintained: colonists and natives alike naturally abhorred it. Lord Charles Somerset who succeeded Sir John Cradock, visited the country himself, made a treaty with the Kafir chief Gaika, to secure an inviolate border, and appointed two missionaries, the Rev. Messrs. Brownlee and Thomson, as Government agents and religious instructors with the chief and his people. Lord Charles at that time was most favourably impressed with the character of the unoccupied Zuurveldt (now the district of Albany), through which he travelled, and on his return to Cape Town a Government notice was issued, inviting parties to establish themselves in that quarter. His Excellency

had been struck by its pleasing features, its park-like appearance, and its apparent fertility. His public notice is couched in the most glowing terms, as were also his despatches of that period to the Home Government. These despatches reached England at the close of the Napoleonic war, when trade was greatly depressed, and emigration was looked to as an outlet for relief of the unemployed. The British Parliament voted £50,000 in aid of colonising the country and in a short time no less than 90,000 applications for passages were sent in, although only 4,000 persons could be accepted. They were principally English, some Irish, a few Scotch, and a modicum of Welsh; and among them were members of almost every gradation in the social scale—well-educated gentlemen and half-pay officers, highly respectable manufacturers, and tradespeople, skilful mechanics and artisans, with a large body of labourers and operatives of every class of industry. Most of them were landed in Algoa Bay in April, 1820. What is now proudly termed the “Liverpool of the Cape,” Port Elizabeth, was then nothing more than a fishing village, surrounded by sand-hills, with a small military fort crowning the height, and a few rudely-built scattered cottages either occupied by the military or by small traders chiefly dependent upon them. In due course the immigrants reached their locations and soon began to realize their position. It is most interesting and instructive to read the story of their progress as narrated by some of themselves—from their first encampment on the grassy hills and dales of Albany—when the first tree was felled, the first wattle-and-daub house commenced, and the first furrow made by the plough in the virgin soil; through seasons of flood and drought, and blighted harvests, and through bloody devastating Kafir wars,—to their happy, peaceful, and prosperous position, on the occasion of

their recent jubilee celebration commemorative of their arrival in South Africa. Sir George Grey, late Governor of the Cape and of New Zealand, whose practical acquaintance with all the colonies was very great, has placed on record, in a despatch to the Secretary of State, his opinion "that the English settlers who came out here in 1820 have succeeded as well as emigrants have done in any part of the world--better than in very many."

The successive Kafir wars of 1834, 1846, and 1850 greatly retarded the development of the country, and sorely tried the courage, perseverance, and industry of the frontier farmers. All were sufferers and many were ruined by these disastrous disturbances. In 1834 the whole border was suddenly over-run by the Kafirs, and there being no precautionary provision by the Government for resisting them, they carried off 111,418 head of cattle, 156,878 sheep and goats, 5,438 horses, and 58 wagons, burnt 456 farm-houses and pillaged 300 houses, thus committing ravages of the lowly estimated value of £288,625, besides murdering, in some instances with circumstances of great atrocity, hundreds of individuals. The Kafirs were ultimately subjugated, and it was agreed to, by treaty, that British sovereignty should be extended over them as far as the Kei River, the present limits of the Colony. At the same time a large number of Fingoes, who were in servitude with them, but who had kept aloof from the war, were brought out from Kafirland and located within our border, where they have since proved faithful subjects, and have now so far risen in the scale of civilization as to constitute to a considerable extent the working peasantry of the Eastern Districts. The treaty then concluded with the Kafirs by Sir Benjamin Durban, in 1835, extending the boundary to the Kei River, was unfortunately disapproved of by the Imperial Government and

ordered to be reversed,—the allegiance of the chiefs and tribes being renounced and the limits of colonial authority moved back to where it was in 1819 along the Fish River. This policy of concession, although dictated by philanthropic motives, failed to have any beneficial effect upon the natives. They seemed to think that such generosity sprung rather from timid apprehensions and fears, than from kindness or a desire to promote their interests. The years immediately following were very trying and disastrous to the frontier settlers. Stock was swept off in droves by the Kafirs, herds were murdered, and the owners, when going in pursuit, were fired on by the robbers, and, in some instances, killed. The Government in vain endeavoured to check this state of things, and war was again declared in 1846. Burgher volunteers from all parts of the Colony were called into the field to aid their brethren in the front, and after a great sacrifice of blood and treasure (the property destroyed or taken being estimated at half a million pounds sterling), peace was secured. But again only for a brief time. For scarcely had the settlers re-occupied their farms and resumed their ordinary pursuits when in 1851 the Kafirs made an unprovoked attack upon Her Majesty's troops, massacred some of the military grantees occupying the villages in the Chumie Valley, and, joined by a number of discontented and rebellious Hottentots, for nearly two years maintained a guerilla war, involving still greater sacrifices of life and property than before. This was brought to a termination by the submission of the hostile chiefs to Sir George Cathcart in 1853, and the proclamation of Kaffraria as a British dependency, governed by British functionaries. Since then, for a period of over twenty years, the blessings of peace have been uninterruptedly enjoyed.

Another event which at the time checked the pros-

perity of the Colony, although ultimately it contributed to the advancement of civilization and European dominion in South Africa, was the exodus of the emigrant farmers, or old colonists, in 1835 and 1836. To this they were incited partly by their inherited aversion to coercive authority and partly by newly-created feelings of dissatisfaction if not of exasperation, against the English Government. It had emancipated their slaves and told them that they would be compensated in money which would be paid in London; but by the dishonesty of agents and middlemen, one half the money never reached the poor "boers," while some in simple ignorance considered the whole thing a fraud, and refused to take the documents which would entitle them to the compensation—of which £5,000 at least remains to the present day unclaimed. The depreciation of the paper-currency of the time was another cause of annoyance; and the marauding habits of the natives on the north-east frontier, culminating in the ruinous war of 1834, maddened them into a determination to seek "fresh fields and pastures new" even if they had to "trek" to the other end of Africa; or, as they expressed it, *tot ander kant uit*. They sold their farms and such effects as they were possessed of at whatever prices they could obtain, many a farm being exchanged for a wagon and some for much less value, and emigrated with their wives and children into the country beyond the Orange River. There they separated,—one party crossing over the Quathlamba or Drakensberg Mountains, and founding what is now the Colony of Natal; another party crossing the Vaal River and planting what is now the auriferous Transvaal Republic; while another purchased or obtained leases of the lands of some of the Griquas near the Orange River, forming what is now the Orange Free State and the diamondiferous territory of Griqualand West.

Notwithstanding the drawbacks of three desolating frontier wars and the stocking of those young off-shoots which now form four flourishing border settlements, the Cape of Good Hope has made most substantial progress in its political, material, and social condition during the past fifty years.

Among the important political changes effected, the foremost was the establishment of a free press—not subject to arbitrary suppression or censorship, as it was in 1824, but placed under the protection and the control of the law. Regularly constituted courts of justice and trial by jury followed, and the action of the law for the protection of life and property was carried into the most remote districts. A liberal and comprehensive system of education, by public schools, was organized for the European population, and religious and civilizing agencies were extended amongst the various native tribes. The unrestrained absolutism of Governors was checked, first by an Executive Council and afterwards by a Legislative Council, partly elected and partly nominated. An attempt to make the Colony a penal settlement was successfully yet loyally resisted. Local self-government was established by the formation of municipal councils freely elected by the inhabitants. And finally the privileges of a colonial Parliament were obtained, by which the administration of public affairs has been placed under the control of the Legislature on the same system of Responsible Government as prevails in Great Britain.

The advancement of material prosperity during this period is strikingly evidenced by the growth of villages and towns, the increase of population, and the expansion of production and wealth. The Colony, which fifty years ago was divided into half-a-dozen wide-spread and sparsely peopled districts, has now about sixty magisterial divisions or counties, with towns and villages still more numerous throughout them. The

population has increased from a little over 100,000 souls to considerably more than 600,000, exclusive of the natives in Basutoland and Kafirland; and the white population, which in 1821 was below 50,000, now approaches near to 250,000. The imports and exports of the country then scarcely amounted to half a million sterling; now its external commerce represents nearly twelve million pounds sterling per annum. Then there were but a few thousand merino sheep, and the export of wool was only 26,000 lbs.; now they are so multiplied that the quantity of wool shipped in 1872 reached 48,822,562 lbs., of the value of £3,275,150. Then the public revenue was not £100,000 per annum—less than that of the present Orange Free State Territory; while now it is over £1,200,000. Then there were no roads save mere natural tracks, unworthy of the name, scarcely a river was bridged and formidable mountain passes cut off the isolated occupants of the inland districts from intercourse with a knowledge of what was transpiring in the rest of the world. Now, a network of high-ways spreads out from the coast to the interior, rivers are spanned, railways are opened, and in course of construction in all directions, north, east, and west; while the electric telegraph, uniting the southern extremity of Africa with Europe, will soon speed the world's stirring news from one end of the Colony to the other. Besides this, the sea-board has been lit almost as perfectly as the coast of England; extensive works have been constructed at the various ports for the accommodation of shipping; and, what the old Portuguese mariners named the "Cape of Tempests," offers a Harbour of Refuge and the secure shelter of land-locked docks to the navies of the world.

In the social condition of the people there has also been visible improvement. The prejudices once existing from difference of race are rapidly dis-

appearing. Colonists, whether of Dutch, French, German, or British descent, are all one in their common intercourse and pursuits, and in their pride in the onward progress and future destiny of South Africa. Improved communication and interchange of the amenities of life have removed territorial rivalries and jealousies, and infused broad and liberal ideas. The conveniences and comforts of civilization are extended in every direction; and it is not too much to say that the position of the inhabitants in the furthest districts, is at the present day in most respects equal, and in some superior, to that of those who were nearest to the old centres of population some years ago. Education has made great strides. There are now no less than 168 undenominational schools, 279 mission schools, and 93 aborigines, training and industrial schools in operation—in all 540—aided by Government, while four colleges provide for the higher and professional studies, and a University has been established conferring its privileges on the rising youth. Religion has also multiplied its agencies. There are upwards of 350 churches and chapels belonging to the Dutch Reformed, Church of England, Wesleyan, Lutheran, Roman Catholic, Presbyterian, Independent, Baptists, and other denominations. Literature and science have not been forgotten. The Library of the Metropolis boasts its 40,000 volumes, daily open to the public; and there are few towns or even villages without their reading-rooms. Museums and Botanic Gardens offer incentives to the study of Natural History, in addition to the varied productions of the land. The Press has upwards of forty representatives, and is conducted with an amount of ability and energy which commands admiration from those who are acquainted with its working in larger communities. The Post-office has vastly multiplied its business. The mails dispatched to England by the ocean mail-steamers consists of

176,882 letters, 158,292 papers, and 11,948 books annually. There are nearly 400 inland country post-offices; and the extent of roads open for posts is upwards of 4,500 miles, of which about 4,000 are travelled by cart, and the remainder by horses. Crime is not by any means rife, notwithstanding the scattered and mixed character of the native population. Even the frontier Kafirs are no longer a terror; the power of their chiefs has been reduced and broken, and they are now adapting themselves to habits of peace and industry, becoming producers as well as consumers, with daily increasing wants, and they and their families are likely in time to prove of immense advantage to the colonists as reservoirs of labour.

To those who have lived through the changeful progressive events of the past half century, thus briefly sketched, the retrospect must be eminently satisfactory and pleasing; and taken in conjunction with the advance of the Border States, the extension of civilization into the Interior, and the recent wonderful development of mineral riches, diffusing wealth and stimulating enterprise and industry in every direction, may well justify the anticipation that this country is but on the threshold of a magnificent Future.

“The toilworn fathers have sunk to their rest,  
But their sons shall inherit their hope's bequest;  
—Valleys are smiling in harvest pride,  
There are fleecy flocks on the mountain side;  
Cities are rising to stud the plains,  
The life-blood of commerce is coursing the veins,  
Of a new-born EMPIRE that grows and reigns  
O'er Afric's Southern wilds.”

## PRESENT ASPECT AND CONDITION.

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### I. CAPE TOWN AND ITS SURROUNDINGS.

The Cape Colony and the Mother Country are now-a-days brought very close together. The facilities of communication and travel, as well as the tranquil waters and genial temperature usually enjoyed on the ocean highway to South Africa, are such as to render a voyage outward or homeward quite an ordinary pleasure-trip. What was formerly an indefinite two or three month's passage is accomplished in twenty three or twenty-four days; and such has been the rate of progress and improvement of late that we may safely say the maximum of accelerated speed has not yet been attained. Instead of the slow easy-going sailing ships, or even the crack East Indiamen, which at irregular intervals did the carrying trade for passengers and goods about twenty years ago, there are smart commodious steamers arriving and departing almost weekly. The Union Steamship Company which started into existence with only two or three vessels of not more than 500 tons burthen, to perform the monthly postal service, has, after fifteen years, enlarged its fleet to upwards of eighteen steamships, averaging each about 2,000 tons, and running three times a month, and may boast of having carried thousands of passengers without a single disaster at

sea. Besides this the Donald Currie "Castle" line has during the last year or two entered the trade with their powerful vessels, and the stimulus of competition thus created has inaugurated a new era of rapid passages and quick dispatch. The voyager who desires novelty and variety has also the choice of two routes,—the direct one, along the Atlantic, with glimpses of Madeira, St. Vincent, Ascension, or St. Helena; and the eastern route, by the P. and O. boats through the Suez Canal to Aden, thence by the British India Company's vessels along the East African Coast to Zanzibar, and from there by the Union steamers past Mozambique and Delagoa Bay to Natal and the Cape Colony. The point at which both routes converge is the port of Table Bay, which still maintains its old position as the "half-way house" on the highway of commerce.

The singular mountain scenery around the Bay never fails to arrest the eye if not to excite the admiration of strangers. On one side the land rises abruptly from the shore forming the great massive wall of Table Mountain, 3,500 feet high. This imposing central figure is flanked on the right by the remarkable Lion's Head and Rump, and on the left by the picturesque Devil's Peak; while in the broad valley between, the city of Cape Town is spread out, its suburbs extending along the slopes and skirts of the mountain for nearly fourteen miles from Sea Point to Wynberg. On the other side of the Bay, which sweeps in a beautiful unbroken curve eastward to Salt River and thence northward to Blueberg, there is a flat sandy shore with here and there a few cottages and windmills; beyond these are the softly rounded hills of Tygerberg and Koeberg, marked by a patchwork of brown or green cornlands surrounding the white-washed farm houses; and still further and higher the rugged serrated summits of the Draken-

tein, Paarl, and Tulbagh mountains, whose sharp outline against the blue sky testify to the clearness and purity of the atmosphere. In the hot summer months the aspect of the country is somewhat bare and sunburnt, save where now and again relieved by wood plantations and vineyards, but after the first winter rains it is generally covered with verdure, and with the advent of spring in September the plains and slopes of the hills are gaily luxuriant, flowers of every hue carpeting the sward and presenting a most inviting appearance to the new-comer from a northern climate.

The features and character of the harbour itself have been greatly changed since the opening of the Breakwater and Docks,—a work whose magnitude, importance, and success unmistakably mark the spirit of progress in the Colony. Formerly all the shipping trade was carried on in the open Bay, where in ordinary weather vessels were secure enough, but during the prevalence of north-west winterly storms were exposed to long rolling heavy seas driving in with tremendous violence. In the memorable gale of the 17th May, 1865, no fewer than eighteen vessels out of twenty-eight at the anchorage were cast up as helpless wrecks upon the beach and about fifty lives lost. Happily such disasters cannot again occur. The port now offers in all weathers as good shelter and protection as is to be found in any of the Colonies. A Breakwater runs out from the shore for a length of nearly 2,000 feet, enclosing a large area, where ships can safely lay at their moorings. Inside of this are the Docks, consisting of an outer and an inner basin, together forming an area of sixteen acres in extent, affording accommodation to eighty or ninety vessels. The entrance is 100 feet wide, with a depth of twenty-one feet at low water and between twenty-six and twenty-seven feet at high water. The walls are of

massive masonry with a strong coping of granite taken from the quarries under Table Mountain. Going through the entrance, we come into the inner dock, a fine piece of water 1,100 feet long and 510 feet wide in its greater dimensions, but tapering inwards, the depth of water also decreasing. The north end is the widest, and is 24 feet deep at low water, or about thirty feet at high water. There are the usual accompaniments of quayage, storage, workshops and patent slip; and a graving dock is now in course of construction of sufficient size to take in the largest vessels in Her Majesty's navy. Fourteen years ago, His Royal Highness the Duke of Edinburgh, then a midshipman in the *Euryalus*, tilted the first wagon-load of material with which these great works were commenced; and in July, 1870, while Captain of the *Galatea*, he officially opened them to the commerce of all nations. The chief superintending engineer of the works was Sir John Coode, and the resident engineer Mr. A. T. Andrews. The total expenditure upon them was about half a million pounds sterling,—£300,000 of which was raised by loan guaranteed by the Colonial Government, secured by a first charge upon the wharfage dues of the port, the remainder being paid out of the accumulated dues and revenues of the Harbour Commission, under whose direction the work was carried out. Since the opening of the Docks in the middle of 1870, the total revenues up to the end of 1873 amounted to about £162,000; and in the last year alone it was over £52,900. The trade of the port is largely increasing; and, notwithstanding the ill effects which the Suez Canal may be supposed to have had upon it in regard to its use as a place of call for vessels to and from the East, its commerce is greater now than ever it was before. The number of ships entered inwards from foreign parts and coastwise in 1873 was upwards of 700, gauging an aggre

gate tonnage of over 300,000. With this increasing business, it is already pretty evident that the Docks must be soon enlarged to give greater accommodation to shipping, and it is also desirable that the Breakwater should be extended to the length originally designed of 3,000 feet, which is all that is needed to make Table Bay a perfect harbour of refuge.

Cape Town is not seen to the best advantage from the seaward side, nor even by the approach from the Docks. There is a straggling, unkempt appearance about the buildings stretching down to the beach and the jetties; and the heterogenous industries which manifest themselves, such as boat-building, skin-drying, wool-pressing, flour-mills, gas and soap factories and fish-curing, are not particularly attractive. Besides everything looks dwarfed under the shade of the massive wall of Table Mountain, forming the background. It is only when the central thoroughfares of St. George's-street, Adderley-street, and the Parade, are reached, with their fine open streets and many handsome looking places of business, that anything like a favourable impression of the South African Metropolis is obtained. Its founders originally laid out this central part with mathematical preciseness, the main streets forming parallel lines, intersected at right angles by secondary streets of lesser width; but with the growth of population and commerce the lines have been extended in irregular courses, and now the houses and streets are rambling over the whole valley and joining on to the suburbs. The prevailing style of architecture still retains the primitive characteristics of the early settlers—flat roofs, dull fronts and “stoeps.” These, however, are rapidly giving place to modern edifices and decorated exteriors, in imitation of the more costly structures of Europe. Adderley-street—its old name the “Heeren-gracht” is almost in disuse—has in this manner been

quite metamorphosed of late years. Once the favourite place of residence of the best Cape families, with a miniature canal in the centre and spreading oaks on each side, it is now entirely devoted to trade purposes. The old "gracht," has long been covered over, the trees have been cut down, and rows of cabs crowd the middle of the street, while shops, stores, banks, and offices extend from one end of it to the other. St. George's-street has followed suit; so has Darling-street, formerly the "Keizersgracht;" and numbers of the other streets are undergoing similar renovations and improvements. Many of the mercantile buildings are very creditable, and would not be considered out of place in some English cities. The handsome offices of the Mutual Life Assurance Society, the Post Office, the Harbour Offices, the General Estate Chambers, the old Mixed Commission Buildings, the Young Men's Institute and Theatre, and even the Markets, all show the tendency to new forms and designs.

The churches and chapels are noticeable, although it is difficult to class some of them under any recognized order of architecture. The best specimen of ecclesiastical style is the St. Mary's Roman Catholic Cathedral, a gothic structure, which from its fine commanding site is a conspicuous object from many parts of the town. The new schools in St. John's-street, belonging to the same church, are also very tasteful scholastic buildings. Close to them, facing the avenue of the Gardens, is another chaste and characteristic work, the Jewish Synagogue. The Episcopal Cathedral of St. George's is a more ambitious attempt at classic architecture, its Grecian front and ornamental tower, much resembling St. Martin's-in-the-Fields. The Dutch Reformed Church, with its old vane-topped Flemish spire standing alongside, is again remarkable for the absence of any external beauty or even embellishment, yet it is the largest church in

the city and has a most spacious pillarless ceiling which will bear comparison with many of the great buildings of England. The Lutheran Church and the Scottish Presbyterian Church externally are also of somewhat ponderous character, but the interior of the former is adorned by the finest specimen of wood-carving in the Colony. A very neat and graceful cruciform building, of modern gothic style, in Overbeek-square, belonging to the German Lutheran body, and another structure of the same order but substantially built of stone, with pitched roof and ornamental windows, erected by the Congregationalists in Caledon-square, complete the most prominent places of worship in the city ; and to them will shortly be added another of considerable architectural pretension, about to be erected by the Wesleyans on an excellent site in Greenmarket-square.

But unquestionably at present the finest of all the buildings, and one of the best things Cape Town has to show, is the edifice erected for the accommodation of the Public Library and Museum, which, strange to say, is hid away from the public eye, occupying a retired spot in the rear of St. George's Cathedral and facing the Botanic Garden. It is artistically designed in the Roman Corinthian style, its principal feature being the handsome facade at the entrance. The Library Hall is a fine room about eighty feet long by forty feet broad, well lighted, and fitted with galleries and recesses, which are lined with bookshelves and books. A copy of Winterhalter's full-length painting of Queen Victoria in her coronation robes, is at one end of the room, and at the other a portrait of "Prince Alfred" as he appeared on the occasion of the inauguration of this building in 1860. The Library is under the excellent care of Mr. Maskew, the chief Librarian, with Dr. Bleek as an assistant in charge of the Grey collection. It contains

upwards of 40,000 volumes in every department of Literature and Science, and is open and available for study daily to all classes of the community. No introduction or recommendation of any kind is required and the whole is therefore in every respect a public institution. A narrow vestibule leads from it to the Museum, which occupies the other wing of the building, and is filled with a very interesting collection, numbering many thousand specimens, of the mammalia, birds, fishes, reptiles, insects, minerals, and other objects, illustrative of the natural history of South Africa, as well as of other countries.

Immediately in front of this handsome edifice there is a fine marble statue of Sir George Grey, formerly Governor of the Colony. It was executed by Marshall, the sculptor, is of colossal size, and stands on a solid block of Cape granite. This is a fitting adornment to the building, for it was Sir George Grey who set on foot the erection of it, and chose its site, conceiving with prescient mind that in course of time a University, Halls of Legislature, and other public institutions of a kindred character, would be raised up around it; and as a substantial proof of his faith in the future of this country, and the influence which its Metropolis will always have on the higher education of its youth, he gave to the Public Library the princely gift of his own collection of rare books and manuscripts, including many valuable works of the tenth, fifteenth, and sixteenth centuries,—a literary treasury such as no other colonial possession can boast. His plans and hopes for the Cape, then imperfectly understood, are now taking form and shape. A University has been created. New Parliament Houses are to occupy the ground to the left of the Library, the Legislature having already voted £45,000 for the construction of a suitably magnificent building. An Art Gallery has been permanently established on the other side, in

what was once the Tot Nut van het Algemeen Institute, now the property of the Fine Arts Association. And at the upper end of the Gardens, the first high-class educational establishment founded in South Africa has been developed into a well-equipped College, whose students may now fully realize Sir George's day-dream of fourteen years ago: "Here in the midst of this beautiful scenery they may resort and converse at their will with the poets, the philosophers, the historians of all countries, and of all past times, and here acquire that knowledge which may enable them to bless and earn the blessings of nations which are yet to be born in the interior of this vast continent."\*

The Gardens, although limited in extent, answer for all the purposes of a park to the city, with the additional advantage of being situate right in the heart, and easily accessible to every part of it. They are a legacy from the olden time, for which the community may thank the Dutch East India Company. Originally planted more for use than ornament, to shelter the vegetables and fruits grown for the refreshment of passing fleets, they now afford a grateful shade and pleasant place of resort to the inhabitants, and are especially appreciated by strangers and visitors, new to African heat and sun. The central walk extends for three-quarters of a mile through an avenue of grand old oaks, and this again is relieved by cross-walks and by the grounds of Government-house on one side, and the Botanic Garden on the other. The latter is an ornamental as well as a botanic garden, laid out with grass-plots, flower-beds, shrubberies and conservatories, and contains a rich collection of rare and valuable plants from every quarter of the

\* Address delivered by Sir G. Grey on the occasion of the inauguration of the building in 1860.

globe. Although its whole area is not more than fourteen acres, and the situation and soil very unfavourable, it contains upwards of 8,000 varieties of trees and plants, embracing specimens of the most remarkable exotic productions as well as the most interesting types of the indigenous Flora. In this narrow compass the best timber trees of Europe, oak, ash, birch, maple, lime, elm, and pine, grow contiguous to the graceful deodar of the Himalayas, the Camphor tree of Sumatra, the lofty bluegums of Australia, and the towering and stately araucaria of Norfolk Island. The fruit-trees of England, laden with apple, pear, or peach, stand side by side with the orange, olive, and mulberry of the Mediterranean Coast, the banana, mango, and alligator pear of the West Indies, and the lit-chic of China. Azaleas, camellia japonicas, fuchsias, and rhododendrons, bloom under the open sky as freely as roses, carnations and violets, while around them are Cape wild flowers of infinite beauty and variety. The Garden in this way, strikingly exhibits the moderate temperature of the Colony, and its fitness for the growth of many vegetable productions, which, although not yet forming articles of common consumption or export, might be raised with great advantage. It was only laid out for scientific and botanical purposes in 1849, and has been brought to its present state of order and completeness by the superintendent, Mr. McGibbon, with very little extraneous aid. The public grant has always been meagre, varying from £250 to £500 per annum; yet the institution is by no means a local one, nor has its usefulness been limited to its immediate surroundings. There is hardly a village or district on this side the Orange River, and even beyond, which has not by its agency been supplied with imported trees, shrubs, and flowering plants; and the finest varieties of fruits, grape-vines, mulberries, grass, and

clover, and other valuable productions of different kinds have thus been introduced and spread over the country, to its incalculable benefit.

Government House, the official residence of Her Majesty's representative in the Colony, is on the left side of the Gardens, with a public entrance from the top of Grave-street. It is a heavy, irregular pile of buildings, originally commenced by the Dutch Company's officials, more than a century and a half ago, and altered and latterly modernized from time to time by its respective occupants. There is nothing palatial or magnificent about it; on the contrary, it scarcely comes up to the standard of an English gentleman's mansion, and the accommodation is miserably deficient, especially when vice-regal pageants are to be gone through, or colonial hospitalities have to be dispensed. Ordinarily, in the summer months, the Governor moves away from town to his country residence in the suburbs; but his office, and the office of his secretary and aide-de-camp, as well as the meeting-place of his Executive Council, are here all the year round. The other public buildings occupied by the various chief departments of the Civil Government and by the Courts of Law, have nothing to recommend them but their size and solidity. They form a massive flat-fronted quadrangle, originally designed for a slave-lodge and hospital, stretching from the lower end of Grave-street to Adderley-street. There are accommodated the Treasury, Audit, Deeds' Registry, Survey, Attorney-General's, the Judges', and other offices; but many other departments, such as that of Education, Native Affairs, Public Works, and Railways, are scattered about in private houses, rented till suitable public offices are provided. The military headquarters of the Commander of the Forces and his staff are in the Castle—a quaint specimen of the ancient citadel, of pentagonal form, with ravelins,

glacis, ditches, gate, sallyport, and all the other paraphernalia of the old fortifications. It was designed and commenced as early as 1672, and the bell on the gate tower bears date 1697, but the greater part of the existing quarters and stores appear to have been built or re-built between 1780 and 1785. Some years ago it was offered for sale to the colonial authorities by the Imperial Government. It is of little use for defensive purposes, and the space occupied by it could be very profitably turned to account for the convenience and improvement of the city. Ample garrison accommodation for the troops quartered here is provided in the main barracks in Caledon-square,—an extensive range of buildings, which were nearly completed by the Dutch (one wing only was unfinished) when the cession of the Colony transferred it ready-made to our hands. Another possession from the olden time is the Town House in Greenmarket-square, a plain but substantial building, with cool, roomy halls and offices. Here the grave and respectable burgesses, chosen by the Government to fill the dignified post of “burgher senators,” were wont to exercise a paternal control over the affairs of the inhabitants at the beginning of the century. Municipal administration did not come into existence until more recently, in 1841, and then it was a complex system of boards of commissioners and wardmasters, presided over by a “chairman of the municipality.” Now there is a Mayor and Town Council—in the modern corporation style—who are expected to keep pace with the requirements of these progressive times, and to make the city as presentable as it should be. A thorough system of drainage, the removal of “stoeps,” the construction of paved streets, and some abatement of the plague of dust during “south-easters,” have still to be accomplished before that will be attained.

The natural advantages which Cape Town possesses are very great. The magnificent scenery surrounding it, and the plentiful supply of purest water which might be stored and made use of for the ornamentation as well as the cleansing and cooling of every part of it, are such as few cities can boast. This may best be realised by a visit to the more elevated points of view afforded by the beautiful Garden suburbs, or the fine drive leading upward over the kloof between the Table Mountain and the Lion's Head. There the whole of the wide valley, gently sloping down from the mountain to the circling bay, spreads out before the eye—a perfectly picturesque picture, with pine-groves, vineyards, and old Dutch mansions, and oak avenues, gardens, and modern villas, following each other in charming succession, until they join the regular lines of streets and square blocks of houses of the city below.

“On each hand, like sentries keeping  
Jealous ward, the mountains frown;  
And beneath, like princess sleeping,  
Sleeps our city of Cape Town.”

The Kloof Road just mentioned is one of the most enjoyable walks or drives about the city. It is a miniature mountain-pass, carried over the neck or ridge between the perpendicular cliffs at the western end of Table Mountain and the peak of the Lion's Head. From this neck there is a glorious view both landward and seaward—the town and the bay, and the straight lines of road and rail leading into the Interior on one side, and the open sea on the other. The road then descends a wooded ravine towards the Round-house, Camp's Bay, and Clifton,—favourite picnic, fishing, and bathing places; and curves in and out along the spurs of the Lion's Hill until it reaches the height overlooking the suburbs of Sea Point and Green

Point, with pretty villa residences clustered along the course of the shore. Those delightful marine quarters are conveniently connected with Cape Town by a tramway, and at any hour of the day one may exchange the glowing heat or dusty streets of the city for the healthful breezes and magnificent ocean view from the granite promontory at Sea Point.

But the most populous and fashionable suburban resorts are the tree-embowered villages of Mowbray, Rondebosch, Newlands, Claremont, and Wynberg, on the eastern side of Table Mountain. In these pleasant sylvan retreats the city merchants and Government officials delight to dwell, and there is a great deal to justify their choice. During the summer months it is far cooler, the difference of temperature at Wynberg being as much as ten degrees less than that of Cape Town, owing to its more elevated position and its exposure to the winds coming up from the zone of Antarctic ice in the southern regions. It is rarely visited by fogs or mists, and although in winter the rainfall is considerable, the hills are well drained by a substratum of gravel. Then the natural beauties of landscape, heightened by the art and industry of the residents, has made these parts a microcosm of the best of South African scenery. Anyone travelling by the railway will be charmed with the green lanes along the line from Rosebank to Claremont, the glimpses of shaggy wood and mountain precipices above Rondebosch and Newlands, and the open breezy flats stretching from Wynberg across to the Stellenbosch hills. The drive along the main road in the same direction is even more delightful,—through the glorious avenue of pines and oaks extending onwards from Mowbray; past the Rondebosch village church and the woods of Westbrook; past the shady groves of Newlands and the slopes of Protea, the episcopal residence of the Bishop of Cape Town; up the Wynberg Hill, with its

clumps and thickets of silver trees; and on to the hospitable homesteads and rich vineyards of Constantia. Along this route the alternate views of hill and dale, dotted with cottages, mansions, and verandahed retreats, with the grand background of bold mountains, are unequalled for beauty and picturesqueness in any part of the Colony.

Such pleasant surroundings contribute to render Cape Town, more than any other place in South Africa, agreeable to residents and attractive to strangers. It is by far the most populous of any of the colonial communities; and its position as the seat of Government and Legislature, as well as the principal commercial *entrepot*, has gathered about it a comparatively wealthy and stationary class, whose social circles possess all the charms of old-established and cultivated society. The number of inhabitants of the city and suburbs is about 50,000, of whom two-thirds may be said to be residents of the city proper, within its municipal boundaries. This embraces both white and coloured races, with all their varieties of nationality and gradations of blood, from fairest Saxon to darkest Nubian. Conspicuous amongst the latter, are the descendants of the liberated slaves, mostly half-caste negroes, who, with the mixed Hottentots and Kafirs, form the "coolies," or working labourers. They are the lazaroni of the Cape,—contented with warm sunshine and a meal of fish and rice, and always full of animal spirits, grinning with natural good humour, or ready to explode in fits of laughter or contortions of merriment at the least suggestion of fun or excitement. Next to them are the half-oriental Malays, generally followers of the Prophet in matters of faith. They are a numerous and well-behaved class, very serviceable not only in household occupations, but in various mechanical employments. As grooms and drivers they are excellent,

for none can take better care of horses. They are the principal fish and fruit dealers and basket-makers; while many are masons, carpenters, and painters, tailors, shoemakers, and harness-makers. Several of them have of late years acquired considerable property, and are quite an aristocracy amongst the coloured people. With all their adaptability and progressiveness, however, there is noticeably wanting the intelligence and skill of the European artizan—the results of education and training—which give a marked superiority to the latter, and enable him here, if steady and industrious, quickly to rise from the condition of employed to that of employer.

Among the white population as already stated, there is a considerable variety of nationalities. In addition to English, Irish, and Scotch settlers, there will be found Dutch, German, and French, Danes and Swedes, Portuguese, Italians and even Americans,—their specialities all more or less modified by the cosmopolitan influences of free and unconstrained colonial life. But the largest and predominating section are the colonial-born of European extraction. Their names usually indicate their diverse descent and ancestry, and their familiar use of the Cape *patois* of the old Dutch colonists may mark that they are sons of the soil; yet in all visible characteristics they are broadly identical with the British-born. Constant intercourse with, and continual accessions of books, periodicals, and serials, from the mother country have naturally infused and extended English habits and ideas, which now generally prevail here. The home markets regulate the springs of trade and commerce; home fashions rule supreme in every circle; and almost all the popular institutions, and pleasures, sports and pastimes, are reproductions of home customs and home life. The mere enumeration of some of the “local institutions” may sufficiently indicate this. There are hospitals, orphan-

ages, sailors' homes, savings' banks, young men's institutes, and Christian associations. There are volunteer corps, and cricket, foot-ball and boating clubs. There are musical societies and theatrical entertainments; and lectures, concerts, and oratorios are frequently given in the assembly-rooms of the Mutual, or St. Aloysius Hall's. There are Masonic, Odd-Fellows', Foresters', and Good Templar lodges. There are comfortable and commodious hotels, a club, public dining-rooms, billiard-rooms, and reading-rooms. There are well supplied fruit, fish, and meat markets. There are cabs, traction engines, tram-cars, railways, and telegraphs. And newspapers (both English and Dutch) are issued on every day of the week. In fact, the new-comer, on his first landing in South Africa, will find evidences on every hand of material and social conditions equal to that of the older countries which he has left behind.

## II. THE OLD SETTLED CAPE DISTRICTS.

Having made the acquaintance of the metropolis and its environs, the reader may seek to know something of the general aspect and condition of the various divisions of this extensive Colony. The first which come in order of position, occupation, and population, is that portion which formed the "Settlement of the Cape of Good Hope" upwards of a century ago. This embraces the Cape peninsula and the lands extending from the sea to the first range of mountains, terminating at Cape Hanglip on the one side, and St. Helena Bay on the other. It is now sub-divided into five districts, known as the Cape, Stellenbosch, Paarl, Malmesbury, and Piquetburg, covering an area of over 5,000 square miles, of which 140,000 acres are under cultivation, and containing an aggregate population of about 100,000 souls, chiefly European, or at least of European descent.

The railway runs through a considerable part of these districts—in one direction to Wynberg, in another to Wellington and Bushman's Rock, opening into the Tulbagh Valley and Worcester, and in a third direction it will soon be extended to Malmesbury, thus affording every facility for excursions from Cape Town to any of these points. But persons who are fond of active exercise, or partial to climbing

"To sit upon an Alps as on a throne",

may have a fine panoramic view of the country by getting to the summit of Table Mountain. The path up by the Platteklip ravine, above the Gardens, is a steep and somewhat fatiguing walk of two or three hours; but it is unattended with danger, and many

ladies, following the example set by Lady Anne Barnard and Madame Ida Pfeffier, have accomplished it without any difficulty. The splendid prospect which it commands on a clear day will well repay all the trouble of the ascent. The whole of the coast-lands northward towards Saldanha Bay, the cornfields of Koeberg and Malmesbury, the ridges of hills of Tygerberg and Paardeberg, and the valleys of Drakenstein and Stellenbosch, are offered to view in the distance; while every part of Cape Town, with its breakwater and docks, is spread out with all the detailed distinctness of a card-board plan. Behind the city, and skirting the mountain eastward, every house and cottage ensconced amongst the silver and pine and oak woods of the suburbs, may be seen; and beyond these the famous vineyards and wine farms of Constantia; the fertile valley of Hout's Bay, with its beautiful shelving beach; the fashionable watering-place of Kalk Bay, noted for its good air and good fish; and near the extremity of the Peninsula the snug harbour of Simon's Bay, a natural port of refuge, where vessels can anchor close to the shore, securely protected from every wind.

Simon's Town itself is not large, consisting mainly of one long straggling street, running round the horse-shoe shaped bay. It owes its present importance to the fact of its being the chief station, depôt, and rendezvous of the Royal Navy on the South African coast. The principal buildings are the Admiralty House, Naval Hospital, and Barracks, the Magistrate's Office, and the English, Roman Catholic, Dutch Reformed, and Wesleyan Churches. The Naval Yard is an extensive establishment, with spacious stores and ample supplies. There are also a boat-dock, landing-piers, and a powerful patent slip, constructed by private enterprise, capable of taking up vessels of about 2,000 tons burthen. The presence of a Flying

squadron, or the occasional gathering of allied fleets, outward or homeward bound, gives a wonderful stimulus to the life and trade of the town, which otherwise is of a very ordinary character, as there is little or no export from it. The hills above it look bleak and sterile, but some of the kloofs and flats along them are occupied by many good agricultural farms, and cattle, horse, and ostrich breeding is successfully carried on there. A fine lighthouse, with revolving reflectors, has been erected on the extreme peak of the Cape Point. The view from it is very grand, overlooking the foaming breakers nearly one thousand feet below, and taking in the blue waters of False Bay and the great wide expanse of the South Atlantic.

“ Here the white surge comes bounding to the shore,  
And the cliff answers to its angry roar ;  
For where the Cape of Storms heaves high its steep,  
The clear south-easter foams along the deep,—  
Whirls the wild spray in gusts of driving snow,  
And sweeps with its salt shower the reeling prow ;  
While round each winding bay and jutting rock,  
The glassy swell rolls with its thunder shock ;  
Or, deepening vast and sullen, heaves away  
To the lone isles beneath descending day.”

Stretching out from the Peninsula to the distant range of mountains, there is a level plain or flat, forming the isthmus, separating False and Table Bays. A good part of this is a tract of sand dunes, considered almost impassable before the advent of hard roads, but now crossed by railroad as well as turnpike, and in many parts covered with young plantations of accacia, hakea, pine, blue-gum, and other trees which are growing luxuriantly, arresting the progress of the destructive drift-sand, and showing what may be done in the way of planting under the most unfavourable circumstances of soil or locality.

Beyond these flats, and along the spurs of the mountains, are the rich valleys forming the chief wine-producing districts, extending from Hottentot's Holland on to Riebeeck's Kastel and the Twenty-four Rivers. The number of vine-sticks planted in these districts, according to the last census, was about 36,000,000, bearing and unbearing, yielding upwards of two and-a-half million gallons of wine, and about two hundred thousand gallons of brandy. Of this quantity Stellenbosch and the Paarl, each, gave considerably over 1,200,000 gallons of wine and from 70,000 to 80,000 gallons of brandy. Besides the vintage, there are crops of agricultural and garden produce, dried fruits, and other articles of value raised.

This is one of the most fruitful and picturesque parts of the country. There are several pretty villages and towns throughout it. Somerset West, in the Hottentot's Holland district—the "Brackenbury" of the "Cape and its people,"—is one of these, an hour's drive from the railway station of Eerste River. It is a favourite resort of newly-fledged city Benedicts, who find congenial charms in the quiet hamlet and the rides in its vicinity. There is a fine mountain road (Sir Lowry's Pass), with glorious scenery, very accessible. There are magnificent estates, well wooded and watered, with hospitable owners, to be visited—one especially, "Vergelegen," with interesting historic associations, as it was laid out by the Dutch Governor Van der Stell, whose plantation of stately camphor-trees still flourishes. And then, close by, there are excellent bathing and fishing grounds at the "Strand," where country cousins from far and near congregate for holiday enjoyments towards the close of the summer months.

Stellenbosch, directly on the line of railway, is something more than a village—it is a town, and, next to Cape Town, the oldest in the Colony. It dates its

existence nearly two hundred years back, and still retains most markedly the hereditary characteristics of its founders. It is the "Broek" of South Africa,—a scrupulously clean and quiet rural elysium, where a population, numbering some four thousand, live and prosper apparently with very little effort. It is prettily situated, extending over a broad square plain, watered by the Eerste River, and surrounded by high and steep hills. The streets, which are numerous, are all at right angles to each other, and precisely alike in appearance, all bordered by oak avenues, all furnished with limpid streams, all containing rows of the same kind of houses—white-washed, thatched-roofed, and gable-faced,—and all having a background of vineyard, or garden, or orchard, yielding delicious fruits of all sorts in abundance. Here the Dutch Reformed Church has established a college, or theological seminary, as it is termed, for the training of its clergy. This was the first step taken towards providing for a complete professional education in the Colony; and many youths who were not in a position to go to Europe have by its means been qualified to occupy spheres of great usefulness as preachers and teachers among their countrymen. The college is in a spacious building which was formerly the magisterial residence. It is fronted by large oak trees, some of them sixty or seventy feet high; and beautiful shady walks "for contemplation made," adjoin it along the banks of the river. The Dutch Church—once a heavy squat structure of the olden type—has lately been modernized in the gothic style, and with its graceful spire is a pleasing and conspicuous ornament to the town. There are other churches of various denominations—the English Episcopalians having a very tiny but pretty ecclesiastical building, although the number of members cannot be many. And here, too, are the head-quarters of the Rhenish Missionary Society,

whose admirable institutions have contributed much to the civilization and improvement of the native coloured races. The local industries are not numerous nor prominent; they are mostly represented by wine-cellars, distilleries, breweries, and corn-mills, and the ordinary retail store establishments common to the country towns.

Over the hills above Stellenbosch a road winds picturesquely into the valleys of Drakenstein and Fransche Hoek. This is where the Huguenot families settled, and named their places after the Gallic homes whence they came—La Parais, Lamotte, Rhone, Languedoc, La Rochelle, Normandie, and the like. The mountain scenery around is very magnificent, towering up in rugged and imposing bluffs and buttresses; and from one of the heights a waterfall descends some three or four hundred feet, forming in winter a grand sight, and even in the driest season washing the rocks and trees and shrubs below with perpetual spray. The homesteads are generally along the course of the Berg River, or its tributary, the Dwaars. They stand in the midst of orange, naartje, or lemon groves, which occasionally number as many as a thousand trees in one clump. Their appearance at any time is exceedingly fine, but especially in September, when the orange is laden with its golden fruit and fragrant blossom, the vines are shooting out their first coat of bright green, the spreading "veldt" is gay with flowering bush, and the mountains high above are here and there tipped with the remains of the winter snow still lying in their craggy clefts. Fransche Hoek is at the extreme end of the valley, forming a charming little hamlet engirt with hills. It was there that the three brothers, De Villiers, of La Rochelle, from whom are descended the extensive colonial family of that name, first settled in 1670; and the ruins of the original house built by them—of moulded clay with

reed covering—may still be seen. Lower down, near Simon's Valley, is the site of the old church where they and their exiled brethren worshipped; and there their descendants have erected a memorial school named Simondium, in commemoration of the first French pastor, P<sup>ère</sup> Simon, who accompanied them to the Colony. In this locality, too, on the slopes of the Simonsberg, above the mission station of Pniel, are the abandoned excavations of the so-called "silver-mines," once worked by some officers of the Dutch East India Company. They consist of several chambers, some of considerable size, tunnelled into the hill, and the ruins of an old place supposed to have been the smelting-house,—all now nearly covered over with the shrubs and trees growing around them. The history of these "mines" is but little known. The local story is, that a man of the name of Mulder settled here, and having possessed himself of several Spanish dollars, melted these down, and forwarded the silver to the Governor, who ordered the excavations to be made. Mulder was pretty comfortable for a time; but, at last, his store of dollars was ended, and the secret came out, upon which he very quietly disappeared. The Government did not wish to make much fuss about the matter, lest the laugh should be against them, and so the story of silver abounding in the mountain was kept up, and some of the ore said to have been obtained from it was made into a chain, to which the keys of the Cape Town Castle were attached, and as such was preserved here until a few years ago. The mines are frequently explored by visitors who come to the neighbourhood; and groups of crystals, gathered from the quartz veins running through the decomposed granite in which the excavations have been made, are carried away as curiosities.

Emerging from the vale of Drakenstein, we reach the Paarl—a considerable sized town, on the line of

railway, which also retains the peculiar features of the primitive settlement. Lying along the base of the rocky hill, whose huge granite boulders glistening in the sunshine like monster "pearls" have given it its name, it forms one continuous street stretching for nearly seven miles, lined with goodly dwellings, capacious wine-stores, rows of oaks, rose-hedges, gardens, and orchards. At different points in the breaks between the houses there are glimpses of cultivated vineyards running up the slopes of the hill, and again down towards the bed of the Berg River, while across the valley there are picturesque mountains, whose colourings under the purple light of early morning, or the warm pink and crimson glows of sunset, are exquisitely beautiful. The inhabitants number about 4,000 or 5,000 people, but they do not show themselves much, nor are their active occupations at any time very conspicuous. During the greater part of the day the long-extending thoroughfare has a dreamy, tranquil appearance, like a nook of the Lotosland, "in which it seemeth alway afternoon," and nobody is ever hurried or busied or excited. The old Dutch custom of a mid-day *siesta* has not yet become obsolete; and here one may readily realise Washington Irving's pictures of Wolfert's Roost and Diederick Knickerbocker. The community, however, is a wealthy and prosperous one; and its local business maintains two banks, besides several other paying institutions. The main source of this, of course, is the wine trade, which is at present very profitable. The produce of the vineyards in a favourable season generally average from one to two leggers (the colonial measure for about 126 imperial gallons) from each 1,000 vines; and most of the farms are large enough to yield over 100 leggers, while some give as much as 200 and 300 each vintage. Ten years ago the market price of the article was ruinously low. The commercial treaty

with France, and the adoption of what is known as the Gladstone tariff (according to the degree of strength) closed the English market to Cape wines. The colonial export, which in 1859 was 1,000,000 gallons, valued at £153,000, fell, in 1864, to 30,000 gallons, valued at £5,200. In consequence of this the growers could not command more than £3 a legger for their young wines, and many of the poorer class were great sufferers. Those who had means held on to their stock as long as possible, or converted it into spirits, for which there was a local market and a better price. Since then, considerable attention has been given to the manufacture and manipulation of the wines, which have been much improved; and this has been followed by an increasing colonial consumption, especially on the frontier districts and at the Diamond and Gold-fields. Wines and brandies, the produce of the country, are now imbibed by all classes, Europeans and natives alike. Although the production is fully fifty per cent. more than it was ten years ago, it does not do more than keep pace with the demand. During the present year (1874) the growers have got as much as £12 a legger—an unprecedented high price, which, if continued, will make them all rich men, for the old good average quotation of £7 has been always considered a very satisfactory return for capital and labour. The various pursuits connected with wine and spirit-making give employment to a great number of the people. There are extensive and costly distilleries in many places, and nearly every farm has its large cellars and stores full of huge vats and casks. Wagon-making is also an important industry, and connected with it there is an occupation peculiar to many of the residents of the towns in these old-settled districts. This is known as "togt,"—the common signification for trading trips to the inland parts of the country at favourable seasons. Wagons are loaded up with all

sorts of merchandise or produce likely to find a sale among the isolated farmers in the interior ; travelling from homestead to homestead, the goods are bartered for sheep and cattle, until finally the wagons and horses are even parted with, and the trader returns with his stock, calculating the profits of his journey according to the prices which they may realize in the Cape Town market.

A new source of wealth has recently been developed in the mountain range directly opposite the Paarl. Rich veins of manganese ore run through the sandstone formation there in various directions, and at one spot, in the locality known as Du Toit's Kloof, it forms a great lode, standing out like a craggy ridge on the hill tops, and extending in mass over hundreds of yards. It is said to contain thousands on thousands of tons of ore. This is now being worked, and is found to be of a very superior quality, yielding from seventy to ninety per cent. For the conveyance of the ore from the mountain to the line of railway in the valley, an aërial wire tram has been constructed for a length of five miles. This novel mode of transport consists of a double endless rope, three and a half inches in circumference, made of strand wire, and suspended on strutted supports ranging from ten to seventy feet in height, with spans between them of various lengths, but in one instance extending to twelve hundred yards. The wire is worked by stationary engines at the two extremities of the line, the rope bringing one way the full buckets of ore, and on the other carrying back the empty ones ; and a telegraph apparatus has been superadded which gives perfect control over the engines from any part of the line. The cost of transport by this aërial railway is dependent upon the quantity of ore that can be conveyed over the distance of four or five miles, and it is estimated that with a delivery

of fifty tons per day, it will not exceed 4s. 6d. or 4s. 9d. per ton.

About nine miles from the Paarl is the township of Wellington, situate in what the old refugees named the Valle du Charon, and where they richly reproduced the "cornfields green and sunny vines" of their native country. Wellington itself is a place of recent date and growth. It sprang up after the great mountain-road of Bain's Pass, leading over the mountain behind it, was constructed about twenty years ago. Later, it has been for some time the inland terminus of the railway, and as such has become an important produce depôt. Wool-washing and other industries have been established there, and it is now a trade-centre which will be maintained, although the railway line has been extended beyond it. Independent of this, it is surrounded by highly productive farms, and the proprietors generally are well-to-do. Like Stellenbosch and Drakenstein, it is also notably a fruit-bearing place, and the supplies of apricots, peaches, plums, citrons, guavas, chestnuts, figs, apples, pears, quinces, and other varieties are abundant and excellent. The orange groves are very prolific and profitable, most of the trees as ordinarily planted giving each a crop of 5,000 or 6,000, while some old ones in favourable situations give as much as 10,000 to 15,000 a-piece. Formerly the ground used to be strewn with the produce of the orchards and orangeries, owing to the difficulty and cost of transport, but now the railway has brought the city market within easy reach of the cultivator. Still there are great quantities of fruit allowed to be wasted, and tons of it might be collected and preserved for home consumption and export.

Leaving the vine-growing valleys, we pass on to the grain-producing portion of these districts—Koeberg, Zwartland, and Piquetberg. This comprises

the whole of the slopes and plains stretching away from the Paarl and Drakenstein and Tulbagh Hills to the western sea-board. It may best be seen from the summit of Bain's Pass, above Wellington, where, on a clear day, about the harvest time, miles and miles of waving corn or mown fields recede in the distance, and give one a most pleasing idea of colonial agricultural industry. Half a century ago it was spoken of as the "granary" of the Colony. Then the whole of the wheat brought into Cape Town, from all parts, did not exceed 146,000 bushels. In 1865, this section of the country alone yielded nearly 400,000 bushels of wheat, in addition to 66,829 bushels of barley, 89,784 bushels of rye, 258,559 bushels of oats, and 137,548 hundred pounds of oat-hay, besides other produce. Since 1865, owing to the division of property, the improvement of market prices, and the general impetus given to agriculture, the production has increased. The extent of land cultivated and the yield of corn is half as much again as it was ten years ago, and there are few places where farming industry has not been greatly enlarged in the direction of planting vineyards, grazing sheep, and keeping dairy stock or horses. Better methods of farming are also being adopted, and machinery introduced to economise labour. There are now upwards of twenty portable steam thrashing machines employed during the harvest, itinerating from farm to farm. Several reaping machines are also at work gathering in the crops, although commonly the scythe and sickle are used.

Malmesbury, the principal township of this grain-bearing country, is about forty miles distant from Cape Town. It originated like most of the inland towns from the establishment there of a place of worship for the convenience of the farmers, and was for a long time known as the Zwartland Kerk, until in 1829 it received its present name in honour of the

lady of Governor Sir Lowry Cole. It is now a thriving village, and with its large stores, comfortable houses, excellent schools, and handsome new churches, presents a very well-to-do aspect. Fourteen years ago it was treeless and bare like most of the surrounding farms, but of late it has been greatly improved in appearance by planting, and its central square and streets are now pleasantly shaded. It possesses a mineral spring of great repute as a "spa" and spacious buildings with bath-rooms, and other conveniences have been erected around it for the accommodation of those who wish to try its medicinal effects. Malmesbury will soon be connected with Cape Town by railway, a branch extension from the main line near D'Urban having been authorized, and this will give its energetic inhabitants an additional stimulus to increase its productions and extend its trade. Bread stuffs and forage form the chief source of business, but other articles have lately contributed to it also. Wool and skins, which formerly were no item of traffic, are now considerable, and the manufacture of wine and brandy is yearly increasing. Some of the vineyards along the spurs of the Riebeeck's Kasteel and Paardeberg Mountains yield richly a wine of first-rate quality, and in most parts of the district there are spots suitable for its production. The wheat lands of Mosselbanks River, Zwartland, and Darling rarely fail to give good crops; from their proximity to the sea they have always a good rainfall and their soils, chiefly a stiff clay formation, with occasional patches of sand, give an average return of about twenty fold. The Saldanha Bay and Berg River districts are more of a mixed sandy and limestone character and less subject to moisture, but they also yield regularly, and sometimes give as much as fifty fold. Nearly all these farms have excellent pasturage, and now carry a good deal of stock.

It is an ordinary custom for cattle from all the neighbouring districts to be sent here for a change during part of the year, and it is wonderful to see the fat and sleek condition which they acquire after a run of a month or two on the herbage of the Bay. Sheep are also now bred and pastured along the Groenekloof farms, the average flocks being 1,000, although some range up to 3,000; and there are many large herds of milch cows. The size of the coast farms is generally 3,000 morgen and more; further inland they are smaller. The average value of these occupied lands may be stated at from 15s. to 30s. per morgen. Sandy places, not fit for corn, may be got at from 5s. to 10s. per morgen; but good arable lands, with grazing for sheep and horses, are not to be obtained anywhere in the division for less than £1 per morgen; while first-class farms, combining "horn, corn, wool, and wine," are sometimes sold as high as £3 per morgen (equal to two imperial acres).

There are several small villages throughout Malmesbury, such as Darling, the Mission Station of Mamre, Hopefield, and the fishing hamlets of Hoetjes Bay, and Steinberg's cove, at nearly all of which there are churches, schools, and stores. In this division too is the beautiful natural harbour of Saldanha Bay. It is about fifteen miles in length, and at its northern side (Hoetjes Bay) there is deep water close up to the shore where ships of any size may anchor. Some years ago a scheme was set on foot by an English capitalist to purchase the properties about the Bay and establish a town there, but this, like many other previous plans for utilizing the natural advantages of the place, has never taken any practical form. At present the harbour is frequently visited by vessels cruising or seeking shelter, who find good accommodation and generally get supplies from the farms in the neighbourhood. Some of the islands in the

bay have been used by the Colonial Government as a Quarantine Station. Game is plentiful, and sportsmen find ample enjoyment there.

The Berg River separates Malmesbury from the adjoining district of Piquetberg; and along the course of the river, especially near its mouth, there are many miles of unoccupied lands, private property, which are admirably adapted for small agriculturists, who might produce quantities of grain and other articles that could be readily shipped along the river to a market. Some of the properties there are from 7,000 to 20,000 morgen in extent. The two most remarkable of them are those of Mr. Melck and Mr. Kotzé, which for the last forty years have been celebrated for the successful horse-breeding which has been carried on there. Mr. Kotzé's is to the south of the river, about twenty miles from its mouth, and Mr. Melck's on the opposite margin, but quite two miles distant, in a straight line across. In some seasons, when rains are heavy, and the river is swollen by the sea-tide, the whole of this space is covered with an expanse of water, so that one may step into a boat from Mr. Kotzé's stoep, row across, and land at Mr. Melck's. The water at such times is covered with myriads of wild sea-fowl, including regiments of flamingoes; and formerly hippopotami were harboured in the high reeds fringing the river, but now they have disappeared, the last having been shot in 1870. Except for a few months of the year, however, the water is confined to its ordinary bed, and the lands on each side form valuable tracts, with abundant pasturage, where horses, cattle, ostriches, and pigs are allowed to run day and night. These farms are devoted to every department of agriculture, although the rearing of first-class horses and cattle is their speciality. The best blood-stock, including horses of considerable celebrity, have from time to time been introduced, and the character and appear-

ance of their studs have been uniformly well-maintained. The annual sales of the young progeny bring together buyers from all parts of the Colony, and on such occasions the hearty free and unrestrained character of colonial life, and the unbounded hospitality of the colonial farmers, may be seen to the best advantage. Day after day there is open house, festive entertainment, and Beotian plenty; as at the Canterbury Franklin's, "it sneweth both with meat and bread," and every visitor receives at once a refined and cordial welcome.

The Berg River is one of the few navigable streams in the Colony. It rises in the mountains above Fransche Hoek and runs over a course of sixty-three miles to the bight of St. Helena Bay where it discharges itself. For a distance of about forty-four miles from its mouth it is used for the transport of produce by sailing-boats of various sizes up to forty tons and five-and-a-quarter-feet loaded draught. "Jantjes Fontein" is the highest and principal point of shipment—the village of Hopefield a few hours' distant being the chief depot, and by this means a large quantity of the produce of Malmesbury and Piquetberg is brought to market. At the mouth of the river small coasting vessels, drawing six or seven feet, may come in and there are jetties built there by private traders for loading and unloading cargoes. It is found, however, in consequence of the difficulties in the navigation of the bar and mouth, to be usually more expeditious to load and discharge vessels at the anchorage in St. Helena Bay by the cargo boats, especially as of late the work is facilitated by a small steamboat. Last year the Government engaged Staff-Commander May, R.N., to survey the river with a view to the improvement of its capabilities; and he reported that the principal obstructions could be removed, and the passage made navigable from the sea for fifty miles of its course at a moderate cost.

Of the obstructions at its mouth he says:—"The passage in and out is rarely impracticable from wind and weather during the summer months. The larger boats have to wait for the tide, small boats pass in and out at the lowest tide under oars, or sail if the wind permits their being handled through the winding channel between the rocks. During the winter season, however, when N.W. winds prevail, the passage is frequently wholly impracticable; the whole coast, from the shallow depths becomes a wide expanse of breakers; but I am informed that the subsidence is prompt upon that of the wind and that the passage is rarely closed on this account for more than a day or two at a time." Respecting the depths of the river he remarks: "The bar is distant from the mouth about a quarter of a mile; it has depth of four feet only at low water spring, with a rocky and sandy bottom; the passage of the mouth is so obstructed by rocks which much uncover at low water springs as to render it then only passable for small boats; and rocks, some only of which uncover, obstruct the navigation for the first three and a half miles of its course; it is free from rocks in its channel thence to a distance of eleven and a half miles from the mouth, where the last obstructive rock occurs. The rocky bed of the last three and a half miles of its course is mostly more or less covered with sand, at and about the mouth to an average depth of two to four feet on the banks, the bed there being kept free from sand by the accelerated tides. Throughout a distance of forty-four statute miles it has an average depth of six to nine feet; it has depths, however, of twelve, fifteen, seventeen feet, and in one place twenty-four feet, whilst there is no place where a five-foot draught cannot manage to find a passage, although in many places a narrow one. The bottom, where not rocky, is either sandy or sandy mud, and in a few

places only, mud alone." The limits of penetration upwards of the sea tide varies with the season. During the dry season, that of least fresh water in the river, it is not sufficiently fresh for drinking, below Zeekoe Island; it is often salt at Mr. Melck's and has been so at Haasenkraal (Mr. Breda's), beyond the present limit of navigation; whilst, on the other hand, when the river is "full" after rains, the banks, as already stated, are overflowed, much of the adjacent country is laid under water, and fresh water runs unmingled for several miles into St. Helena Bay.

Captain May states that during the past year, 1873, the following produce was shipped out of the Berg River, viz.:—Wheat, 22,500 bags; rye, 9,235 bags; barley, 2,328 bags; oats, 23,077 bags; tobacco, 5,145 lbs.; whale oil, 1 cask; butter, 3 casks and 2,000 lbs.; beans, peas, &c., 790 bags; hides and skins, 1,150; eggs, 10,000. Most of the exported produce is sent to Cape Town, but much of the oats, rye, &c., to the northward for the supply of the mule trains, &c., in connection with the copper mines of Namaqualand. Two years ago (in 1872) the wheat crop in the neighbourhood was so abundant that 7,000 bags were shipped direct to the London market by the steamship *Marc Antony*.

The village of Piquetberg or Piketberg, as it is sometimes named, is a few miles north of the Berg River and distant about eighty miles from Cape Town. It is on the direct road to Clanwilliam, and the bridge which spans the river near to it—an iron lattice structure which cost £28,000—is one of the finest in the Colony. The Piquetberg Mountain got its name from the circumstance of a company of soldiers being stationed there in the olden time; now its plateau is occupied as a farm where a large flock of sheep is grazed and a quantity of tobacco is grown. The village, which is very small, only numbering about forty or

fifty houses, is situate on a slope at the foot of the mountain, and commands a fine uninterrupted view of the country to the north and south-eastward for some twenty miles. A Dutch church (in which English service is also held), and public offices and schools have been erected, the village being the seat of magistracy. It has a plentiful supply of clear water, and the several roads leading from it, over the Grey's Pass to Clanwilliam, to the Twenty-four Rivers, and to Cape Town, are for some distance protected by avenues of trees in luxuriant growth. A new village called Porterville has been established in the ward Twenty-four Rivers on the line of road from Clanwilliam to Tulbagh and Wellington, and from its position it is not unlikely that it may in course of time outstrip Piquetberg. There are two Moravian Mission institutions in the district, one at Goede-verwachting and another at Wittewater, where the native labouring population are provided for. The farms of the division are highly productive both in cereals, fruits, and tobacco, and pasture numbers of horned cattle, horses, and some sheep. There is, however, a large portion still uncultivated, and in parts of the flats and Zandveld the occupiers are a poor and ignorant class, as backward as any who are to be found in the extreme border districts. From the want of roads they have been to a great degree isolated from their neighbours, and are not yet much affected by the spirit of enterprise and industry which elsewhere prevails; but here and there intelligent proprietors from other parts are settling amongst them, whose energetic example will no doubt soon have an educating influence. Their communication with the best markets has also been improved by the opening of a new bridge over the Twenty-four Rivers, which gives the district the advantage of easy access to the line of railway at Tulbagh Kloof.

Fishing is carried on in all the bays which indent the coast along these divisions. At some places, fishing grounds have been let by Government on leases of five years at £1 per 100 feet. At other places, such as Kalk Bay, Somerset, Saldanha, and St. Helena Bays there are large private establishments for the curing and export of the bountiful treasures of the deep, which give employment to numbers of the coloured people. The value of the industry at Kalk Bay and Table Bay is estimated at £35,000, inclusive of home consumption. And at Saldanha and St. Helena Bays last year it amounted to £11,600. Both in Malmesbury and Piquetberg there are several salt-pans some of which yield large supplies of excellent salt.

### III. THE WEST COAST DISTRICTS.

North of Malmesbury and Piquetberg, proceeding along the coast, is the division of Clanwilliam, which once embraced the whole of the country extending to the Orange River, covering an area of about fifty-six thousand square miles. It is now separated into the three districts of Clanwilliam, Calvinia and Namaqualand. Of these Clanwilliam is the smallest, having an area of 5,930 miles, of which only 10,000 acres are returned as under cultivation. The natural scenery here as elsewhere on the West coast is dull and uninteresting. As a rule, the features are a broad belt of sand, then low scrubby bush swelling into hills of moderate height, and then a back-ground of mountains, whose rugged, but in many parts picturesque peaks form the margin of a table-land, 3,000 feet high.

Although an old established district, dating as far back as 1808, and partially occupied by a handful of the immigrants of 1820, Clanwilliam has not advanced equally with other parts of the Colony. The absence of roads, and the natural obstacles to transport from heavy sand tracts and mountain barriers, are among the causes which have kept it for years in a stagnant state. When no market was accessible, there was little inducement or stimulus for the farmers to cultivate more than for their own consumption. Now, however, there is a good road all the way to Cape Town about 160 miles, and for nearly one third of this distance the railway from Tulbagh Kloof may be used. The most fruitful portions of the district itself, such as the Cedarbergen, Bidouw, and Oliphant's

River, are being opened to the interior by a road now in course of construction over the Pakhuis Mountain. And if an effort was made to open Lambert's Bay (about forty miles from the town of Clanwilliam) as a port, by removing the monopoly of trade there, improving the anchorage, and constructing a tramway or even a hard road over the Zandveld, a great stimulus would be given to the development of the local resources. One part, known as the Lower Oliphant's River, is highly productive, and especially fitted for individual industry. This forms what has been termed "the Nile Lands" of South Africa. The river which rises in the Winterhoek, the highest peak of the Tulbagh and Bokkeveld Mountain range, runs through the district and receives several tributaries, carrying along with them the surface soil of the Calvinia Karoo and Bushmanland. At certain seasons when the river is flooded and overflows, the adjacent land is covered with the mud or "slick," and is marvellously fertile. Under ordinary favourable circumstances it yields at an average one hundred fold. The soil, however, before it produces to this extent, requires soaking for about twenty-four hours, consequently no rain has any productive effect upon it, except when of sufficient amount to produce floods having a sluggish pace or after the evaporation of standing pools. The "stooling" of cereals varies from twenty to as many as one hundred and sixty stalks from one grain. Mr. P. Fletcher, Government Surveyor, who examined the Oliphant's River in 1859, reported that the quantity of land of this character along its banks amounts to 8,700 acres. He further drew attention to the Holle or Zout River, a tributary of the Oliphant's River as equally fertile, remarking:—"By its arteries it brings together the rich Karoo soil of the Hantam and Hardeveldt, and the rich sandy soil of

Bushmanland. The best crop of oats I have seen in Africa was in the deposit of this 'periodical.' Other portions are of a very saline character. At a rough guess, I believe that in many spots a dam might be constructed three or four feet high and a couple of hundred feet long, which would flood several hundred acres, thereby rendering them richly arable. I have measured some of last year's 'slick,' two feet deep; this, of course, was under the most favourable circumstances, but by the use of dams, the deposit might be regulated, the fresh slick might be allowed to deposit to its full extent, so that in a few years the lands would be out of the reach of ordinary floods—if desirable that they should be so. By this system of irrigation, even the most saline basin would become available to agriculture, and about nine or ten thousand acres on the banks of this one periodical river might be brought under cultivation, which would even excel the richest soil in the 'Boland' (upper country). This is at least my confirmed opinion. Several of the tributaries to the Zout River have extensive Karoo deposit. Some of their basins reaching to nearly one mile in breadth, and their fall so little, that, standing in their delta, a person cannot sometimes judge with the eye which direction water would flow. Their water-course, which winds through the middle of the deposit, is always well-defined, and shows a longitudinal section of the plain. Except in ordinary heavy rains, those channels carry off all the water without overflowing, while a few pounds would leave them in a condition to produce fifty, eighty, or even one hundred-fold. Such is the nature of the Farsh River, Geelbek River, portions of the Troe-Troe River, Oorlogs Kloof, the Zak River at Amandelboom, and other tributaries of the Hartebeeste River. I have not seen the latter, but have been more than once informed that it has, in some places, a deposit of

an hour on horseback in breadth (about five miles), and that when it does overflow there is abundance of grass for all the cattle that visit that quarter. If this description of the Hartebeeste River be correct the products it may be able to yield, either in the form of grain or pasture for cattle, would appear to most people fabulous. We have here, and not here only, but over an extensive portion of the whole Colony, the richest soil in the world, lying at present for two-thirds of the year utterly unoccupied, waste and worthless."

Notwithstanding the natural capabilities of the Oliphant's River, they remain undeveloped, owing in a great measure to the apathetic disposition and habits of many of the farmers there. An enterprising colonist who visited them some time ago, says:—"I strolled along the banks of the river and was much struck with the extremely fertile appearance of the soil and the very little which had been done for turning it to account. It seemed as if the Creator had done everything for the country, and man nothing. Scarcely any rain had fallen for some time past, and the river had not overflowed its banks for more than a year. The stocks of grain and vegetables were getting very low. The farmer was complaining much about the long protracted drought, and when he had finished, I took the liberty of pointing out how he could, by leading out the stream for the purposes of irrigation, or by fixing a pump, to be propelled by wind on the river's bank, secure an abundant supply, independent of the weather. He seemed to listen with some interest to the development of my plans, and I began to hope that he had decided upon doing something to relieve himself of the difficulty; but eventually, after turning round and scrutinising the whole horizon in the direction of the river's source, as if in search of some favourable symptom, he yawned heavily, and

merely observed :—‘ Ach ! wat, dat zal een dag regen.’  
(‘ Oh, it will rain one day ! ’)

Mr. Fletcher in his report to Government estimated the European farming population along the irrigable portion of the river at 120 souls, and says :—“ When there is an overflow of the river they are active enough. Day and night they work incessantly ; the sun and moon alike witness that they do not eat the bread of idleness. But talk to them of improvements in the way of artificial irrigation by dams or pumps, and they ridicule the idea. Those of them who have a vague notion that something might be done in this direction, fear the introduction of taxation ; but perhaps the idea most dreaded of all is, that the land will somehow or other get into the hands of strangers (*vreemde menschen*), or that such will be encouraged to settle among them. This is a fact which indicates more deep-seated ignorance than any other ; it is one which extends throughout the length and breadth of Clanwilliam. As is the case in the other wards of the district, education is at a very low ebb. There is only one family that has a teacher, to whom several of the neighbours send their children. An inspection of this school shows at once the industry of the teacher and the perseverance of the scholars ; there are ten of the latter, the most of them grown-up and some of them even married ; they are taught to read their catechism, but the greater portion and efforts of their time is devoted to writing a copy of a manuscript letter placed before them. By the end of six weeks (the time generally supposed requisite to complete their education) they can produce a tolerable copy of the original epistle. It is really astonishing to see the progress they make even under this system. Arithmetic is not taught, and I believe there is not one of the farming population I allude to who can cipher a sum in the simplest rules of arithmetic. All

the farms along the irrigable portion of the river are partner farms, or what they call *maatschappy plaatsen*; some of them have to the number of seven proprietors, generally brothers or brothers-in-law. Those imaginary shares are again subdivided among their families. One of themselves pointed out a farm where seventeen individuals could claim shares. Nothing is more ruinous to the moral as well as material progress of those farmers than the principles of *maatschappy* farms. Quarrels (*roezijs*) are created between brothers about cutting a bush, allotting flooded river ground, or keeping a few extra bucks, which extend over years, and, in some instances, through life. In talking to some of the most intelligent of the people, they appeared very desirous of having a portion of land that each could call his own; but doubted whether they could demand a division. I believe they can. One thing, however, is certain, that until these *maatschappys* are done away with, there will be no harmony or prosperity on the Lower Oliphant's River."

Equally discouraging is the account Mr. Fletcher gives of the condition of the Rhenish Mission Institution of Ebenezer in the same locality. It is richly endowed with lands of 12,000 morgen in extent, of which 1,100 acres is rich river ground, besides grazing rights over 27,000 morgen on the north side of the river. There was on this place a total population of only 276 souls. There was a church and school, and mission buildings to the extent of a couple hundred feet frontage, all built entirely at the expense of the society. Three brick and stone houses were the only representatives of native industry; all the other dwellings were miserable hut and mat houses. The families of the natives are very poor, and live at certain seasons almost wholly on pumpkins, which vegetable they grow along the edge of the river or wherever the water has happened to overflow. When ripe, it is cut

up in strips, dried, and stored for future use. Muids of the larvæ of the ant are at another season consumed. Few of them like the occupation of fishing; most of them prefer the chase. Mr. Fletcher adds:—"I shall now show what the society had in their power to do, even with a portion of the means at their command, by simply adopting the rude appliances which have proved so abundantly successful for raising water for irrigation in India. Two men and eight oxen can raise water from a well sufficient to irrigate eight acres of ground, thirty men and fifteen such spans will, consequently irrigate 120 acres, which would, on the Oliphant's River, give at least a return of 2,000 muids of corn; this would give more than five muids to every man, woman, and child on the institution, or nearly three pounds per diem to each, for 365 days, besides one or two other crops for feeding cattle, &c. There would still remain river land to the extent of 1,780 acres, skirted for nine miles by a dam of water 400 feet wide and an average depth of about ten feet, banked at the lower end by the sea water and at the other fed by four or five cubic feet of water per second—even at the end of the dry season. From the above facts it appears that Ebenezer alone could support comfortably a population of at least 50,000. To make this statement more palatable, halve it—and say 25,000; or if you doubt the assertion still, refer to standard works on irrigation—such as Smith's, Cotton's, &c."

But it must not be inferred from these remarks that the inhabitants of all parts of the district are open to the reproach of being as apathetic as those above described on the Lower Oliphant's River. From the Zandveld as much as 18,000 bushels of grain is shipped to Cape Town in a good season. The field-cornetcy of Troe-Troe, where a village has now been formed, produces corn, wine, and dried fruits. Along

the Upper Oliphant's River there are a succession of fine properties surrounded by orchards and orangeries ; and the latter attain to wonderful perfection in this locality. The Bidouw and Cedarbergen are also noted for various products, such as wine and brandy, tobacco, whipsticks, and all sorts of fruits. Here the cedar tree (*Widdringtonia Juniperoides*) gives employment to many persons engaged in cutting and supplying timber to Clanwilliam and other places. There is likewise an excellent mission station of the Rhenish Society in striking contrast to that at Ebenezer. It is named Wupperthal and forms quite a small village. Cotton and flax are cultivated, and there are tanning, hat-making, and tobacco and snuff manufactories, all under the superintendence of the missionary.

During the last ten years there has been a marked change for the better amongst the farmers generally. Schools are now opened, and education is appreciated. Woolled sheep are being preferred to the African, and there are merino flocks of 3,000 and upwards. Angora goats have been introduced, although not with so much success. Large enclosures are made for ostriches, which are here in their natural veldt. Horse-breeding is carried on by several persons, and cattle breeding is very extensively engaged in by all. Sheep once accustomed to the pastures do well, but salt is freely given to them as well as to cattle and is found to be very beneficial ; it is readily obtained at 1s. per bushel from the salt pans along the Zandveld.

The town of Clanwilliam is considered one of the hottest places in the Colony in the summer months. It is situate in a basin, near the junction of the Jan Dissels and the Oliphant's River. There are Dutch and English Churches, schools, and public offices, and the private dwellings are surrounded with well watered and fertile gardens. The population of the town at the last census was 330, and of the district 3,500. The value

of immovable property was about £124,000. The reports of the several civil commissioners, however, state that it is capable of supporting a very large population if its resources are only developed. As an instance of what energy and enterprise will do, it may be mentioned that two farmers, some years ago, sold their farm in the Upper Oliphant's River for £250, "because they could not subsist upon it." It is by no means one of the best farms in that locality; but it now supports upwards of eighty people and the new proprietor has derived a comfortable independence from his exertions. Within a year or two past, copper has been found in the district on a farm named "Zandfontein" and on Government land, but whether it can be obtained in paying quantities remains to be seen. Marble of a good quality is also found, and saltpetre exists in several localities and is used by the inhabitants for household purposes. Clanwilliam from its being a coast district has the advantage of regular winter rains, and it is seldom (not more than once in five or six years) that these fail. There are also in various places many powerful springs which may be used for irrigation; one of a mineral character on the Upper Oliphant's River has a great curative repute. Land varies much in price according to position and other circumstances, but the average value for occupied properties is from 7s. 6d. to 10s. a morgen.

Calvinia immediately adjoins Clanwilliam on the inland side. The township (which has a population of about 300) is 250 miles distant from Cape Town, by the direct road leading through Ceres, Karoo Poort, Laange Doorns, Vaarsche Fontein, and Draaikraal outspans. The division is one of the largest in the Colony, extending from the Tanqua River in the Karoo north to the Orange River, embracing an area roughly estimated according to the Blue-book at 26,000 square miles, but the greater portion of this

tract is generally known as Bushmanland—which will be more particularly noticed hereafter, in connection with the Northern Border territory. The occupied parts of Calvinia are chiefly the high table lands (nearly level with Table Mountain) locally designated the Bokkeveldt, Roggeveld, and Hantam. The climate there in the winter season is very sharp, snow falling and the frosts frequently affecting the fruit trees and the grain crops. The soil is fertile, consisting mostly of Karoo, and when the latter rains fall copiously the harvest is good, yielding an average of fifty fold. But being on the debatable ground between the winter and summer rain tracts, the district is subject to periodical droughts, and when these prevail breadstuffs and provisions reach a famine price. It is, however, more a pastoral country than otherwise, and sheep-breeding is the chief occupation of the farmers. The census of 1865 gave the number of woolled sheep in the district at 27,242 and of African sheep 246,943. More than half of the flocks are still of the hairy fat-tailed African kind, which supply the heaviest and best mutton to the western markets; but year by year these are being cleared out, and farmers are showing a greater disposition to betake themselves to the more valuable merinos. The clip of wool of Calvinia last year was upwards of 800 bales, most of it of a superior quality. The farms vary in extent from 3,000 to 10,000 morgen, and some are even 25,000 morgen. The largest flocks are about 6,000 sheep, besides cattle and horses, but the average may be put down at not much more than 1,500. Horse-breeding is carried on to a considerable extent, notwithstanding occasional heavy losses from epidemics. The Van der Merwe's, Visagies, and others keep up their valuable blood-stock, and the Western Hantam, like that of the New Hantam (near Colesberg) can always be relied on for supplies of good

serviceable animals. Ostrich-farming is increasing, the open and arid nature of the country being favourable for it, and the amount realized for feathers last year was estimated at £5,000. The excessive dryness of a great portion of the district in summer has induced the farmers for many years past to adopt what is now with them a regular habit—the “trekking” system. They close up their houses and move away with their sheep or cattle to the open plains stretching to the northward, which from the circumstance of their being thus used as free commonages have obtained the name of “Trekveld” and “Achterveld.” A few years ago, licenses granting the privilege of grazing there were issued by the Government under the Squatters’ Act of 1867. This yielded a revenue of £1,500 per annum, and it was estimated that 300,000 sheep and 8,000 head of cattle were pastured on these lands. The Squatters’ Act having expired, part of the country numbering about 100 large lots was last year put up for annual lease, but only a few of these were taken at the upset rental of £3 per 20,000 morgen. Had there been any reasonable conditions made for the repayment of improvements effected by the lessees, the result would have been very different. The farmers would then have been encouraged to construct reservoirs and watercourses, which are necessary for the occupation of the country for any length of time. But failing this, they preferred reverting to the old state of things under which they roam about at will in search of the best pasturage and the largest natural pools, and not unfrequently there are quarrels and broils as to the possession of these. The Government, however, is making arrangements for the survey of the lands with a view to leasing them for terms of twenty-one years under the Land Act of 1864, and it is estimated that the revenue from them will reach £15,000 or £20,000 per annum. Farms in the occu-

pied parts of the district now average, in the Bokkeveld, as much as 30s. per morgen; in the Hantam, an average of 15s. per morgen; and in the Achterveld, where little or no improvements have been made, about 5s.

We next come to the rich copper-bearing district of Namaqualand, stretching along the coast from Clanwilliam to the mouth of the Orange River over an area estimated at twenty-one thousand square miles. The population does not much exceed 12,000 souls, and the extent of cultivated ground about 12,000 acres, so that the greater part of the country although known to be rich in hidden wealth is as yet an empty barren wilderness. Its geographical features, as well as its geology, zoology, and botany, and the situation and character of all its mining centres are admirably described by Mr. Wyley, the geologist, in his official report on the district in 1857. A broad sandy tract stretches inland from the sea, and rises by a gradual ascent to the high plateau of Bushmanland. Towards the north the mountains increase, some rising 1,500 feet above the general surface, which is about 3,000 feet in height.

The prevailing rock, in Namaqualand, Mr. Wyley says, is gneiss, passing into schists, as we approach the Orange River. In the south, the gneiss is often of a granitic texture, and cannot always be distinguished from the granite veins which are mixed up with it, as in all gneiss countries. It is broken into by new granites, and greenstone rocks, and very often, in the south, by a peculiar ferruginous felspar rock, which has been noticed in connection with the mines. This usually forms small rounded or conical hillocks, easily distinguished by their dark rusty brown colour, and as they are pretty sure to accompany the copper indications, they have often served as a guide to the latter, and have been termed "the copper-bearers."

The bedding of the gneiss, where it can be made out, is sometimes nearly vertical, sometimes horizontal, but it is seldom so marked as to exercise any great influence on the form of the hills. Not so with the quartzites and limestones along the middle of the mountain range, which appear in horizontal caps, and flat tabular mountains, like the Table Mountain, or the sandstone hills of the Interior. The hills of Bushmanland, excepting those very far to the eastward, although of gneiss or granite, have also a tendency to the tabular form, owing in most cases, to a more nearly horizontal arrangement of those rocks. Those of the western flats are, for the most part, of the same broken character as the gneiss of the highland districts.

Springbokfontein, or Springbok as it is commonly named, is the chief seat of magistracy of the district, and near to the centre of the wonderful mining industry which has sprung up during the last twenty years. The existence of copper in this locality was known nearly two centuries ago, and as early as 1685 attempts to turn it to account were made by the Dutch Company's Governor, Van der Stell, and afterwards by others, but without success. The want of fuel and the difficulties of transport in those days were probably insurmountable obstacles to enterprise. It was only in 1852 that the working of the present mines was commenced by a Cape Town firm, the late Messrs. Phillips & King, now King & Son. They opened the ground at Springbok, which then was a desolate place, with merely a mud cabin and a few mat huts occupied by the natives. The mineral indication was situated at the base of a hill rising about 600 feet above the plain. Before being broken into it exhibited a mass of rusty brown rock, of a somewhat semi-circular form about 160 yards in greatest length. The lowest portion consisted of very

slightly altered granite, or rather very granitic gneiss, showing little trace of copper; the upper part on the other hand was highly altered and mineralized gneiss with an abundant copper stain, not superficial, but penetrating far into the decomposed rock, in addition to which there were several veins of red copper ore at the surface of the ground. The first eleven tons of ore were shipped by the steamer *Bosphorus* on the 31st August, 1852. Since then upwards of 88,000 tons averaging 30 per cent. of copper, have been shipped. The exports for several years have been 7,000, and it is rapidly approaching to 10,000 tons per annum. Springbok is now an important village, with its public offices, pretty English church, and substantial houses. Five miles away from it, a new mine, the Ookiep, has been opened; and the tall chimney stalk 120 feet high, the smelting works and other extensive buildings erected there, as well as the large heaps of ore lying about, show the importance of the station. There is a population of 1,500 on the place, a portion of whom work under ground and the remainder on the surface, in the different occupations connected with the mine. A number of these are Cornish men and skilled European artisans, but there are also labourers from St. Helena, and Hottentots, Bastards, Damaras, and other natives employed. Again at Spectakel, twenty miles from Springbok, and near to the junction of the Buffels and Schaap Rivers, there is another mine with a population of about 600; and at the Concordia mines, eight miles north-east of Ookiep, there is also a large establishment with smelting works and some 300 to 500 people employed there.

In 1860 Messrs. Phillips & King retired deservedly enriched by their enterprise and energy, and their property was transferred to the Cape Copper Mining Company (Limited). From that time the development of the mineral wealth of the district has

been most marked. Skilled labour and machinery were introduced, new centres were opened, a railway constructed from the seaport towards the mines, and the whole business conducted under a well arranged system of administration and management. As a mercantile success, the result has been highly satisfactory. Their principal mine is that of "Ookiep" and the richness of its yield may be judged of from the fact that it produced more metal last year than the whole of the Cornish and Devon mines during the same time. Professor Noble who visited it in 1873, says:—"It is beyond all doubt the richest copper mine in the world. In 1870 it yielded 5,300 tons of ore, at an average per centage of 29·38; in 1871 it gave 6,071, at an average of 32 per cent; and in 1872 it yielded 6,900 tons, with a per-centage of 33·25. During the present year it is yielding at the rate of from twenty to thirty tons per diem; while the estimated amount of its wealth within reach of the present shaft with its traversing extensions is upwards of 30,000 tons! The total depth attained by the shaft is 420 feet,—or to give a still more vivid notion of it, I need only mention that the most experienced miners take 'twenty minutes' in climbing up the ladders from the bottom to the summit level. Of course, at various levels extensions are made in all directions, east, west, north, and south, traversing the copper bearing lode. At the fifty fathom or 300 feet level in one direction there is a 'stope' or excavation of sixty feet by 120 feet, forming a huge cavern, the roof of which is supported by three pillars of resplendent ore, necessarily left untouched; while at the deeper level of sixty fathoms or 360 feet, the area explored and excavated is 210 feet from north to south, and 150 feet transversely to the eastward." Of the ore in reserve—that is, in sight but not yet brought to the surface—the mining engineer's estimate

is 35,000 tons. In his last report he says: "I have gone carefully into calculations as to the quantity of copper ore that we have at present discovered in the mine, and I estimate the number of fathoms, and the yield per fathom, to be as follows:—

In back of 20 fath. level,	680 faths.	yielding	$5\frac{1}{2}$ tons per fath.	3,740
" "	30 "	"	5 "	3,000
" "	40 "	"	5 "	5,215
" "	48 "	"	$3\frac{1}{2}$ "	2,800
" "	58 "	"	$5\frac{1}{2}$ "	14,245
" "	68 "	"	6 "	6,000

Tons 35,000

Added to this, the managers contemplate the period some years hence when they will be working the ore ground at 120 fathom or 720 feet level, so that Ookiep has a brilliant future to look to. But the Company are also directing attention to other portions of their property, more especially to the locality formerly known as Copperberg (now Carolusberg) six miles south-east of Ookiep which was visited by Governor Van der Stell in 1685. Kildennan, six miles to the north of Ookiep, is also being opened, and another mine at Buffel's River, thirty miles to the west of Ookiep, has been found very productive, though uncertain. The Company has likewise commenced the working of the mines known as Kudas and Numis, 120 miles north of Ookiep. These latter are about sixty miles distant from the coast and within five or six miles from the Orange River, which may be made available by means of flat bottomed boats for the transport of the ore to its mouth.

The Cape Copper Mining Company, although the most important and extensive, is not the only joint-stock association engaged in mining here. The Concordia Company with a large capital have commenced work on the Hester Maria and Wheal Julia mines,

and other outcrops of cupriferous rock. There are also many abandoned workings, such as the Bulltrap, Burra Burra, and Schaap Mines, which are awaiting the employment of capital for development. Northward again from Pella to the Orange River Mouth lodes of copper-bearing rock are known to exist; and a strip of country 100 miles in width from the sea-board ought to be workable with profit if transport and quick dispatch at a reasonable rate were provided.

The matter of transport was the great difficulty with which the Cape Copper Mining Company had to contend. Their mines were far away from the sea, and the ore had to be conveyed over frightful mountain roads and sandy tracks to the coast. Trains of ox and mule wagons were employed, absorbing the whole agricultural appliances of the district and drafts from other parts of the Colony besides; but they were unable to meet the rapidly-growing requirements of the traffic, and the piles of valuable ore lying unremoved at the mouth of the mines induced the Company to send out their present engineer, Mr. R. T. Hall, to see how the transport problem could be solved. Hondeklip Bay was then the shipping and landing port, and a constructed road was opened from there towards Springbok. Mr. Hall after a careful survey of the country and the coast, recommended the directors to abandon the Hondeklip route and bay, to remove their establishment to Port Nolloth, and to carry a narrow-gauge railway from there inland to the mines. This plan has been adopted with gratifying success.

The railway as an example of a cheap and effective mode of opening up the country is of a very interesting character. It has been constructed for about one tenth of the cost and one fifth of the time required for ordinary lines. The gauge is two feet six inches. It is laid with rails mostly 18 lb. to the yard but

occasionally 28 lbs. securely bolted to longitudinal creosoted pine sleepers seven inches by three inches, and fixed laterally by iron tie-rods fastened underneath. The line starts from the landing jetty at Port Nolloth, and for the first fifteen miles runs over a sandy plain up to Ograbies, which has an altitude of 500 feet above the sea level; beyond there it winds along the mountain valleys, rising by imperceptible gradients to a level of 1,600 feet near Muishond; from there towards Klipfontein the ascent is steep and rapid, making 1,400 feet in seven and a half miles, but a ruling gradient of one in twenty for two miles leads it up to the summit level of 3,000 feet; and thence it descends easily to the mission station of Steinkopf or Kookfontein, about sixty-five miles from the Bay and twenty-six miles from Ookiep, to which the line is now being extended. The cost of this railway over the first fifty-one miles was only £52,205 or a fraction over £1,000 a mile; over the latter portion to Kookfontein, on which there are rapid curves and heavy works, both rock cutting and viaducts, the average was much above £1,000 a mile, but in no instance as high as £2,000. The whole sixty-five miles now being worked cost altogether about £100,000, and the entire length of ninety miles to Ookiep will be completed for the estimated total amount of £150,000. The cost of maintenance is from £80 to £100 per mile per annum. The locomotives used are very light, weighing with water and coal about seven tons, and have a working pressure of from 100 lb. to 120 lb. per inch. A good deal of expense has been entailed in securing a regular supply of water. At one place between Nonamas and Ograbies in a valley about a mile in breadth, a well was sunk 124 feet, all the way through alternate layers of sand and hard baked alluvial deposit, but the bottom was as dry as the top, although, strange to say, straight roots of some plant alive ran

from top to bottom. Now reservoirs have been constructed, from which water is conveyed by pipes to the railway for the use of the engines.

The quantity of goods carried along this line last year was 3,402 tons (of 2,240 lb.) up; and 10,424 tons down; and the assistance it has proved to the Company as a means of transport in comparison with the former ox-and-mule-wagon conveyance will be seen from the following traffic-returns of Ookiep for the last six years. It has to be noted that the first portion of the railway (forty-six miles) was opened in 1871, and the second part to Kookfontein in 1873. The two ports have quite altered the positions they relatively held, and for the future the preponderance in favour of Port Nolloth is certain to be still more marked, as the chief trade of the district and of part of the north-west Border will be centred there:—

	FROM OOKIEP			
	<i>Viâ</i> PORT NOLLOTH.		<i>Viâ</i> HONDEKLIP BAY.	
	Up Transport. Goods, Fuel, and Forage Shipping ton 2,240 lb.	Down Transport. Ore and Regulus. Gross Shipping ton 2,240 lb.	Up Transport. Goods, Fuel, and Forage. Shipping ton 2,240 lb.	Down Transport. Ore and Regulus. Gross Shipping ton 2,240 lb.
1868	316	367	222	1,829
1869	831	1,484	500	2,891
1870	1,364	2,478	915	3,172
1871	1,088	7,461	286	1,567
1872	1,794	7,611	157	1,163
1873	3,402	10,424	...	1,183

The agricultural products of Namaqualand are comparatively limited, chiefly owing to the uncertain and at best of times small rainfall, which does not exceed eight inches annually and in some places not half that amount. There are no such things as permanent streams; running water is a thing rarely seen; and the principal dependence is on surface springs rock springs, or the dry channel of river beds, from which water (chiefly brack) is procured by sinking in the sand. Still there are upwards of one hundred and thirty measured farms and one or two mission stations in the southern part, the produce and stock on which are valued at £180,000. In 1865 the yield of the whole district was 47,076 bushels wheat, 2,476 bushels barley, 11,267 bushels rye, 3,620 bushels oats, some oathay, potatoes, tobacco, and 12,716 lb. of wool. The cereal production, however, is far short of what is required for local consumption, the mule train of the Mining Company alone consuming at the rate of 5,837 bushels of oats, rye, and barley, and 19,000 lb. of oatsheaves and chaff per month, and large supplies have to be obtained from Malmesbury. To meet the wants of the small farming population, a village named Bowesdorp has been created near the Kamiesbergen, where there is a Dutch Reformed Church and schools. There is also a Mission Station for the improvement of the natives at Lilyfontein, in connection with the Wesleyan Society. The other mission stations are those of the Rhenish Missionary Society, one at Steinkopf under the Rev. Mr. Brecher, and one at Kammagas, under the Rev. Mr. Weich, where a large reservoir and gardens have been made from which the mining villages get welcome supplies of fruit and vegetables.

Port Nolloth (formerly known as Robbe Bay) is an indentation on the coast with a reef of rocks protecting it from the Atlantic. Its length from north

to south points, is about two miles, and its breadth from shore to reef varies from 1,000 to 3,000 feet. The reef runs nearly N.W. by S.E., but about the middle and for a space of near 1,500 feet, there is a break, which forms what is termed the bar or entrance to the harbour. The depth of water here is about twenty-eight feet at low tide, the reef on either side is nearly bare at low-water spring tides. On the south side of the bar or entrance is "Robbe Island," a small islet nearly covered at a very high spring tide, but a great protection to the shore against the run of the sea from westward. Opposite here are the public offices and the general places of business. A jetty has been built 300 feet in length, carried out to a depth of eleven feet at low water; there is also suitable wharfage accommodation and stores for the purposes of carrying on a large trade. Moorings have been laid down and beacons and a light for the guidance of vessels have been put up; and last year authority was granted by Parliament for expending about £5,000 in clearing the harbour and forming a channel from the moorings to the jetty of a uniform depth of eleven feet at low water spring tides. There is a considerable business at the port now, and this year it has been made a seat of magistracy. In 1873 the number of vessels entered coastwise was fifty-nine, with a registered tonnage of 6,987 tons; and fifteen vessels from foreign parts, with a registered tonnage of 4,323 tons; the total value of direct imports was £34,226, the value of exports £242,722, and the amount paid to Government for duties and royalty on ore exported from the Crown lands was £3,459 16s. 8d. Steamers ply weekly between Port Nolloth, Hondeklip Bay, and Cape Town, making passages regularly of about forty-eight hours. Ten or twelve days will allow ample time for a trip from the Metropolis to the mines and all that is most interesting in Namaqualand.

#### IV. THE NORTH-WEST DISTRICTS AND THE ORANGE RIVER.

The north-west districts comprise the extensive unappropriated territory, marked on the map as Great Bushmanland, forming the inland portions of the divisions of Calvinia, Fraserburg, and Victoria West. Here colonization has only lately been gaining upon the wilderness, and there is still a great area waiting to be filled up, whose pastoral and agricultural capabilities when developed will add largely to the wealth of the country.

The unoccupied lands reach from the settled parts of Calvinia, north of the Hantam Mountains up to the Orange River, about 300 miles in a straight line, and across from the borders of Namaqualand at Pella eastward to Prieska, nearly, if not quite, 400 miles. This large tract was included within the Colony on the proclamation of the Orange River as the boundary in 1847; but until very lately it was regarded as a desert and left to the free occupation of migratory squatters and their flocks, and wandering Bushmen and Korannas, living along the river, hunting antelopes and ostriches in the open plains extending on each side. The squatters consisted of white and coloured people of two classes,—some of whom had no farms, and led a purely nomadic life, and others who had farms in the adjoining districts which they occupied during the greater part of the year, only moving into this open country after the periodic rains had fallen, for the sake of the rich pasturage. The Korannas and Bushmen were remnants of the

indigenous population, many of them retaining their savage lawless habits, and sometimes levying blackmail upon the squatters' flocks. In 1868-9, their depredations assumed such a character as to excite no small degree of terror among the outlying farmers along this border. Stock to the amount of 15,000 sheep besides cattle and horses, were carried off, and life and property there were considered very insecure. But the forays and raids of these banditti were soon checked by the operations of the Frontier Mounted Police under the late Sir Walter Currie, who followed them up and cleared them out of their haunts in the dense bush along the Orange River. Since then the presence of a body of twenty-five policemen, whose head-quarters are at Kenhardt, has sufficed to keep the whole of the country perfectly orderly and peaceful.

This unpopulated territory is more or less suitable for pastoral occupation, but it is barely supplied with water and subject to recurring droughts. The winter rains which visit the west coast districts, do not extend more than 100 miles inland; and scarcely any part of Bushmanland ever receives any moisture from them. It is dependent upon the sub-tropical rains and thunder-storms of the summer months. These generally fall in December, but are uncertain. When they come, the sandy flats and plains are quickly transformed into one wide meadow of waving grass for hundreds of miles. The grass grows in stools or tall tufts separated from each other by three to six feet of reddish sand. There are five or six species of common occurrence, but the best is that known as the Bushman or "twaag-rass" described by Mr. Wyley:—"It grows from two to three feet in height, from a small bushy base, its long slender culms growing nearly upright, but inclining slightly outwards, with panicles nearly a foot in length. Its long feathery awns, are simple and undivided, but with two stiff bristles at the

base. When it is green, oxen, horses, and sheep, all thrive upon it, and grow fat, in a few weeks; and even in the winter, when thoroughly dried up, it is better feeding than the green reeds or bushes. Most of the natives, and some of the farmers, trek to it in the summer months, with their cattle, thousands of which may sometimes be seen drinking at the same pool. During the last two years, large quantities of this grass have been brought by the native wagons to Concordia. It is cut with a reaping hook, like oats, each clump or tuft affording about a handful. Four men can usually load up a wagon in an hour, the wagon travelling along as the grass is cut. If cut while in flower, or before the seed ripens, I have no doubt it would make excellent hay, which could be stacked on the ground, and transported, at leisure, for winter feeding." It may seem strange, Mr. Wyley adds, that a tract hundreds of miles in extent, producing this grass, should not be occupied; but there are serious obstacles to this. In the first place, the grass is green for only a few months at best, and as the rain falls only locally, and some years, scarcely at all, there would be risk in settling at any particular place. Besides, throughout the country where these grasses grow, the waters are few and far apart. Notwithstanding these drawbacks there is little doubt that as soon as the country is surveyed and offered for lease, it will be permanently settled. Wells may be dug in every direction, and many tanks or reservoirs can be constructed; and it is likely enough that here as in the grassveld of the Hope Town district, several thousands of sheep and cattle may be depastured. The civil commissioner of Calvinia in his last year's report states that according to the information given him by Mr. Garwood Alston, the Government Surveyor, the probable extent of Bushmanland unoccupied, may be put down at 30,000 square miles,

which can be laid out in farms of about 20,000 morgen, to the number of 500 or 600. Looking at the revenue derived from Crown lands in other parts of the division which are surveyed and leased, the average value of each 20,000 morgen of land there may safely be put down at a rent of at least £20 per annum. Mr. Alston's estimation of the cost of survey of the whole of this tract of land figures at £25,000, or less than the rent of three years, if surveyed in farms to the extent and number stated, and leased under the provisions of Act No. 19 of 1864.

In Bushmanland as throughout many parts of the adjoining northern districts of the Colony there are several of those hollows or depressions having little or no outlet, which are called "vleys," "vloors," and "pans." Some of them are considerable saline deposits, and are covered with salt; others having an overflow of water show only a filmy coating or saline efflorescence, which does not altogether check vegetation and as soon as dry, short grass springs up on the mud, affording good pasture for sheep and horses. One of the largest of the salt pans is due north from Calvinia and named the Great Commissioner's Pan. It is about ten or eleven miles long by a little more than a mile broad, covered with a thick crust of salt, looking in the distance almost like snow. Many of the Boer and Bastard squatters employ themselves here, gathering the salt and selling it in the neighbouring districts at from 20s. to 30s. a bag. Zevenfontein Pan although not so large also yields salt of excellent quality. There is another about three miles north of the Commissioner's Pan, known as Klavervley, where the water, especially after a flood, is drinkable, and, it is said, the outlet from it could be easily dammed up and a fine lake about one and a half miles long, and more than half a mile broad, with a depth of fifteen feet all over might be secured.

The drainage of this territory runs northward. The waters of the high plateau of the Roggeveldt and Nieuwveldt Mountains are carried off by the Fish, Riet, Hartog's, and Zak Rivers, which afterwards form the Hartebeeste, and then join the Orange River. In the dry season these streams are comparatively small, and often a mere succession of pools, but after rains they run briskly, and where level with the banks, overflow and soak the adjacent flats. In many places so very even is the country that they may be said to have no defined channel and form extensive sheets of water, a few inches deep. The Zak River at 250 miles from its source, thus varies in breadth from one to four miles, and further on from Onderste Doorns to Leeuwenkop it widens as much as ten miles. At a locality known as De Kruis, the Zak joins the Haartebeeste River, which really forms the central drain into the Orange. Along its course is the most valuable part of Great Bushmanland. Water can be obtained in its bed even when dry, and its valley generally affords pasture to cattle during both the winter and summer months. After floods, there are extensive alluvial bottoms on each side of it where agricultural products of every kind might be raised. These are now commonly used by the squatters as sowing-lands, but without any labour or trouble beyond scratching in the seed. One overflowing of the soil is sufficient to ensure a crop even although no rain should fall afterwards. The returns are something marvellous. Wheat usually gives one hundred and fifty fold, and Mr. J. Auret, the surveyor, in one of his official reports mentions an instance where on the Zak River 800 muids were raised from thirty-two muids of seed.

The Zak and Haartebeeste Rivers form the boundary between the divisions of Calvinia and Frasersburg. They may also be said to fix the line of

demarkation between the grassveld and the bushveld, which extends eastward. At present, too, for some distance they mark the limits of the unoccupied and occupied lands. On the Calvinia side, the farmers graze promiscuously, live in huts and make no improvements; on the Fraserburg side, the lands are held on quitrent tenure or convertible lease, and substantial houses, springs, wells, and dams, and occasionally gardens and tree plantations are met with.

Further on, in the adjoining division of Victoria West, wherever the waste lands have been surveyed they have been readily taken up and occupied and a vast extent from which it was supposed at one time that no profitable return could be derived, is now utilized and highly valued as excellent grazing ground. The western portion of this division has quite lately been declared a magisterial district, and named Carnarvon. The village of Schietfontein is its centre. This was originally a location of Kafirs, Fingoes, and Bastards, among whom a mission was established by the Rhenish Society. The families settled here received a grant of a piece of ground with sowing land, and grazing for 500 sheep and twenty head of cattle, on condition that they erected a house within twelve months afterwards. A large number fulfilled these conditions and received transfer and title to the land, and were prospering well under the late missionary, the Rev. Mr. Alheit, an energetic man, who gave no countenance to idlers. After his departure, many disposed of their titles and several of the erven fell into the hands of Europeans. The place has since developed into a village, a Dutch Church as well as a Mission Church having been built, and one or two stores, which do a good business with the surrounding farmers. The church and new tenements are creditably white and neat as compared with the old mud houses. The village is situate on a flat, surrounded by low hills; but it is

a pity that it was not built 500 yards lower down where there is a better fountain and water supply. To some extent this may yet be remedied by abandoning the present gardens and laying out new water erven; it may then in course of time become one of the finest towns in the inland parts. The principal arable lands are distant about an hour's ride, at a spot named Zaaipoort where a considerable quantity of grain is grown. These present a fine sight, when sown and green, with the waving corn stretching over more than six miles. Sowing facilities are pretty general here in regular seasons, but when drought comes, supplies have to be looked for from elsewhere.

The mountains of the Kareebergen, whose eastern extremity extend around Schietfontein, are geologically very interesting. They are not high, few of them rising more than 1,500 or 2,000 feet above the plain. There is among them a great preponderance of table-topped hills and a few conical ones, all more or less banded with projecting beds of sandstone. In the higher hills the bands number six or seven. They resemble the bands in the Upper or Stormberg beds, but are hardly so well developed. In the shales about five miles north-east of Schietfontein are plant impressions and very large blocks of fossil wood, like that found at Kneehalter's Nek and other places in the Albert district. These facts led Mr. Wyley to regard the Kareebergen as belonging to the upper coal measures or Stormberg series, and it is possible that in some places throughout them serviceable coal may be found.

Mr. Dunn, who visited the neighbourhood, has also pointed out that near Schietfontein are several interesting localities presenting geological phenomena identical with the "New Rush," "De Beers," "Du Toit's Pan," "Bultfontein," and "Jagersfontein,"—the dry diggings, or at present supposed localities in which the diamond has originated, and from

which nearly the whole of the diamonds of Griqualand West have been dug. There are two such places at Klipfontein (J. Jacob's), two hours from Schietfontein, and one at Blaauwkranz, an hour from Schietfontein, corresponding to the New Rush in appearance of reef soil, pebble, and bort. Mr. Dunn says:—"These localities are easily distinguishable on the surface by an edge of upturned shale surrounding a more or less circular area; within this boundary is the soft, friable, and apparently decomposed trappean rock, fragments of shale lying in confused order, cores of igneous rock not yet decomposed, small pieces of calc-spar, red spinels, diopside (green) a topaz-like mineral, but much softer—black spinel, &c., in fact every mineral that is met with at the previously mentioned diggings. It is difficult to form a decision as to the manner of their formation. Considering that they are filled with what is evidently igneous rock in a decomposed state, fragments of shale, &c., being scattered at random through it, that the edges are also invariably in these cases bent *upwards* as though by the force of heavy molten matter acting on the edges, it is rendered probable that these were 'pipes' or chimneys connecting one sheet with another. That the material in them is nothing more than decomposed trap may be clearly seen in some dykes in the neighbourhood of Victoria West where material identical with 'Dry Diggings' rock occurs." In the extreme northern part of the division near Prieska a "rush" took place two years ago from the discovery of a few diamonds there, but they proved to be merely surface finds which are not unusual along the Orange River,—where, for instance, on the Hope Town side the brilliant "Star of South Africa," valued at £30,000, and now in the possession of the Countess of Dudley, was picked up by a native shepherd.

Prieska has been selected by the Government as the

site of one of the new villages about to be formed along the Orange River. These will be of great advantage as centres for the pastoral population settling on the Crown lands along the border, and are likely to extend trade and civilization amongst the natives beyond it. The river at Prieska flows along in a wide smooth stream bearing on its bosom a large island which has received the name of "Leibbrandt," after the respected minister of the Dutch Reformed Church of Victoria West, who was one of the earliest to penetrate into and make known the character and capabilities of this part of his parish. The banks on the colonial side are covered with a dense growth of willow, mimosa, and other trees, and the hills adjoining are crowned with blocks of jasper conveniently pointed and of all dimensions, "so truly rectangular with smooth faces," says Mr. Dunn, "that no mortar is required, every stone will fit exactly." There is a small river named the Prieska, running for some distance, and a good fountain which may be greatly improved and used for irrigating a portion of the village ground. But about six miles higher up, the Orange River itself can be easily led out permanently and so bring a large and fruitful area under cultivation. The plan of the new village provides reserves for church and school purposes and public buildings, with about 150 dry and water erven for municipal purposes in addition to commonage; and we are glad to notice that there are very stringent regulations for the preservation of the wood and bush for some miles along the river banks. Prieska will, of course, take some time to be established, but from its position and natural facilities it is likely to thrive and ultimately take a place among the border towns. It is distant from Victoria West, 121 miles; from Carnarvon (Schietfontein), 127 miles; from Hope Town, 77 miles; and from Griqua Town, Griqualand West, 66 miles.

Another point chosen by the Government as the site of a new border village is further down the Orange River, at a place bearing the name of Wegdraai. It does not figure on the map (which very imperfectly represents the topography of this part of the Colony), but is situate about sixty miles north-east of Kenhardt. This locality was some time ago recommended by Mr. Jackson, the late Border Magistrate, as suitable for a settlement, and last year it was inspected and favourably reported upon by Mr. Garwood Alston. The Orange River here for a distance of fifteen miles has a mean fall of about two feet six inches. It flows along in short rapids and reaches of comparatively smooth water. At one spot, the Bucchubergen Poort, it is divided by islets into three groups of streams, and there it is proposed to lead out a water-furrow for about twenty-five or thirty miles to Wegdraai, where some 4,000 or 5,000 acres of rich alluvial soil could be put under irrigation. With no great trouble adjacent lands could also be utilized, and in a few years if an industrious population were placed there it might prove the granary of the north-west districts. A commonage of 30,000 morgen, extending on the south-west side to the Ezelbergen, is intended to be attached to the village, and other liberal inducements held out to settlers. Mr. Alston says that "politically the advantages would be incalculable, and commercially there is no doubt that the sale of the water-erven would reimburse the Government, provide a considerable quitrent, and materially enhance the value of the surrounding Crown lands." Experience must teach what the products of the country will be. It is known that cattle and sheep do very well, and the soil only wants the assistance of water to render it highly productive of every variety of agricultural crop. Trade with the natives of the interior will be greatly

facilitated, and abundant scope opened for the speculations of enterprising individuals.

The Great Orange River—the “Gariep” of the aborigines and the old colonists—is the most wonderful geographical feature of South Africa. Traversing the continent from east to west over a distance of about 1,000 miles, it carries down the waters from the lofty range of the Drakensberg, the plateaux of Basutoland, Free State, and even a portion of the Transvaal, and receives the extensive drainage of Griqualand West, Bushmanland, and Great Namaqualand. Its stream, which sometimes, as at the Narrows above Colesberg, is compressed between precipitous hills to a channel not more than 100 yards apart, widens in its course to one and a half to two miles, and in full flood to four or five miles—now and then spreading out into translucent lakes, breaking over foaming cataracts, or dividing into numerous channels reticulating from countless grassy and wooded islets. To persons travelling through the bare dry and often desolate central plains, its cool, clear stream and shady banks are a welcome and grateful sight, and all who have visited it speak in enthusiastic terms of its beauty. The river runs in a deep valley, and at many places in approaching it, from the rapid fall of the ground, the mountains alongside have the appearance of being in a pit, the upper portions of them alone being seen. The banks are generally covered with trees, such as the willow, accacia, pendoorn, zwartbosch, ebony, cappariss, and wild juniper. These grow scattered over the flats or terraces, commonly forming a belt of dense thicket a hundred yards in breadth. Westward, from near the junction of the Haartebeeste to De Nuis, above the Great Waterfall, there is a succession of some twenty or thirty islands (one of them ten miles long by one broad in the middle), with very dense bush on each side,—respecting which the late Sir Walter

Currie, in reporting his operations with the police against the Korannas there, said that he used to think the Fish River bush of the Eastern Districts a jungle, but he found it nothing as compared with the water-jungle of the Orange.

The Great Waterfall at this part of the River, was first described by Mr. G. Thompson in his "Travels" (1827) and more recently by the late Surveyor Moffat (son of the venerable missionary) who visited it in 1856 in the course of his exploration of the river under the auspices of Governor Sir George Grey. Mr. Moffat says:—"The Waterfall is a grand object, and must be grander still with a full river. I did not know whether to consider the fall itself with the beautiful cascade on its left, and the grand boss on the right, or the deep chasms below, with its parallel and precipitous walls and the apparently insignificant stream meandering there, the grander object. The sides of the chasm and the appearance of a group of black conical hills of greenstone about five miles below, on the left bank, testify that a fissure must have existed in which the broad waters of the river found a vent, and that that rock was the subterranean disturbing agent which formed it. Compact gneiss is the rock which the river channels traverse immediately at the waterfall (strike true N.; dip. say 90° E.) One side of the fissure still remains perfect, and presents, on the left bank of the fall, a gigantic boss of granite, with a perfectly vertical wall over the round top of which the exfoliating masses are gradually becoming displaced. A cascade on the right bank of the fall, at right angles to it, is formed by one of the lateral channels, before described as passing the fall. I could see the polished lips of two others on the edge of the chasms, on the left bank, some way below. With difficulty I crossed two of these streams and several dry channels on the north side, to reach my stand-

point, so that there can be no doubt that, at the time of my visit, three cascades were in full operation on the left edge of the chasm, independently of the main fall; and when the river is full, there must be at least ten beautiful cascades west of the fall in simultaneous operation, all formed by the lateral streams converging to the edge of the chasm, at various intervals, and thus circumventing the main fall; and the dimensions of the stream precipitated at this must be still grander and terrific. But to see them all at one view would be next to impossible, or even to reach the main fall at such a juncture would be impossible without a pont, and, even with one, dangerous."

The relative extent of the draining surfaces and distant sources of the main tributaries of the Orange was estimated by Surveyor Moffat as follows:—  
 "Regarding this river, extending from East long.  $24\frac{1}{2}$  degrees to the sea, as the main trunk, it may be said to have five tributaries, viz. :—

	Draining surface in square miles, about	Distance of sources.
The 'Oup or Fish River...	52,000	400 miles.
Aintass River .....	140,000	400 "
Haartebeeste River .....	50,000	270 "
Vaal (including the Hart)	55,000	400 "
Black River (commonly called the Orange, including the Caledon)	28,000	400 "

giving a total of 325,000 square miles, as the extent of surface of the hydrographical basin of the Great Orange River. Of these five, the three first-named, though draining three fourths of the basin, are merely occasional rivers, with dry channels, containing here and there standing pools, and the other two permanent streams containing sometimes, in very dry seasons, little more water than a sturdy rivulet. The former are filled by sudden thunderstorms, and come down

in immense floods sweeping everything before them.\* Of the three, perhaps the Haartebeest River, with its broad level bottom which receives the drainage of the Nieuwveld, carries down the greatest quantity of water; and the two last named (Black and Vaal) coming from the high lands of the Drakensberg in the east, with its fountains, frequent rains and snows, alone cause the channel to remain full for several months and often the whole year."

The river in its course through Namaqualand, from Pella down to some few miles from its mouth, runs among mountains of from 500 to 2,000 feet high. The stream at its winter level occupies a breadth of from 100 to 300 yards, flowing at the rate of two and a half miles an hour; during the summer months it rises to a great height quite covering the channel from bank to bank, inundating the trees along its margin, and still more so those in the low islands and periodically dry portions of the bed, for weeks together. But occasionally the river rises much higher even than this, especially when the rainy season up country is excessive. The quantity of water it then brings down is enormous as the speed in the deeper channels is five or six miles an hour. In the flood of this year (1874) it rose thirty feet in five days. Such floods carry off immense quantities of trees which have been uprooted or fallen through natural decay; some of them are stranded on its banks or near its mouth, but the greater part goes out to sea and is carried by the current along the coast.

The author of "To the Cape for Diamonds"

\* On one occasion (Mr. Moffat was informed) in the Fish River Great Namaqualand, so sudden was one of these floods, that a tiger and an antelope, which had come down to different standing pools of its channel to drink, were in succession caught up by it and carried away, until entrammeled in a tree, where both could be seen terror stricken, gazing at one another!

writing of this river says that it might be made use of as a navigable highway up to Hope Town, but in this he shows ignorance of its character, perhaps excusable when he supposes that no man has traced its course. Notwithstanding the extent of its main artery, and the immense quantity of water which flows along it, its outlet on the West coast is quite unnavigable except for boats; while the rapids, falls, and islands, to be met with more inland are insuperable barriers to its ascent by any vessels, for purposes of transport, beyond comparatively short distances. Near its mouth it spreads over a delta about three miles wide, in flood forming an imposing sheet of water covered with innumerable flocks of wild fowl, but in the dry season of the year easily fordable. Sir James Alexander who was there in 1838, thus describes the aperture into the sea: "At last we saw a line of breakers assailing the sandy beach with hollow roar, and stretching right across the mouth, which was merely an opening of about one hundred and seventy yards between two points of sands, on which sat a line of penguins and gulls; outside lay the ocean

‘ Beautiful, sublime, and glorious,  
Wild, majestic, foaming, free.’”

Mr. P. Fletcher who surveyed it in 1854, says:—"It is interesting to compare the manner in which the three rivers on the west coast of the Colony empty themselves into the sea. For instance the Berg River has a small spit on the north side of its mouth, three quarters of a mile long, and about seventy yards broad, which is comparatively stationary, no doubt modified by St. Helena Bay, situated at its south, and Cape St. Martin due west. The Orange River has a corresponding spit at the north side of its mouth; but in summer another spit forms from the south side, and towards the end of the dry season, sometimes overtakes

the retreating northern one, thus closing the mouth entirely up, and remains in this state until the first river-flood. The salt water seldom goes further up the river than four miles. This bar was reckoned (by parties resident on the spot for some years) to be passable about twelve days in the year, or one a month at an average. The mouths of these rivers have slate formations." A more recent survey, was made in 1872 by the Admiralty Surveyor, Lieut. Archdeacon, but the result only confirmed previous conclusions as to the spasmodic nature of the limited navigation this great river affords.

## V. THE SOUTH-EAST COAST DISTRICTS.

Turning from the West Coast, let us now look at that portion of the Colony lying on the south-east side of the range of Mountains which skirt the Karoo plains, extending from the plateau of the Cold Bokkeveld in the Tulbagh division along the Zwartberg Mountains to the Zitzikamma, and embracing the whole of the sea-board from Cape Hanglip eastward to Cape St. Francis. It comprises eleven divisions, namely, Tulbagh, Worcester, Robertson, Caledon, Bredasdorp, Swellendam, Riversdale, Mossel Bay, George, Oudtshoorn, and Knysna. Its area is over 27,000 square miles and the aggregate population under 100,000 souls.

The particular features of this belt of country are a succession of hills and mountains rising from 200 to 3,000 or 4,000 feet, alternating with valleys and plains sloping off to the coast, and in some places thickly-covered with magnificent primeval forests. Sandstone, quartzite, and limestone constitute the formation of the mountains, while clayslates generally underlie the valleys, which everywhere have a thick covering of soil and in favourable seasons are very fertile. Most of these districts have been occupied for a long time past, chiefly by the descendants of the old colonists. There are many towns and hamlets planted throughout them, as well as extensive corn-fields, vineyards, orchards, tobacco plantations, sheep and cattle pastures, and ostrich enclosures. Their annual yield of produce is moderately estimated at £1,000,000, but it may easily be doubled as population increases, and the waste lands are occupied and agricultural operations multiplied.

Portions of Tulbagh and Worcester are on the elevated terrace bounding the Karoo, and extend for a considerable distance into the plains which bear that name. The Cold Bokkeveld is the highest part, rising from 4,000 to 5,000 feet above the sea level; and forming the watershed of the country, the drainage on one side running to the Oliphant's River and on the other to the Breede River. It extends from the Cedar Mountains to the Witsenberg on the west and to the Hex River Pass on the east. There are some first-class farms there, combining corn, wine, sheep, and cattle. The winter seasons, for two or three months, approach an Alpine character, snow covering the ground and ice the pools of water. Cherries, apples, and other European fruits, grow to great perfection. Flockmasters, however, are careful to avoid this cold temperature especially about the lambing time, and migrate with their sheep to the milder Karoo plains. The pastures thus occupied by them have been known as "leg-plekken" (lay-places) and until lately were all held under annual licences, but portions of them have now been surveyed and leased, and many of the lessees have made application to convert their leases into quitrent tenure, finding that by opening up springs, making dams, and planting trees they can change what was considered a "howling desert" into valuable farms.

Ceres is the district town of Tulbagh. From the Worcester Valley railway it is approached by the mountain road of Mitchell's Pass, a scene of great boldness and picturesque beauty. At the eastern summit of the Pass, 1,700 feet above the sea, the little town,—a creation of the last fifteen years,—is seen stretched out on the circular undulating plain of the Warm Bokkeveld. A great deal of the trade to the Interior passes through it and it receives all the traffic from Calvinia and the north-west districts,

which is likely to be largely increased by the opening up of a new road to Fraserburg through the Verlaten Kloof. The mountains surrounding it especially to the eastward have lately been prospected for gold, of which traces have been found in several places, from near Verkeerdevlei—a sheet of water a mile and a half long and three-quarters of a mile in breadth, and the source of a small stream known as the Touw River—on to the Draai, Constabel, and Kragga. At the latter spot a nugget weighing about two ounces was picked up in 1855. The geological formation is interesting also from the quantity of fossils (mollusca and crustacea, identified chiefly as Devonian) found in the shales and sandstones of the Gydow, Karoo Poort, and Hex River.

The finest part of these districts, however, is the beautiful and fertile basin where the towns of Tulbagh and Worcester are situate. This is a valley some seven or eight hundred feet lower than the Warm Bokkeveld; it extends for about thirty miles in a line from west to east, and is well watered by the Breede River and other streams from the mountains enclosing it on either side. The direct route to it from Cape Town has hitherto been by Bain's Pass—a magnificent mountain road constructed through a kloof in the Drakenstein range for eighteen miles, and for a good deal of the distance scarped out of the face of nearly perpendicular cliffs, or carried over abyss-like gaps and fissures which have been built up with retaining and parapet walls from 100 to 300 feet high. Immense hanging blocks of sandstone are perched upon the slopes in various fantastic shapes and forms. Here and there small trees, shrubs, heaths, wild flowers, and ferns shoot up among the rocks. And after heavy rains there are numerous sprays, cascades, and waterfalls leaping from ledge and precipice down to the torrent at the bottom of the kloof, presenting

altogether a scene of unusually grand character. Further on in the same mountain range there is another and much easier Pass, known as the New Kloof; through this, the railway from Cape Town to Tulbagh and Worcester has now been carried, and will be completed and opened for traffic towards the close of the present year. Tulbagh is a small village lying in a hollow of the valley, a mile or two from the railway, and not likely to be largely increased by its proximity, although the rich agricultural farms around it will be materially benefited by the new facilities of transport.

Worcester on the other hand is most advantageously situated for the purposes of trade and traffic, and possesses all the elements of progress. The town was laid out about 1820,—its admirable site, in the middle of the broadest part of the valley watered by the Breede River, having been chosen by Lord Charles Somerset when he visited the district in 1817. Its wide and regular streets lined with trees, hedges, and running streams,—its palatial “Drostdy” and public offices with its adjoining gardens, the type of what country magistrate’s quarters should be,—its town-hall and market-square, its handsome churches and model schools,—its well-built, commodious houses, mostly of modern style interspersed with orchards and vineyards, and its surroundings on each side of picturesque mountains, in winter white with snow and in summer flushed with mellow evening tints,—all contribute to form what is at present without exception the prettiest township in South Africa. Connected with the Metropolis by railway, it will be the principal inland terminus for the central and south-east districts for the next five or six years, and even after the Midland line is extended to Beaufort West, will continue as the entrepôt of a very productive portion of the Colony. The large and at present comparatively-unoccupied

plain around it is particularly fertile, and there is sufficient command of water to bring every acre of it under cultivation. Capital, enterprise, and industry are all that are wanting to develop its manifold resources and turn them to profitable account.

The thermal spring of Brandvlei (Fire Lake) is about an hour's drive from Worcester and well worth a visit. This spring is remarkable both for its temperature and the great volume of water it pours forth. It rises near the junction of the mountains and the flat, in a large pool about thirty yards long by ten broad, over most of which space it is constantly bubbling up through a sandy bottom and throwing a cloud of vapour. The heat of the water is from 150 to 160 degrees; but it is entirely devoid of medicinal taste or smell and when cool is not distinguishable from the purest spring water, being quite sweet and forming no deposit. At one side of the pool an artificial embankment has been made for the division of the water on the property, where it is used for irrigation, and it runs off in a rapid stream of sufficient volume to turn a mill. Vegetation is luxuriant on its border and along its course where it gradually cools. The water is often used for culinary purposes, such as cleaning fowls, scalding pigs, and cooking eggs; and the spring is sometimes resorted to by persons who believe in its curative virtues, especially in cutaneous affections.

There is another spring of lower temperature more generally frequented by invalids, in the field-cornetcy of Goudini. This is a valley on the west side of Worcester adjacent to the mountains of Du Toit's Kloof; it is about twelve miles long and of the same breadth, and most of it very fertile. Raisins and brandy are largely manufactured here; of the former as many as 5,000 bags (each 250 lb.) are produced in a season. On the eastern side of Worcester, again,

there is the Hex River Valley through which the railway to Beaufort West will enter the Karoo. This locality impresses every one who sees it with its beauty and capabilities. Its soil is rich Karoo, plentifully watered and very productive. The corn lands give a usual increase of fifty to sixty fold and in some cases it reaches 105 fold. Besides grain crops, peas, potatoes, &c., the vine grows well, 1,000 vine stocks which elsewhere only give an average of one legger of wine here produce as much as three and four leggers. In this as in other parts of the district flocks of merino sheep running up to about 5,000, as well as goats and ostriches, are pastured. Cattle are bred and reared both for draught and slaughter purposes, and there is a considerable amount of dairy stock, the irrigable meadows along the rivers maintaining them in good condition throughout the driest seasons. Horse-breeding was once pretty general but at present those engaged in it are few and far between, although most of the farmers still delight in keeping spirited and well appointed teams for their own use. Farms are of various extent and value, according to position and extent of improvement, and ranging in worth from £2,000 or £3,000 to £15,000. Among the finest may be mentioned those of De Vos and Meiring in the Hex River Valley, De Wet's at Brandvlei, and the Naude Brother's, Klopper's, and Du Toit's on the Hex River flats. The latter (Du Toit's) was a few years ago occupied by only one family where now there are ten. This division and sub-division of properties is yearly becoming more common, what was formerly grazing ground being converted into corn-fields and vineyards or irrigated enclosures for cattle or ostriches; but there is space enough for all and for numbers yet to come, as the productiveness of the soil is such as will allow of the realization of Goldsmith's prosperous State,

“Where every rood of land maintains its man.”

At the limits of the Worcester division, and once forming part of it and Swellendam, is the district of Robertson. Its extent is roughly estimated at seventy-two miles from north to south and eighty-four miles from west to east. The chief villages are Robertson along the course of the Breede River, Montagu lying behind the range of mountains of Cogman's Kloof, and Lady Grey in the Boschveld. Robertson was at one time celebrated for its potatoe crops; in 1865 the quantity grown was 15,000 bushels, but lately they have been abandoned for grain and wine. The yield of the vineyards is something wonderful; in Montagu three to five leggers (equal to from 378 to 630 imperial gallons) from 1,000 vines is the ordinary return, and there are many instances of even six leggers. The grapes are very superior, and large quantities are made into raisins of excellent quality. Hitherto the impracticability of getting heavy bulky produce to a market has led to the manufacture of spirits and raisins generally, but now that the railway is brought close by, superior wines may be made and exported. It is considered that the wines of Worcester and this district are much stronger-bodied and preferable to those from the Paarl and Stellenbosch valleys. The produce of one small vineyard (Mr. Hugo's) on the slope of the Hex River Mountains beyond Darling Bridge has been highly reputed for years as equal to Madeira, and has always commanded even in the lowest state of the market a uniformly high price. The quantity made is only about twenty-five leggers, although any extent of equally good soil is lying idle around. The present yield of the vineyards of Tulbagh, Worcester, and Robertson, however, is greatly in excess of what it was at the last census. Then the number of vines was 7,738,887, yielding about 500,000 gallons of wine and 75,000 gallons brandy, besides raisins. Now, Worcester alone gives 1,000 to 1,500 leggers of brandy

yearly. The dried fruits of the three districts then amounted to nearly 1,200,000 lb.; the wheat was over 100,000 bushels, and barley 58,000 bushels, besides rye, oats, maize, tobacco, and other produce, and the returns now will probably be as much again.

From Robertson we pass by the Boschesveld and the little hamlet of Villiersdorp, into the sheep walks of Caledon, Bredasdorp, Swellendam, and Riversdale, formerly one division under the name of Swellendam, but now divided into four districts. A great part of this forms the best grazing ground in the Colony, carrying large flocks of sheep besides a good number of cattle and horses. There is also a considerable breadth of land under corn. The finest sheep farms are along the strandveld near to Cape L'Agulhas, in Bredasdorp, where there is excellent pasturage on the flats and limestone hills, the latter abounding in a variety of grasses, herbs, and heather, out of which the sheep can suit their particular tastes. It was here on the fine estate of Zoetendal's Valley that the breeding of the Spanish Merino was commenced in 1812 by Mr. J. F. Reitz, who was afterwards joined by Mr. M. van Breda, and whose stock supplied a great part of the country with these animals. Year by year, since then, pastoral pursuits have been engaged in by men of marked intelligence, enterprise, and wealth, who by valuable importations have improved their flocks both in size and fineness of fleece; and the uniform care bestowed upon the preparation of the wool produced here has deservedly obtained for it a foremost name in the home market. Many of the properties are of considerable extent, ranging from 10,000 to 30,000 morgen. On some of them the plan of enclosing pastures has been adopted, and proved to be infinitely preferable to the general kraaling system. At Zoetendal's Valley and Duinefontein, there are parks of 7,000 morgen or 14,000 acres, and on Mr. A.

Van der Byl's estate, Nachtwacht, there is a stretch of seven miles of camp where the stock-flock of sheep and troops of blood-mares, as well as domesticated ostriches and herds of wild antelopes (chiefly bon-teboks) are grazed. The largest flocks of fine woolled sheep were possessed by Mr. J. A. Van der Byl of Fairfield, who had as many as 20,000, the charge of which has now devolved upon his sons. The total number of merino sheep in these four districts in 1865 was 744,388 and the clip of wool was returned at nearly one million and a half pounds.

Horse-breeding was for years very spiritedly and successfully carried on here, and although it received a severe check from the epidemic which swept over the Colony in 1855, it is still pretty well maintained. This branch of farming has been particularly indebted for progress and improvement to the late Mr. T. B. Bayley, formerly of the Bengal Civil Service, who from 1844 to 1856 occupied the fine estate of "The Oaks," River Zonder End (now the property of Mr. Chiappini) and spent a good deal of money on the introduction of thoroughbred horses from England. From his stud and that of Mr. A. Van der Byl, young stock have been sent out which have defied all competition at the turf-gatherings throughout the whole Colony. But numbers of the ordinary, active, and hardy Cape horses are also still bred in Caledon, Swellendam, and Riversdale. Lady Duff Gordon truly describes them as "valiant little beasts who, ungroomed, half-fed, seldom stabled, and having nothing but a roll in the dust to refresh themselves withal, will carry a six and a half foot rider sixty miles a day, day after day, at a shuffling easy canter six miles an hour."

The food supplies of these divisions are very considerable, but might be much greater, as wide wastes are covered with the rhenoster bush, the index of a

soil well adapted for cultivation. Grain of all kinds, is raised on every farm in excess of local consumption. In 1865, the crop of wheat was 170,873 bushels, barley, 66,000 bushels, and oats 74,358, besides other cereals. Wine and fruits are also generally produced, and a large quantity of tobacco is grown, especially about Heidelberg and Riversdale. Aloes and buchu, as well as many varieties of bush known as the Cape "tea" plant, and now in common use as such, grow wild on the flats and mountain slopes, and their collection and preparation give employment to the Hottentots and other natives.

Several mission-stations have been established here and form valuable depôts or centres around which the coloured class are gathered. At one of these, Genadendal, under the charge of the Moravian Brethren, there is a population of about 4,000, many hundreds of whom go out as labourers among the farmers over the country, during the harvest and wine-pressing seasons, the remainder of the year being passed in comparative ease and listlessness at their homes. The expediency of continuing the natives under this state of mission pupilage has long been a vexed question amongst colonists; but the solution of it suggested by the late Colonial Secretary, Mr. Montagu, seems the best way in which any change can be made. "Instead of treating the natives as mere machines, obtaining from them the greatest amount of work at the smallest possible cost, without caring aught for their temporal or spiritual welfare or the comfort of their families, and thus driving them to the mission institutions, where these are provided, let the farmers hold out inducements to them to establish themselves as permanent instead of casual labourers of the land, and a new and improved condition of their social relationship will soon follow."

There are a number of towns and villages through-

out these districts. The first is Caledon (seventy miles distant from Cape Town) noted for its hot baths, which are considered efficacious in cutaneous and rheumatic disorders. Near the sea are Bredasdorp and Napier. Inland along the Langebergen is the pretty bustling town of Swellendam, a welcome sight to all who travel over the undulating ruggens and scrubby rhenoster-bush valleys approaching it. It has a thoroughly prosperous, business appearance, and is the centre of a considerable amount of trade. Formerly there was a great deal of export from here by the Breede River, which is navigable for vessels of twelve feet draught of water for forty miles from its mouth; and now the recent opening of the new road over Southey's Pass has made a very fertile tract of country accessible and within reach of the coast. This is known as the Tradouw, an extensive Karoo valley behind the Langebergen, where the villages of Zoar, Amalienstein, and Ladismith are situate, and reaching as far as the Zwarteberg range, through which there is an outlet to the Great Karoo by the Seven Week's Poort. The Crown lands here were formerly leased annually for a trifling sum, but since the Pass has been opened they have realized high prices, and last year about 72,000 morgen were converted into purchased property for a cash payment of £9,000 and an annual quitrent of £90 per annum. The other towns further on are Heidelberg on the Duivenhoek's River, and Riversdale, on the Kafirkuil's River, both progressive centres of the agricultural and pastoral country around them. Beyond Riversdale the Gouritz River passes on to the sea. Its source is in the Nieuwveld hills, above Beaufort West, where it is known as the Gamka; as such it receives the thunder showers of the Karoo and after coming through the Zwarteberg range is again fed by the Oliphant's River, so that it becomes at times a most

formidable and dangerous stream, as yet unbridged. This part of the country is beyond the climatic region visited by the wintry north-west winds, and is dependent for rains upon the showers brought by the "south-easters," generally as early as September, but in seasons of drought not until much later in the year, when the pastures become miserably dry.

Crossing the Gouritz, we enter the old division of George, now forming four sub-divisions, George, Oudtshoorn, Mossel Bay, and Knysna, with an area of 6,000 square miles, and a population of fully 30,000. It is pastoral as well as agricultural, and the clip of wool in 1865 was returned as 413,499 lb. The district of Oudtshoorn is the most inland, reaching to the Zwartebergen. It consists of several valleys, all well watered or capable of being irrigated from permanent streams. The Oliphant's River, Wynand's River, Grobbelaar's River, and the Cango are celebrated for their productiveness, yielding two crops, first of wheat or oats, and then of beans, mealies, or tobacco, in ordinary seasons. In 1865 this district alone gave 172,000 bushels of wheat, 50,000 bushels of barley and oats, 17,000 hundred pounds of oathay, 7,000 bushels of maize, 966,641 lb. of tobacco, 300,000 lb. dried fruits, 22,000 gallons of wine and 55,000 gallons of brandy. Most of the produce is raised by irrigation, in fact without it scarcely a cabbage or a potato could be brought to perfection. The abundance of water, however, is mainly owing to the damming up of the rivers, which is done to a considerable extent between Oudtshoorn and Cango. This prevents the rush of water to the sea, and allows of the ground for a considerable distance being fertilised by it. Land so irrigated sells for extraordinary high prices, while otherwise, as dry Karoo, it is worth very little. The farms generally are divided and sub-divided in fractional parts according to their

arable and irrigable capabilities. Their average value now may be stated at £50 per morgen for arable, and £1 for pastures. The one-thirty-sixth part of one farm of 3,000 morgen has been sold for as much as £2,250. The one-eighth part of another (also of 3,000 morgen, 200 morgen being arable and the remainder pasture), recently sold for £5,500; one-thirty-second of a property of like extent lately changed hands for £600; and for one-twenty-eighth of another £600 was offered and declined. The vineyards here are very rich,—yielding one legger of brandy of superior quality from each 1,000 vines. There are also extensive tobacco plantations, ordinarily bearing 15,000 plants, others having 50,000, and some even 100,000; but the manner of preparation of the leaf is still very primitive and might be greatly improved, as well as new qualities introduced. The annual crop now is estimated about 2,000,000 lb. These and various other articles, the produce of the district, are often taken by the growers themselves to a market in the inland or eastern towns, sometimes even as far as the city of Graham's Town. Prior to 1858 there was little interchange between them and the interior towns, as the only means of communication was by tedious roundabout routes, which it took months to travel. Since then a road has been carried through a rift or chasm in the Zwartberg range, known as Meiring's Poort, which opens into Beaufort West and the Midlands. The Poort is nearly sixteen miles in length and the road is constructed along the bed of a stream winding through the magnificent gorge amid massive walls of rocky cliffs whose peaks appear to pierce the sky.

Near Oudtshoorn there have been found some beds of lignite, a few inches in thickness, similar to what occurs in the "Enon conglomerate" at the Sunday's and Bushman's Rivers in Albany. Beneath the con-

glomerate, there is an extensive sandstone formation giving a superior freestone, of which the churches in Oudtshoorn have been constructed,—one of them, the Dutch Reformed Church, although not yet completed, presenting a very handsome appearance. Here, too, along the base of the Zwarteberg, in the Cango Valley, are the celebrated caverns or stalactite grottoes of that name, described and illustrated in Mr. G. Thompson's "Travels." They were visited last year by Sir Henry Barkly, who was accompanied by nearly 300 of the neighbouring residents. The large cave, which is the principal object of interest, is many hundred feet square and fifty or sixty feet high, and decorated with great columns of strangely-moulded stalactite. Three hundred candles scarcely afforded sufficient light throughout it, serving more to make the darkness visible, while the crowd moving about in the dim glare looked very strange and weird. These caves have never been explored to the end although persons have penetrated for more than a mile, and at that distance a subterraneous river is heard rushing under foot. It is said to be very easy to lose oneself in the attempt to penetrate far, but it does not appear that at the farthest point yet reached the air has become pestilential. The inner recesses still remain as a field of adventure for anyone ambitious of going where man has never gone before.

Adjoining Oudtshoorn, but separated from it by the Kamnasia Mountains, is the fine valley of Langekloof, nearly 120 miles in length, and enclosed on the coast side by the range of Outeniqua or the Langebergen. It is studded with valuable farms, which are generally well-suited for cattle and sheep-breeding and a good deal of produce is raised there when the seasons are favourable. No vineyards are cultivated owing to the frosts, the winter being very cold, particularly in the more distant and elevated parts. The Crown

lands in this direction are not numerous being mostly small pieces on the slopes of the mountains between the several farms.

George Town itself is pleasantly situated on the south-east side of the mountains and about seven miles from the sea. It has a population of 2,000. Its spacious streets arranged rectangularly, well watered and shaded with trees, cover an area of at least a square mile. There is a Dutch Reformed Church and Roman Catholic Church with mission churches attached, and an English Church in charge of the Archdeacon of the Province. There is also a Grammar school, whose headmaster is the first colonial M.A.; besides several mission schools, and about three miles from the town an old established missionary institution, Pacaltsdorp. Although naturally one of the most favourably situated spots in the Colony, George has not progressed equally with other places. A recent visitor to it after some years' absence could not help being struck with its comparatively stationary appearance and asked, "was it the shadow of the mountain, or the rank luxuriance of the herbage, or the granite subsoil, or the proximity of the forests and their temptation to see-saw idleness, that offered an explanation of it?" Wagon-making was at one time extensively carried on, but there are few workmen employed in it now. A tobacco manufactory flourished formerly, but was given up owing to the method of making good "cavendish" not being properly understood. Butter and garden produce used to be sent in quantities 300 miles to a Cape Town market, now they are oftentimes scarcely to be had for local consumption. Leather manufacture to a limited extent is still engaged in, valuable tanning barks being easily obtainable from the forests, and a large establishment for the extension of this industry, combined with that of machine boot and shoemaking,

is contemplated at Blanco, two miles from the town. The domestication and breeding of the ostrich, it appears, has lately been the most successful occupation, there being from 600 to 1,000 birds kept in enclosures or herded in the open pastures like sheep. In the other neighbouring districts there are also large numbers, and the "ostrich feather market" is quite a feature at the produce sales at the adjoining port of Mossel Bay.

For small farmers with limited capital, the George coast lands offer a very good prospect. The average price may be considered about £1 per morgen. The land is well suited for oats, barley, rye, Indian corn, tobacco, and garden produce of every kind. Occasionally good crops of wheat have been raised, but on account of the superior quality of that which is grown in the adjoining district of Oudtshoorn few farmers at present like to sow any. There is still a good quantity of Crown lands under the mountains, chiefly forest ground that has been partly cleared of timber, either by the woodman's axe or, worse, owing to the fires which occasionally do so much damage. The soil in these places is excellent, but people, for some cause or other do not occupy it, consequently it is overrun with thorns and briars of luxuriant growth. The Commissioners of the George Municipality have offered to let out for a term of years a large piece on condition of its being cleared and cultivated, but no one takes kindly to the tempting bait. Whether this is to be attributed to the more profitable employment of the labouring population, or want of faith in the productiveness of the soil we know not. At all events it proves there is abundance of room for more hands. About twenty-five years ago, sheep-breeding was attempted but with little success, for although the flocks increased one year the following reduced them. Perseverance and attention on the part of a few enter-

prising men and the introduction of stock adapted to the country have since overcome these early difficulties. The veldt is now greatly improved, and southdown, cheviot, and even merino sheep thrive here and at the Knysna, and other localities along the coast, to an extent that old residents could hardly have expected. During the summer months and in times of drought when the upper Karoo affords little or no herbage, large numbers of cattle are sent to these grass lands and the mountain slopes, where even in the driest seasons good pasture is found.

All around George the country presents a pleasing contrast to the brown heath and bare parched lands of the Droogeveld or Karoo. The first English settlers who made it their home were wont to say that "it was very much like England—only more so." The climate is delightful. Frost is unknown on the coast, and during the hot summer months there are gentle south-east winds and genial showers. The pastures are refreshingly green, and fine streams run from the mountains to the sea. Both here and in the neighbouring district of Knysna there is that combination of mountain, forest, and lake scenery so seldom met in South Africa. Such is the view at the Lakes, a short distance from George; and again from the hills overlooking the basin in which the village of Knysna lies, where the placid waters, the verdant meadows of the islands, the variegated hues of the woods, and the bluff "heads" all combine to form a most charming picture. And besides these, there are the dark glossy evergreen forests, with their giant yellowwood and other trees festooned with rope-like creepers and hoary lichens, and surrounded by tangled brakes or open flowery glades, rising range above range to the distant highlands in the background.

These forests extend along the whole coast line from George to the Zitzikamma, near Humansdorp, for a

distance of 170 miles, with a varying depth of from ten to twenty miles. Within the limits of the settled portions of George and Knysna they run about sixty miles, reaching to Plettenberg's Bay. Some portions of this tract are private property, having been sold by Government in 1846 at an upset price of 5s. to 15s. an acre, but the greater extent belong to the Crown and contain an inexhaustible supply of timber. They afford constant employment to a hardy race of woodcutters, whose labours are by no means light, owing to the difficulties of bad roads, and getting the trees out of the hill slopes and hollows. A load of timber has often in consequence of this to be conveyed over a part of the country in two portions, the first half being left on the road till the remainder is brought out, when the full load is taken to the Knysna village or to the surrounding district for sale. Some of the smaller farmers are in the habit of taking out a licence to cut down wood during the time their seed is in the ground, and in this manner make up for limited crops; but all kinds of produce having risen so much in price during the last year or two, and the demand for transport into the Interior being on the increase and highly remunerative, there has been less resource to the forests than formerly. For some years to come, however, they will be capable of employing in a variety of ways a considerable population. Persons desirous of embarking in the wood trade will find no difficulty in obtaining forest lands at about 15s. or 20s. per morgen, according to situation and other circumstances.

The system hitherto adopted of working the Crown forests has in the opinion of many been very unsatisfactory, entailing waste and loss, and yielding less advantage to the country than if they were in private hands. A Parliamentary committee inquired into and reported upon the subject last year. They recom-

mended that the portions of the forest lands now being surveyed for sale (chiefly between the George and the Touw River and some pieces adjacent to private property) should be put up at an upset price of 10s. per morgen. That the woodcutting licences should be reduced from £1 10s. to £1, and that a period of not less than six weeks be allowed for working out a licence. That the forests be open the whole year; that the several forest rangers be directed to make themselves acquainted with the proper seasons for felling the several kinds of trees, and that no tree be felled until it has been previously marked by a ranger. They also proposed that villages be laid out for wood-cutters at suitable places, such as "The Poort," midway between Plettenberg's Bay and the Knysna, at Yzernek, on the new line of road from the Knysna to the Interior at "Hoogekraal," and on the western bank of that river between George and the Knysna. The village lots are to be let at a small annual quitrent for a term of twenty-one years, and to consist of about three morgen, with the right to graze twenty head of cattle on the adjoining land.

The Knysna forest was the scene of the Duke of Edinburgh's memorable elephant hunt in 1867, and the published volume of the "Cruise of the *Galatea*" contains a graphic account from the Duke's own pen of his encounter with *Elephans Africanus*, which, he says, looked "a huge monster towering above us, coming on at a tremendous pace, his ears (three times as large as those of the Ceylon elephant) spread out square, like a ship with studding sails on both sides." Mr. Brierly, the artist, who accompanied His Royal Highness, took a great fancy to the beautiful country lying waste here, and considered it a most suitable place for the operations of a land and colonization company with capital. On the return of the *Galatea* from her cruise, Mr. Brierly opened a correspondence

with Mr. Thos. Bain, the Government inspector of roads on the subject, obtaining full details as to the qualities of the native woods and the capabilities of the district, and shortly afterwards instructed that gentleman to purchase provisionally as much land as he could secure at a refusal of six or nine months, the time required to establish a company. Mr. Bain succeeded in securing about 80,000 acres of private property which embraced some of the finest farms in the district, at an average price of 7s. per acre and was in treaty with the Government for about 100,000 acres more of forest and grazing land. A company was provisionally formed among Mr. Brierly's friends, —Mr. Webb of Newstead Abbey, and other wealthy and influential gentlemen being associated with and taking a great interest in it. Before proceeding further, they waited to receive specimens of the different woods which they had ordered, and which were promptly forwarded by Mr. Bain from the Knysna to Cape Town with instructions to be sent on at once by first mail-steamer. Month after month passed and letters came from England to say that the woods had not arrived, and it was not until the following February that after inquiry the box containing the specimens was discovered stowed away in a warehouse at the Table Bay Docks. When at length the specimens reached England they were, after a thorough test, highly approved of, and instructions came out from the Company to get an extension of time from the different owners of land. Unfortunately in the meanwhile land in the Colony advanced and some evil-disposed people advised the parties with whom Mr. Bain had to deal not to extend the time at any price, and this they foolishly adhered to. Mr. Brierly's Company was consequently deprived of the opportunity of carrying out a scheme, which not only might have been profitable to the shareholders, but of incalculable benefit

to the Colony. The intention of the Company, we believe, was to have the land subdivided into a series of hamlets or small ten and five acre farms giving each proprietor a certain portion of forest besides. These lands were to have been sold in England to small capitalists and artisans. Machines for working the timber were to have been found by the Company who arranged to send out portable saw-mills, planing machines, and all sorts of appliances to work the wood in a proper and systematic manner. There are few parts of the Colony where such an enterprise could be carried out with so great a prospect of perfect success as at the Knysna. Land is pretty well at its old value again, so that if these pages chance to meet the eye of any of the gentlemen who took such an interest in the matter a few years ago, the scheme may possibly be revived.

Between Plettenberg's Bay and Zitzikamma there is a tract of magnificent virgin forest extending for fifty-six miles where not an axe has been laid upon a tree. This was explored for the first time in 1868, by Mr. T. Bain and Mr. Harrison, the Crown conservator. They started from Forest Hall, the property of Mr. Newdegate, at Plettenberg's Bay, accompanied by native servants and wood-cutters to enable them to clear their way through the bush. They met with numbers of large game, elephants, buffaloes, boar, panthers, bush and other bucks; and the wild character of the jungle and its denizens at some parts so alarmed the native retainers that it was only by threats they could be induced to go on. They found the country beautifully diversified with forests and glades, abundantly supplied with good grass, and watered by no fewer than twelve rivers. The first of these, the Salt River, is navigable for some distance up for small craft of thirty tons, and might be turned to good account as a place for shipping timber. Many

of the others could be led out over the adjacent lands. They abound in fish of various kinds, and at their mouths and on the coast there are quantities of oysters. The number of elephants among the forests cannot be less than 200, and there are large herds of buffaloes, especially in the "fynbosch" between the Groot and Platbosch Rivers.

Messrs. Bain and Harrison made their way through to the Zitzikamma, and reported that it was impossible to speak too highly of the climate, condition, and resources of the country they had seen, and which, by the path they had cut, and the numerous elephants' tracks, is now tolerably accessible. They strongly urged the construction of a road from Plettenberg's Bay towards Humansdorp, which they estimated could be easily made in three years, with a working party of 350 men, and an average of £800 per annum for plant, gunpowder, and working expenses for the gang. This road, they say, would open up about three hundred and fifty square miles of fine Crown land, upon which there are extensive forests of magnificent timber, and large open flats of excellent soil, capable of being cultivated and irrigated to a great extent from the Coldstream, Harison's, Duthie's, Jerling's, Witklip, and Sanddrift Rivers, which are fine permanent streams, running at high levels, with low banks, and emptying themselves into the sea by a series of cascades,—a feature very different from the characteristic of the Knysna rivers, which invariably have high, precipitous approaches, and very little fall between the sources and their mouths, thus rendering them almost useless for irrigation purposes. By the aid of these streams, most of the timber in the forests could be worked by means of saw-mills and other machinery, which ought to add to the value of those particular localities. Mr. Bain remarks: "In a commercial point of view, if the Government would

spend £20,000 in having the proposed road cut through, the ground rendered accessible by the road is of such a very rich nature, and partly covered with such valuable timber, that I have no hesitation in saying that it would realize at least £100,000 if laid out in farms and small villages."

The coast along the whole of these south-east districts has several available harbours and roadsteads. The Caledon sea-board has such indents as Struy's Bay, Standford's Cove, and Bot River Mouth. Swellendam has Port Beaufort, and the Breede River navigable for upwards of forty miles; George has the safe anchorage of Mossel Bay, besides one or two coves for small craft; and the Knysna (where several vessels have been built) has its own "Feather-bed" harbour, sheltered by its heads, in addition to the roadstead of Plettenberg's Bay. The principal shipping port, however, is that of Mossel Bay, where there is a good lighthouse, an excellent harbour, jetties, warehouses, and other facilities for landing and loading cargoes. It is a regular place of call for the coasting steamers, and has also a considerable direct shipping trade. The statistics of the port show remarkable progress, especially since the mountain-road through Meiring's Poort was opened. In 1858, the total exports were valued at £55,000. In 1873, they amounted to £136,940; while the imports were £129,761, and the customs duties received, £16,227. In 1858, the quantity of wool shipped was 601,981 lb., and in 1873, it reached 2,004,528 lb.

## VI. THE MIDLAND KAROO DISTRICTS.

The long range of the Zwartebergen, as already mentioned, forms part of the elevated terrace which encloses the central Karoo districts. This terrace runs like a well-defined boundary line trending in a horse-shoe shape from the Bokkeveld Mountains in the west on to the Zuurbergen and almost up to the Great Winterbergen, in the east. Extensive plains stretch inland from it towards the higher plateau of the Nieuwveld and Sneeuwberg range, the main watershed of the Colony, and beyond there again they slope away to the basin of the Orange River. This portion of the country may be termed the Midland territory. Its total area is estimated at about 80,000 square miles, and it is divided into twelve districts, namely, Beaufort, the settled parts of Fraserburg and Victoria, Prince Albert, Willowmoore, Jansenville, Graaff-Reinet, Murraysburg, Richmond, Hope Town, Colesberg, Middelburg, and Cradock. The total population is returned at 80,000 or little more than one individual to the square mile. Some of the largest and finest flocks in the Colony are pastured here: in 1865 there were as many as 3,617,082 woolled sheep, 940,000 African sheep, 60,000 Angora goats, and 743,000 common goats, besides horses and cattle. The clip of wool at that time was 10,000,000 lb. and has since nearly doubled.

The southern part of this tract has still the same characteristics of soil and vegetation and rarity of permanent waters which made the "Karoo" seem to the early colonists and travellers a sterile wilderness. From its appearance one readily adopts the conclusion that its original condition was an inland sea or

lake, which by the upheaval of the country age after age, became drained off through the cracks and fissures in its south-eastern rim, where now the Gouritz, Gamtoos, and Sunday Rivers flow. The substratum consists of clays, marls, shales, and sandstone, full of fossil reptilia, and denominated by geologists the *Dicynodon* rocks of the Mesozoic period. It has a surface of dry and often baked red soil on which grow small shrubs or plants of salsolaceous, alkaline and aromatic character, chiefly belonging to the orders *Ficoideæ* and *Compositæ*. This herbage constitutes what is considered the prime sheep-walks, and the soil when fertilised by water is of the most productive quality. Herein lies the future riches of the Colony.

The first view of the plains to be had on emerging from the Karoo Poort, beyond Ceres or Hex River, is not very attractive. It is a dreary flat shut in on two sides by mountains, and peppered over with ant hills and small round bushes,—according to Wyley, “bearing a ridiculous resemblance to the scattered tufts of wool upon the head of a Hottentot, which no effort of imagination can convert into a sublime or beautiful object.” Further on the plain has more of an undulating billowy character; the surface being diversified by slaty hills and eminences, some of which would appear considerable but for the lofty mountains surrounding them. Throughout this tract, for near 200 miles, there are only a few solitary farms situate at long distances apart. The ground is very stony and there is no great depth of soil. Water, whether from rain or springs is scarce, and the rivers for the greater part of the year, except after thunderstorms, are “dry” or furnish only a few brackish pools. These river-beds, however, are fringed with mimosas and other trees, many of them bearing a parasitical leafless shrub allied to the European mistletoe.

In the early spring, or after a rainfall, travelling over the Karoo and sleeping beneath its starry and dewless skies, is delightful enough, but in the warm months of January or February, when the temperature is ordinarily over 100°, the heat and aridity in the day-time are very trying. Then "barren and brown stretch the stony plains; no sounds of life disturb their sullen solitude; no patch of verdure yields a joy to wearied eyes; no leafy tree its refreshing shade, only the stunted bush or prickly cacti rear their ashy coloured forms as if in mockery of animal wants." This dreary monotonous character of these wastes made a journey over them a few years ago appear a formidable affair. But the establishment of regular and rapid conveyances, by the Inland Transport Company, has lately removed those unfavourable impressions, and now a trip across them is quite an ordinary occurrence. A few years hence there will be a much greater change. The Beaufort Railway will be driven through them,—clearing away the impediments of distance, risk, and expense which now limit traffic with the interior divisions,—supplying articles and wants their inhabitants have hitherto been debarred from,—tapping the rich pastoral wealth in which they abound, and introducing population and stimulating industry to develop resources which are as yet scarcely touched.

Beaufort West, near where the Gamka River comes down from the Nieuwveld hills, is at present the first town of any importance in the Karoo. It presents a pleasant appearance on the plain, with its broad main street lined with shady, fruit-laden trees. It has a handsome town-hall ornamented by a clock and belfry, which chimes the passing hours. There are English, Dutch, and Mission Churches, a banking establishment, a public library, and excellent schools. The mercantile stores are not very numerous, but they

transact a very profitable business. Four of the leading firms during 1873, received 857,000 lb. weight of merchandise from the seaports and sent away 942,879 lb. of wool and other produce, entailing a transport charge amounting to over £7,912. The division of Beaufort West was formerly an extensive one; it included Fraserburg and Victoria West, Prince Albert, and part of Willowmoore, of which it has been dismembered by the formation of these places into separate magisterial districts. It has still an area of about 10,000 square miles, and contains some 219 quitrent and apportioned quitrent farms, and a large extent of Crown lands, of which thirty-two lots are held under annual leases and thirty-three under Act No. 19 of 1864. When it first attracted notice as a pastoral region some thirty years ago, the scarcity of water was found to be the great drawback and in many localities it still continues so, the farms being supplied only by small springs and periodical pools. Several enterprising proprietors, however, set to work to remedy this, and constructed large reservoirs capable of retaining the rainfall, which has no stated season here and is dependant chiefly on the thunderstorms in summer. By such means, places which were formerly useless, or at best only available for a month or six weeks, are now become valuable farms, with permanent stations and comfortable homesteads surrounded by trees and gardens. A great deal of improvement in the same direction may still be effected. There are many so-called "dry rivers" which could be partially dammed up, either at their heads or at their feeders, so as to prevent the water which fills them in rainy seasons from escaping to the sea; and not only rivers but "leegtes," or hollows, which are full of water after rains, and where by damming up a small "poort" or kloof in a suitable situation, large tracts of land could be brought under cultivation. All the irrigation

works hitherto undertaken have been promoted by individuals or municipalities and many of them without any qualified professional assistance. The boldest local effort of any kind was the large dam above the town of Beaufort, which, owing to defective construction and want of proper provision for the escape of flood water, burst its embankment and caused considerable damage to property. It is now in course of re-construction on plans furnished to the Beaufort Municipality by a scientific engineer, Mr. Shaw, who had experience of such works in India. Its superficial area when full will be 137 acres; the gathering ground is sixty square miles; the length of the embankments 500 yards; and it is calculated to contain 500,000,000 gallons.

The sheep-walks of some parts of Beaufort West are considered equal to any in the Colony. The appearance of the pasturage, however, at first sight would puzzle a stranger as to what the flocks feed upon. It is such as might naturally invite the remark of the sarcastic Yankee, that "ground so bad should be fenced in to keep the animals from starving on it." Yet it is surprising to see with what relish the sheep browse and how well they thrive on the succulent shoots of the small shrubs (in appearance something like English thyme or some varieties of heather) which form the herbage of the plains. The *schaap bosch* or sheep bush (*Pentzia Virgata*, Less.), an aromatic much-branched rigid little bush, one or two feet high, is the principal and most valuable plant. We observe that it has lately been reproduced in South Australia. Dr. Schombergh, of Adelaide, in one of his recent publications says he received some seed of it from Dr. Hooker with the remark that it was "the most valuable sheep fodder for dry climates," and he has raised about twenty plants which have done remarkably well, proving that the climate there

is well adapted for its growth. The shrub is easily propagated from cuttings, every one of which will grow if planted when the first rains begin to fall. This and other bushes, such as the aar-bosch, ghanna, dagga, and gwarrie, which chiefly form the Karooveldt, will stand a great deal of dry weather and long after the grasses, which are abundant after rain, disappear, they are as wholesome and nutritious as ever. Their roots penetrate the soil to a great depth (fifteen feet or more in some instances) so that they obtain a supply of moisture when the surface is parched with drought. They will also grow and shoot at any season of the year should there be rain, and at times, when the ground becomes thoroughly moistened, it is marvellous to see the transformation effected,—what was a parched brown stubble, “sapless as a worn-out broom,” in a few days rushes into vegetation with a rapidity that looks like enchantment, and the surface of the country becomes a beautiful carpet of heath and flowers of every colour and hue. This ability to stand the drought and the operation of the law of “the survivor of the fittest” has established the dominion of the Karoo, and given it its peculiarity of aspect and resources. Many of the shrubs sheep and cattle will consume, even after they are apparently nothing but dried-up twigs, and if there is a good supply of water large flocks of sheep will live on and even do well, long after, to anyone unacquainted with the nature of the veldt, it would be deemed improbable that they could exist. It is for this among other reasons that the storage of water is of such supreme importance here.

The size of the farms throughout the division vary considerably, some measuring as much as 20,000 morgen; but the largest as a rule are not the best. Those in the East and West Nieuwveld range from 4,000 to 6,000 morgen, with one or two exceptions of

10,000 to 13,000 morgen; in the other parts they average from 8,000 to 10,000. The value of farms in the Nieuwveld, eastward of the Zak River and near the Salt River, which are partly agricultural as well as pastoral may be stated at from 2s. 6d. to 10s. or 20s. per morgen, dependent upon the permanent supply of water; while in the Nieuwveld, westward of the Zak River, they vary from 2s. to 15s.; in the eastern Gough they are about 5s. to 10s.; in the western Gough under the Nieuwveld Mountains, from 7s. to 10s.; and on the Flats, from 4s. to 7s. per morgen. The estimate of the capability of these pastures for carrying sheep, taking seasons of drought into account, is, on the East and West Nieuwveld, from one to two morgen for one sheep; on the East Gough from two to three morgen; and on the West Gough from three to five morgen. Stock thrive well, the dry climate and aromatic herbage being very favourable for them. The increase of lambs when properly cared for appears to be about seventy per cent. The fleeces are of fair weight and good quality. On some places, particularly on the loose dusty ground below and eastward of the Nieuwveld, sheep yield ten lb. of unwashed wool, but on the Nieuwveld where it is hard and stony not more than six lb., and in other parts from five to seven lb. The entire yield is about 5,000 bales per annum.

Some of the largest flockmasters in the Colony are in Beaufort West, one of them being the present Premier, the Hon. Mr. Molteno. The number of woolled sheep on his properties and owned by himself and partners is about 35,000. Mr. D. de Villiers, a neighbouring proprietor, has a flock of 20,000. The flocks generally range from that number down to 1,500. The homesteads are very substantial buildings, occasionally surrounded with cultivated grounds, and as a rule provided with every convenience for carrying on pastoral operations. There are washing pools,

dipping tanks, pens, and roomy clean sheds where the wool is shorn and sorted according to its several qualities or descriptions. Great attention is paid to the getting up of the fleece; and there is none of that admixture of "lamb's wool, dung-locks, and pieces" sometimes tumbled together and packed in a dirty kraal, which is too common among many of the back-country growers. At suitable places throughout the sheep-runs reservoirs have been made, where the flocks are watered without having any distance to travel, and at each of them there are small houses or stations where the superintendents or stockmen with their herds live for weeks together visiting the head station only at intervals, as occasion may require. These superintendents in many cases are young men of good families, who thus acquire a practical knowledge of pastoral pursuits and in a few years are qualified to take the charge of other farms or lease lands on their own account. The rearing of cattle is not much followed in the district, as it is mainly occupied by sheep, but there are some good horses and mules bred, especially on the West Nieuwveld, where an old resident, Mr. Rose, has for many years past reared some valuable stock. Angora goats have been tried, and there are now some thousands pastured, but the veldt being found more suitable for merinos, the former are being discontinued. The ordinary Cape goats thrive everywhere and are most prolific.

Behind Beaufort, the Nieuwveld Mountains present a bold escarpment, distinctly showing the horizontal strata of sandstone and shale, sometimes capped by sheets of trap or basalt, whose *debris* enriches the soil of the adjacent plains. These mountains are considered to correspond with the coal-bearing rocks of the Stormbergen in the Border districts, and thin layers of coal have been found in them,

at the farm of Mr. Vivvier, Leeuw River, and other places between there and Fraserburg. Hitherto the seams have not been of sufficient thickness to be of use, and the quality chiefly anthracitic, probably owing to the proximity of the greenstone dykes which are very numerous. But westward towards the Komsberg, where these dykes are not so common, workable coal is reported to exist, and as the country becomes occupied favourable spots may be opened up which may prove of permanent value. Two or three years ago, the civil commissioner of Beaufort forwarded to Government some samples of quicksilver said to have been found in a fountain known as Winderagers Fontein, on the Karoo Flats below the West Nieuwveld. The opinion of some scientific men who examined the samples was that the mercury had been extracted from a barometer or obtained from a chemist's shop. On application for further specimens it was ascertained that the owner of the place had at the suggestion of some person blasted the rock through which it was supposed the mercury came, and afterwards no trace of it could be detected. The property however, was lately purchased by a Port Elizabeth firm who are now endeavouring to ascertain its mineral character. The fountain, or fountains, for there are three or four of them within a radius of a few miles, are highly charged with sulphuretted hydrogen bubbling up as bright metallic-looking drops in the water. A miner who was for some months past at work opening up the ground behind one of these springs, found the formation to be that of the ordinary Karoo dicynodon beds with layers of argillaceous shale and crystallized calcareous spar; but there was no trace of cinnabar; and his further operations were stopped by the augmented flow of water which of itself, however, has added considerably to the value of the farm for ordinary agricultural

purposes. Some of the sandstones of the Nieuwveld and Roggeveld form excellent building materials, and are frequently used as such. Their great value arises from their points being exactly at right angles to each other and to the planes of the flags. As these stones occur of all dimensions they require no dressing, but can be laid down just as they are taken from the quarry.

On the plateau of the Nieuwveld, 100 miles distant from Beaufort West, the town of Fraserburg is situated. It has a great many neat and comfortable dwellings, a well-built Dutch Church, spacious public offices, and a town-house; and a commencement has been made with tree-planting which in course of time will add considerably to its appearance. In the portion of the district known as the Roggeveld, there is also a small church village, named Sutherland, and to the north-west again, near the Zak River, there is a Rhenish Mission village, Amandelboom, where a mixed body of natives, Hottentots, Bushmen, and Bastards, have cultivated grounds and extensive commonage lands granted to them by Government. At both these places in fair seasons grain crops are raised but the other parts of the district are wholly pastoral. The census of 1865 showed that the sheep in possession of the farmers was almost universally of the old fat tail breed. There were upwards of 400,000 Cape and only 81,432 merino, and the quantity of wool produced was returned at 213,000 lb. Since then there has been a great advance in wool-growing, the clip of 1873 having increased to fully 3,000 bales or 1,500,000 lb. The production, however, is still in its infancy as compared with the capabilities of the district which has millions of acres unoccupied and unalienated. As fast as surveys have been completed these lands have been readily leased for long periods, or at once converted into quitrent properties; and where formerly

there were only nomadic squatters, there are now numbers of comfortable homesteads along the various springs or wells. The periodic droughts which occur,—such as the one of last year when for twelve months or more no rain fell,—make a permanent water supply almost indispensable. Fortunately the formation of the country in many places is such as to render this practicable. The stony ridges which intersect the flats or level plains along Fraserburg and Victoria are naturally suited for blocking up and retaining water. These ridges are mostly trap dykes, often resembling walls or rows of beacons of loosely-piled boulders. They cross the horizontal beds of sand and shale vertically or nearly so, acting as so many drains. In some instances a number of smaller dykes are crossed by one large one. When this large one has been cut through, a spring occurs. Generally by sinking alongside these dykes, even when there is no indication on the surface, water is obtained. Some of them drain very extensive areas, and the springs and water over many arid portions of the Colony may be traced to their immediate influence. Mr. Dunn, in his geological notes, has called attention to the water bearing influences of these dykes, and says:—“The water usually met with by sinking on these ‘drains’ and in the springs, is of good quality, though frequently hard, from the presence of lime. Brackish or saline springs are not common. Nature has also made it easy to follow the course of the dykes, for the larger are frequently marked by a low ridge of dark colour traversing the country, while the smaller ones and those covered with soil are rendered conspicuous by the ‘Karree Doorn’ and other tall bushes growing along their course. It has been found that by opening out a drain from the dykes at a lower level than that at which the water is known to stand, a permanent small stream may sometimes be obtained.” Many of

these sub-surface water-courses are known to the farmers as "aars" or arteries, and from the vegetation above them are almost as legible as footpaths, and Bushmen and other natives say they "can trace where they are by the burrowing of the king ant-eater (aardvaark), the meercat, or even the field mouse." Mr. Alston, a resident in this part of the country, recently gave to the public his opinion that the too free opening of these wells and springs will ultimately tend towards an exhaustive system of sub-drainage which must affect the character of the grazing ground, and render large tracts of it worthless. He observes:— "We have in these high districts no surplus moisture in the soil, and our aim should be rather to increase than to diminish the quantity, and to keep what we can as near the surface as possible, both for the sustenance of the herbage and the certain effect it would have in inducing a greater rainfall. By adopting the system of supplying our wants by storing surplus water in good reservoirs—and to the making of these dams, time being given, there is no practical limit—it would be found that sheep and cattle would be kept in better condition by the use of the fresh water, and by its being accessible at all times, that the labour of the flockmaster would be greatly lessened, and that the cost of the work would not be more than the capital represented by the present yearly outlay incurred in the drawing of water from the wells. Respecting the labour of the flockmaster, I will endeavour to illustrate my meaning by considering what may be effected by changing the direction of a given amount of labour. During two months of the present year I had occasion to supply 500 sheep and forty-five oxen with water drawn from a well ten feet deep, and found that an average of ten tons per day was wanted. I will assume, however, that it is required to lift fifteen tons of water to a height of six

feet, that this must be repeated for fifty days in each year, and take the accumulation of five years' labour. The result is 3,750 tons of water lifted to a height of six feet, and the equivalent to this in lifting earth into a dam wall would provide for the collection of 100,000 tons of water, or about twenty-seven times as much as would be lifted from wells at the assumed rate during the five years. Allowing a very ample margin for evaporation, infiltration, and the possibility of not always getting suitable sites for storage, I am of opinion that in all cases farmers would find dams more economical than wells in the matter of labour alone; and that with respect to improvement in the producing power of their farms there is no plan that offers such certain advantages as the keeping possession of surface water, whether it be stored in dams for future use or forced into the ground where it falls."

Victoria West is distant about 100 miles north from Beaufort. The town is alongside one of the hilly ridges, which there, even more than in Fraserburg, diversify the plains. It has a commodious and well-built Dutch Church, a Mission Chapel, a pretty Episcopalian Church, and the foundations of a Roman Catholic one, and, what is not often seen in the country, a neatly kept, enclosed, and planted cemetery, laid out by the Dutch Church minister. The houses are substantial and many of them, such as the parsonage with its trim garden, appear very comfortable. There is a bank, a public library, schools, hotel, and some nine business establishments, indicating a pretty extensive and prosperous trade. The population scarcely number 1,000, black and white; but the place has quite a bustling appearance when the surrounding farmers visit the town, which they usually do for the stated religious services held there. Few districts have made more marked progress than this. It was only formed in 1857 and the first sale of crown

lands took place in 1859. Then there were only one or two hundred bales of wool brought into the town. In 1865 the production was 1,000,000 lb.; now it is 4,000,000 lb., or above 10,000 bales per annum, and other produce of the division has likewise increased. The number of farms then occupied was 149; now the number is 350, and large tracts of land still remain to be surveyed and leased. The revenue to the Crown rose at the same time from £6,000 in 1865 to £16,000 in 1870. In the condition of the people there has been a noticeable improvement materially and intellectually, the comforts and luxuries of life being enjoyed and education fairly appreciated. The farms are generally of large extent, ranging from 4,000 to as many as 30,000 morgen, owing to the distance apart of the permanent waters. The opening of springs and construction of dams have greatly increased their capabilities. On an average there are at least three or four reservoirs on each farm, the value of each of them averaging from £100 to £200. Some places have fountains which never fail and are often strengthened by the dams above them; the farmers in such cases are enabled to raise crops, and from 100 to 600 bushels of grain are annually obtained. The value of superior land now may be stated at 10s. to 15s. per morgen, and inferior spots may be had as low as 1s. or 1s. 6d. a morgen. Flocks of sheep range from 500 to 8,000, but there are instances of larger ones being pastured, as at the farm Pampoenkraal, purchased from Government a couple of years ago for £10,000, where as many as fifteen or sixteen thousand sheep are grazed, besides 150 oxen and 200 or 300 mules and horses. Generally the pasture is excellent, carrying one sheep to the morgen; yet here as in other places, it is said, overstocking is beginning to tell upon its condition, the sweet grasses and shrubs which were once high and plentiful being dwarfed or giving place

to bush of inferior description. In the northern part of the division, which is now being gradually occupied, the pasturage is as good as can be desired, and new comers who have settled there are doing well, especially when improvements have been made. One portion lying between Carnarvon and Prieska, and extending about fifty miles in diameter, presents a peculiar appearance, which has obtained for it the name of the "Kaijan bult." Its surface is red Karoo soil, resting upon a calcareous crust, in which boulders, rocks, and pebbles of various shapes and kinds, including agates, jaspers, chalcedony, cats-eye, white and coloured quartz, and porphyry, are embedded. This is the formation which Mr. Dunn in his geological map of the Colony has described as a "glacial conglomerate." There is an extension of it, he says, a few miles north-east of Beaufort and at different places westward as far as the Haartebeeste River.

The wise and liberal policy of the Land Leasing Act of 1864 has been strikingly exhibited in these three districts of Beaufort, Fraserburg, and Victoria. Since 1867 over 3,000,000 of morgen, or about 10,000 square miles, have been leased for periods of twenty-one years, to the direct and very material benefit of the country as well as of the general and divisional revenues. The extent of ground thus leased from 1867 to 1872 was:—In Fraserburg, 1,383,890 morgen at a total yearly rental of £6,614; in Victoria West, 1,077,326 morgen, giving a rental of £5,471; and in Beaufort West, 856,654 morgen, at a rental of £3,574.

The district of Prince Albert lies to the right of Beaufort West, along the base of the Zwarteberg range. It covers an area of about 4,000 square miles. A great part of it forms what is known as the "Gouph," commonly presenting a dry baked surface strewn with stones, but when well-watered deserving its Hottentot synonym—"fat" or "rich." This is seen in the great

productiveness of the Zwarteberg ward, where the farms are irrigated, and yield wheat and grain of all sorts, wine of excellent quality, brandy, tobacco, raisins, walnuts, oranges, apples, pears, and figs. So also, in the town of Prince Albert, which is plentifully watered, land sells as high as at any town near the metropolis, while the average value of the outlying portions of the district, where there are no streams, is very low. These latter localities, however, are good for ostrich-farming, providing a wide range for the birds, who require little attention save in watching occasionally where the female chooses her nest, and while the process of incubation goes on. At the present time there are over 800 birds domesticated in this district, two or three farms alone having about 100 birds each, and scarcely a single one being without a pair or more of them. There are also many birds in their wild state still roaming in some parts, and these often form the object of considerable emulation between farmers, each one striving to vie with his neighbour in the number running on his property, and especially the number of broods taken; for although the Legislature has wisely discountenanced, by heavy penalties, the destruction of wild ostriches, it does not prohibit the taking of young birds when found by the owner on his land. The time was when this part of the country was overrun by ostriches, when flocks of fifty or sixty could be seen scampering with distended wings over the vast plains, on the approach of the traveller; and men scarcely fifty years old relate how in their youth they found nests of fifty or more eggs, (accumulated through several females fraternizing together), which they carried home in bags strung across pack-horses. But at that time the value of the eggs for artificial hatching was not known, and it continued to be generally believed that the ostrich was incapable of being domesticated until the late Mr. Kinnear, of

Beaufort, demonstrated the contrary, and showed by the number of young birds he so successfully reared that ostrich-farming could be turned to a very profitable account. The principal part of the district however is pastoral, numerous flocks of sheep and goats running on the various farms, and wool is at present the staple article of export. A wool-washing establishment has been in operation for some time at Klaarstroom, at the northern entrance of Meiring's Poort. The average quantity washed has been 200 bales a month, dependent upon the water supply, but steam machinery is now being erected there for the purpose of carrying on the industry on a larger scale.

The town of Prince Albert is situate along the Zwarteberg, at the end of a deep valley formed by a break in the range. It enjoys a delicious climate at all seasons of the year. In summer it is almost perpetually fanned by a cool south-easter which, rising from the sea on the south-east coast comes sweeping over the mountain ridges as a moderate invigorating breeze. In winter the temperature is far from severe and while rain falls freely on the mountains, under which the town shelters, it enjoys clear sunshine and bracing air. At the same time from its comparative elevation, it commands a wide view over the broad flats bounded only in the north-east by the Blue Nieuwveld range, some eighty miles distant. A strong stream of the coolest and purest water descending the valley runs through the town and makes it wear that green and fresh appearance which delights the traveller after crossing the dry Karoo. The salubriousness of the climate, little known hitherto on account of the remoteness of the place, needs only to be brought into public notice in order to render it, when once a railway shall have been established, a general resort for those in search of health.

The inland position of the district and its isolation from the high road and channels of traffic have hitherto proved a great disadvantage to it. Intercourse with more advanced districts has thereby been checked and education and social improvements retarded. The consequence of this state of things is seen in the more than ordinary ignorance that prevails among the people, and the total absence of anything like comfort in the dwellings of the farmers, often little better than mud huts. The inhabitants of the Gouph especially, born and bred in a region destitute of vegetation and accustomed to the privations endured by several generations, seem to have grown callous with regard to the comforts of life. The increased transport to the up-country and the Diamond-fields has lately however effected a marked change and improvement amongst some of them. Not only has it opened a lucrative market for produce of all kinds, but as travelling is no longer confined to the "smouse" or "togtganger," it has begun to bring the isolated farmer in contact with better informed classes, affording him the opportunity of inquiring and learning about other matters than those that within his limited sphere engross his attention.

The new district of Willowmoore adjoins Prince Albert to the eastward. The seat of magistracy is a small but rising village along the Groot River. It is on one of the main lines of communication from Swellendam, Riversdale, and George to Graaff-Reinet and the Free State; through it also passes the road from Prince Albert and Meiring's Poort to Port Elizabeth; and from Oudtshoorn and the Oliphant's River Valley to Somerset East. It is equi-distant from George, Oudtshoorn, and Beaufort, about 100 miles, from Graaff-Reinet 110 miles, and from Port Elizabeth 160 miles. The Groot River rises in the plateau beyond Murraysburg, where it is known as

the Buffel River; afterwards it receives the name of the Kareiga, forming the boundary of Beaufort and Graaff-Reinet; about eighteen miles from Willowmoore it changes to the Groot River and as such passes through the Winterhoek range about five or six miles west of the Cockscomb Mountain, after which it is joined by the Kouga, and is known as the Gamtoos, entering the sea in St. Francis Bay. Several fish resembling the grey mullet are found in this, as well as in many of the river-beds of the Karoo, occupying the "zekoegatten" or permanent water holes in the driest season.

Many of the farms in the Willowmoore district are agricultural, those lying near the Zwarteberg range, along the Groot River, and in the Baviaan's Kloof producing corn, wine, and fruit of every description. The two last mentioned places are worthy of special notice. A few years back there was nothing to be seen along the course of the Groot River save innumerable mimosas; but now by the energy and industry of a few men, dams have been constructed, and large fields (one of them producing upwards of 3,000 bushels of grain) are irrigated by water which previously was allowed to run unused to the sea. The Baviaan's Kloof is a very fertile valley about fifty miles in length; it is occupied by twelve farms, and is entirely surrounded by mountains, a continuation of the Great Winterhoek range. At the western end and throughout it there is an accessible road, but at the eastern extremity the outlet is very difficult, and those who are bold enough to attempt it have to perform acrobatic feats which would astonish anyone uninitiated in ox-wagon travelling. The greater part of the district, however, is pastoral, being good Karoo veldt, not of the ordinary interminable flat character, but broken by mountains and small hills. Since the leasing of the Crown lands for long periods, great

improvements have been going on, water being stored and wells opened, and several farmers have gone to the expense of erecting pumps driven by wind to raise water for their flocks, and these are found to answer well. Willowmoore is a Dutch Reformed Church centre and an excellent place for trade, a large quantity of wool and other produce changing hands in the village and being then forwarded to Port Elizabeth, the only sea-port with which it has trade communication, for although Mossel Bay is quite as near, the road to it is much heavier, and the market there is not considered so good. When the Port Elizabeth and Graaff-Reinet railway is completed, this section of the country will be an important feeder to it.

Eastward of Willowmoore we come to the new district of Jansenville on the Sunday's River. It is in the centre of the country known as the Ruggens, lying between Uitenhage, Somerset, and Graaff-Reinet. Its extent is about 1,500 square miles. It comprises twelve freehold farms, in extent 15,947 morgen; 118 quitrent farms, in extent 297,563 morgen; thirty-one pieces of land, leased under Act 19 of 1864, in extent 23,827 morgen; and twenty-nine pieces of Crown land, leased annually, in extent 97,370 morgen. To the north there is good grazing for all kinds of stock on the undulating Karoo flats; on the east, there is a low range of hills, through which the Riet and Vogel Rivers flow, where a good deal of the prickly euphorbia or norsedoorn is intermixed with the herbage; on the south it is bounded by the Klein Winterhoek range, covered with bush and grass well adapted for cattle. There are not many farms with permanent springs, but most of them have large dams. The principal sheep-farmers are Messrs. Hobson, Biggs, and Berrington, whose flocks are large, noted for purity of breed, and free from disease. Their farms adjoin each other, on the property originally

*H. van der Merwe, Jansenville*

belonging to the late Mr. W. C. Hobson, and together form a very extensive sheep-walk. Towards the Zuurberg, Messrs. A. C. Stewart, & Co. have fine lands where angora and also ostrich-farming is conducted under the management of Mr. Featherstone. A good amount of cultivation is carried on along the Sunday's River, the soil being deep and rich, producing abundant crops of wheat, maize, and forage—one farm alone yielding sixty-three tons of oathay, and 1,500 bushels of mealies. Vineyards and orchards when planted also do well. Many of the farmers, however, have lately engaged in the transport trade between Port Elizabeth and Graaff-Reinet, which has been for a time more immediately remunerative. The village of Jansenville at present consists of only a few houses, but a large extent of arable land has been laid out in erven fenced with quince hedges and planted with trees. The presence of a magistrate and his establishment, the opening of a second-class school and a public library, and the services of a Dutch Church already established here, is likely to attract more population and effect a great improvement in the place, while the completion of the new bridge across the Sunday's River will in a few months bring the inland traffic (about 100 wagons a day) directly through the village and give a considerable impetus to trade.

North of this tract of country, we have the division of Graaff-Reinet stretching up to the heights of the Camdeboo and Sneeuwberg Mountain range. It is the oldest of the inland divisions, having been first occupied by the early colonists about a century ago. Its area then was fully 50,000 square miles, but it has been reduced by the creation of new districts on all sides around it, until now it scarcely comprises 6,000 miles with a population of about 15,000. It has always been celebrated as an agricultural as well as a pastoral

region, although latterly, owing to the profitable return of the pursuit, special attention has been given to the improvement and increase of fine woolled sheep. The clip of wool in 1865 was 1,233,325 lb. The extent of ground then under cultivation was a little over 6,000 acres, and yielded 44,000 bushels of wheat besides other grain; of dried fruits 115,000 lb.; of wine 20,000 gallons and an equal quantity of brandy. The pasturage is greatly diversified and suitable for all descriptions of stock, the highlands abounding with grass, and the valleys or glens rich in "gebroken veld" and alluvial soil capable of growing anything, while the plains are covered with Karoo bush, ghanna, spek-boom, wild granaat, gwarrie, and other shrubs, suitable as food for sheep and goats. Formerly and before land became as valuable as it now is, it was the custom of most well-to-do farmers to possess at least one summer and one winter farm. The horses and cattle were generally kept in the "grass plaats" all the year round, to which in summer were sent all the small stock or "klein vee," which thrive better by being kept during the winter months in the lower warm Karoo farms. Some of the more successful and wealthy still possess such an extent of land and suitable conveniences, but by far the greater part of the farmers have now single farms only. These vary in size from 2,000 morgen to 10,000. The largest extent of land held by any one proprietor is about 60,000 morgen, while a few hold grants of 20,000 morgen.

Up to 1838, the division was peopled almost entirely by the early colonists of Dutch, French, and German extraction, who bred Cape sheep, horses, and cattle. The only parties who had introduced merino rams to their flocks up to that time were the late Wm. Smit, who then lived on the Rhenosterberg, near where Middelburg now is, and the late Barend Burger, of

Achter Sneeuwberg, now Murraysburg. Not more than 10,000 or 15,000 lb. of wool was then produced in the whole wide-spread district. For a short time previous there had been a considerable exodus of the old inhabitants to beyond the Orange River. These in some instances abandoned their farms entirely; others sold them for whatever they could obtain for them. Many a farm was then parted with for a wagon or span of oxen, and in one instance a place worth more than £5,000 was sold for an old bull which died a few days after. Tempted by the low price at which land was procurable, the families of the Southeys and Rubidges, together with their numerous family connections, from Albany, made extensive purchases of farms and settled in this division, while the late Mr. Fred. Leisching, and Mr. Watermeyer from the neighbourhood of Cape Town did the same. These brought with them numerous flocks of merino sheep of the best kind which they greatly improved from year to year by importations from Europe. The older inhabitants seeing the new comers successful followed their example until now the merino sheep, being found infinitely more profitable than either the Cape sheep, or horses or cattle, has nearly displaced them all.

The value of a farm here depends much upon the quality of its herbage, the strength and permanency of its fountains, the nature of the improvements that have been made upon it in the form of dams, buildings, homestead, &c., as well as its extent of arable land and proximity to a market. The best farms are worth at present from 20s. to 30s. a morgen and others from 10s. to 20s. per morgen. Among the most noticeable properties may be mentioned those of Messrs. Parkes Brothers, "Wheatlands," in the lower part of the division, where the desert has been turned into a fruitful garden, yielding wine,

brandy, and grain, as well as handsome returns in wool and increase of stock. Another example of the successful application of industry and intelligence is "Wellwood," the sheep-farming establishment of Mr. Charles Rubidge, who has by many years of unremitting care and attention and the judicious selection of rams from the best European flocks succeeded in bringing his sheep to great perfection, and obtained quite a colonial reputation as a breeder.\* Mr. Alfred Rubidge's farm "Portlock" and Mr. Watermeyer's "Colonies Plaats" as well as "Bloemhoff," now owned by Messrs. Southey, Mr. le Roux's, Mr. Niekerk's, Mr. Brook's "Goliath's Kraal," Mr. A. Watermeyer's "Letskraal" and Mrs. Meintjes', Fontein Plaats, near Tantjesberg, may also be mentioned as among the most superior farms. The land as well as the stock is chiefly owned by the occupiers. There is very little tenant occupation. Arable lands are sometimes given on the halves, as it is called, the owner giving only the land and taking half the crops, but this is not done to any great extent. The yield of the soil as a rule is very abundant, varying from twenty to 120 fold, or even more with irrigation. The storing of water for this purpose has had some but far from sufficient attention paid to it. The Messrs. Parkes, at Wheatlands, and a few others have constructed large reservoirs, but there are many other suitable spots in the division where by an outlay of a few thousand pounds great bodies of water could be conserved, and small lakes formed which might be used to irrigate extensive tracts of arable land. Such spots may be found immediately above the town of Graaff-Reinet and at Mr. Booyesen's farm, a little lower down the Sunday's River. These works,

\* Mr. Rubidge drafts from his ordinary flock all ewes that do not yield at least ten lb. of wool. In his better flock a yield of twelve lb. is the test for admittance. One animal on his place gave the exceptional yield of twenty-five lb. of wool.

however, are hardly likely to be undertaken by single capitalists, but would richly repay a Company if judiciously carried out. Numbers of the ordinary dams or reservoirs have been constructed by the farmers themselves. The dams are simply earth embankments thrown up across shallow valleys, the earth being taken from the inner side, thus scarping a hollow for the water to be stored in. The length of the embankments vary from twenty or thirty yards to 1,000 yards, with a height of from four to twenty-four feet, giving as much as twenty feet depth of water in the largest.

A great deal of attention has lately been paid to the breeding of angora goats. They thrive admirably everywhere, but the most suitable part for them is the lower Zwart Ruggens. Spekboom and other shrubs which goats thrive best on are there found in the greatest abundance, and are of such a succulent nature that the stock can do well without water for a week at a time. Messrs. Evans and Rex, of Riet Fontein, have by far the largest flocks of these beautiful creatures of any one in the district. Mr. Rabie, of Camdeboo, Mr. Walter Rubidge, of Roodeberg, Mr. Biom, and Mr. Ziervogel have also given attention to them with successful results.

The town of Graaff-Reinet is the oldest and one of the largest in the inland districts. It is situate at the base of the hilly range where the Sunday's River leaves the Sneeuwberg Mountains for the plains. These hills rise behind it to a height of 1,000 or 1,500 feet. The summit of one of them, the Spandeanu Kop, has a rough resemblance to a haystack, and adjoining it there is a ridge of loosely-piled trap rock with pillars of columnar basalt, standing out in bold relief to the height of 300 or 400 feet, having a very picturesque effect. This spot is known by the name of the Valley of Desolation. At the foot

of these hills the river sweeps round and forms a bend about a mile across, and in this bend the town is laid out, an abundant supply of water being distributed through it by several channels from the bed of the stream. The streets are wide and many of them are planted with rows of trees on each side. Formerly oranges and lemons were the principal trees, and their evergreen foliage and golden fruit were a peculiar feature of the town, but most of them succumbed to a scaly disease, which a few years ago attacked orange trees everywhere in the Colony, and now their place is supplied by rosy oleanders, accacias, blue-gums, cypresses, and Kafirbooms. The principal buildings are the Dutch Reformed Church, with its clock tower and spire, a handsome English Church, the Government Offices now in course of reconstruction, the town-hall, the college, masonic lodge, the Free Protestant Church, and the Public Library. Three well conducted newspapers are published in the town; three banks are in full operation, and its market is second only to Port Elizabeth. There are several large, and comfortable private buildings and stores of modern style, but the houses generally are of the old-fashioned type, with thatched roofs, gables and stoeps, or raised terraces, the usual form of dwelling of the old colonists. Nearly all have vineyards, gardens, or orchards, or some spot of greenery attached to them. These give the town a very pleasing appearance, and its marked antithesis to the surrounding arid Karoo plains obtained for it long ago the appropriate title of the "Gem of the Desert." A quantity of fruit and brandy is raised by the possessors of the vineyards and gardens; and there are several steam and water-mills and other local industries; but the trade of the place is principally maintained by its being the commercial centre for many of the surroundings districts. The traffic between it and the port of Algoa Bay (160 miles

distant) is very considerable. A year or two ago, it was estimated at 20,000,000 lb. of produce dispatched, and 18,000,000 lb. of goods received. This gives employment to a great number of carriers, but oftentimes the means of transport has proved quite inadequate to the traffic. The necessity of obtaining railway communication with Algoa Bay was mooted long ago, and a strenuous effort in its behalf was made in Parliament by Mr. Probart and others in 1858, but it was only last year that the Legislature finally authorized the construction of this midland line, at an estimated cost of £940,000.

On the plain close to Graaff-Reinet there is a spring known as Kruidfontein, issuing out of the horizontal sandy shale, and impregnated with hydrosulphuric acid gas. An excellent hotel and bath-rooms have been erected on the spot, and it is a favourite place of recreation for the inhabitants. On some of the farms on this plain, the cactus or prickly pear is becoming a source of trouble, the plants springing up so thickly together that nothing else can grow between them. One variety commonly known as the "Kaalblad" has few thorns on its leaves and during drought cattle thrive well upon it; but generally the innumerable thorns of the ordinary kind lodge in the mouths of the animals and cause such injuries that many die therefrom. When the plant has not too great a hold on the soil it may be eradicated, as has been done by Mr. Walter Rubidge, Mr. Booysen, and some others at a cost of several hundred pounds to each.

The town of Aberdeen is situated about thirty-six miles westward from Graaff-Reinet, in the flat country at the foot of the Camdeboo range of mountains. It is a thriving place and has a considerable trade with the wealthy farmers of the Camdeboo, and supplies the wants of those occupying the low country of the Zwart Ruggens and Kariëga. A periodical court is

held there monthly by the magistrate of Graaff-Reinet. Until lately there were vast tracts of Crown land in the neighbourhood most of which, however, are now leased, though there is a considerable extent still available for the same purpose. The features of the country and the nature of the soil are both favourable for the construction of dams, and all this Government land at present yielding nothing will ere long be occupied and made richly productive, as when provided with water it is a most excellent sheep pasture. Ostrich-breeding is very successfully carried on, especially by Mr. Rabie, of Camdeboo, and Mr. Gardner, of Aberdeen, as well as Mr. Jan Booyen, of Klipdrift.

On the north-western spurs of the Sneeuwberg, about fifty miles distant from Graaff-Reinet, is the division of Murraysburg, formed out of portions of Graaff-Reinet, Richmond, and Beaufort. The village from which it takes its name was commenced in 1855, by the purchase of a farm and the sale therefrom of building lots for the purpose of raising funds for the erection of a church. It is another of the many instances which may be given showing the possibility of transforming the desert into a smiling garden. Where formerly there was only the Boer farm-house of old fashioned type, there is now a very pretty country village with luxuriant orchards and cozy cottages, neat houses and stores, a handsome church and a most comfortable hotel. The extreme length of the district is about sixty-six miles, the breadth about forty-five; and there are many rich sheep and cattle farms throughout it, the pasturage being generally sweet Karoo. Many of the homesteads are equal in appearance to any in the western districts, having large comfortable houses and out-buildings surrounded by fruit trees and magnificent oaks, with running streams of water and extensive corn lands. The

sheep kraals are generally on the sloping ground, adjoining the homestead, and are universally enclosed by walls of dried cattle manure, cut in squares and built up in the same way as turf or peat. The fine farm of "Vleiplaats," the property of the Hon. Mr. Burger, within half an hour's ride of Murraysburg is one of these places well worth a visit. Mr. Burger's merino sheep number over 20,000, of which there are always ten to twelve thousand under his own observation on this farm. He is also a horse-breeder, and has now a considerable stud, including some excellent stock recently acquired from the Berg River and Caledon breeders in the West.

The plateau of the Sneeuwbergen consists of a series of mountains known as the Oudeberg, Goliath's Kraal, Amandel Hoogte, Naudesberg, Zuurfontein, and other heights extending for nearly fifty miles behind Graaff-Reinet. Its highest point is the Spitzkop, or Compassberg, on the water-shed dividing the feeders of the Sunday's River, running south-east, and the Zekoe running north. Its height is given by Wyley as 7,800, although Hall and others have put it down at 8,500. The view from the summit is remarkably fine and for extent there is scarcely anything to compare with it in the Colony as its sharp peak overlaps the neighbouring mountains nearly 1,000 feet. Mr. Wyley says:—"The ascent of the peaked portion is a little difficult. The south-western face is a vertical wall. The north-east side which is formed by a large greenstone dyke intersects this at an angle of about  $50^{\circ}$ . The intersection is a sharp edge the lowest portion of which is to the north-west, the side on which the mountain is ascended. To make matters worse, this sharp edge has been shattered into large fragments for a depth of several yards so that the ascent is as it were on the top of a dyke or wall of loose stones, said stones, however,

being often a yard or two in diameter and so poised on each other touching only at the angles that they would appear as if a strong breeze would send them down by the run. The upper part forming the mountain is solid and is several yards in breadth. On its highest point a small pile of stones is erected."

Passing the Sneeuwbergen we are in the undulating country extending to the banks of the Orange River. This is divided into the districts of Richmond, Hope Town, and Colesberg. Throughout it greenstone dykes dispute the ground with the shale and sandstone; the herbage still continuing of the Karoo character, but mixed with varieties of sweet grass in greater or less profusion. Richmond lies about seventy-five miles north from Graaff-Reinet; the town which was established in 1843 is now one of considerable size and importance, and there is a good deal of trade in the products of the district, chiefly wool, mohair, skins, and ostrich feathers. It is next to Graaff-Reinet as an inland centre. There is a large Dutch Reformed and Mission Church, a very successful school, a library, bank, masonic lodge, a newspaper office, and hotels. The houses are interspersed with gardens and there are a number of trees planted about the place. The total number of farms in the division is 400, averaging from 8,000 to 12,000 morgen, although there are some of 20,000 morgen and upwards. Of these only about 100 possess arable lands worth mentioning, having about 1,600 to 1,700 morgen, or about 3,400 acres under cultivation. The other 300 farms cannot bring under cultivation more than a few acres each, and everywhere irrigation has to be adopted. Wheat, barley, and oats are the chief crops, and the average yield is from thirty to thirty-five fold. The best agricultural places are in the wards of Uitvlugt and Middle Wyk, and with a few exceptions in South Winterveld. The division con-

tains some very good sheepwalks, many of those along the branches of the Zekoe River having extensive vleys which are covered with short sweet grass, even during severe droughts. Luipard's Vley, formerly Mr. Mellersh's farm and now Mr. Perie's, is one of these, and the fine property of Messrs. Sieberhagen is another. The number of woolled sheep in 1865 was returned as 420,400 and of Cape sheep 97,000. The clip of wool then was 1,316,899 lb. ; but its production has greatly increased, being now estimated at 6,000 or 7,000 bales. The flocks generally range from 1,500 to 8,000 ; and the fleeces give about 4 lb. The largest land owners are the Messrs. Kock, whose flocks of sheep number fully 20,000 ; W. C., P. and J. van de Merwe, N. J. S. van de Merwe, J. H. Viljoen, J. H. Visser, J. J. van Zyl, D. P. van der Merwe, R. Botha, Eckard, and Pirie. No great complaints are made of the pasturage wearing out, although many farms are said to be overstocked, and in some places the "bitter bush" has displaced the sweeter Karoo varieties. The latter circumstance, however, is not regarded as very objectionable by many farmers, as there are instances where sheep becoming accustomed to the bush are in as good condition as on the sweeter pastures. Cattle and horse-breeding have for some years past been comparatively neglected, but a few residents are again resuming stud-keeping, and high prices have been paid for imported entire horses. Large troops of goats are still found, and ostriches are common. The inhabitants of the division are, as a rule, an intelligent, opulent class. This may be seen in their comfortable residences and the superior character of their flocks and appliances for getting up their clips of wool, as well as in the many well-built reservoirs which are to met with. The population of the town and division is estimated at 10,000 white and coloured.

The next division, Hope Town, is the most northerly in the Colony, and although created in 1858 is still very sparsely occupied. Its features are flat country with a few hills and occasional patches of camel thorn trees. To the eastward it is covered with short Karoo bush, affording good pastures; while to the north and west there are plains of red sand abounding in grass, mixed up with small shrubs chiefly the capoc or cotton bush. After rain the country has a most luxuriant appearance; but the annual fall is very small and uncertain, and periodical droughts of long duration are frequent. The water supply is principally from dams and wells, there being few fountains. The best farms have only about a morgen of ground under cultivation, and they are few. In consequence of this the inhabitants are dependent upon the lower districts for most of the necessaries of life, and as transport is costly, provisions of all kinds are generally high priced. There is a good deal of cattle-breeding, but sheep-farming is the principal occupation, the leading men being Messrs. H. du Plessis, J. W. Vermulen, J. du Toit, J. Bredenkamp, and G. Swegers. The average size of the farms is 4,000 morgen and their value about 2s. 6d. per morgen. Flocks of sheep generally range about 1,500. In 1865 the district had 278,000 merinos and 58,000 Cape sheep, and the clip of wool was 870,622 lb. Until within a few years ago, there was a great deal of squatting on the waste Crown lands, a poor inferior class of farmers living in tents and moving about from spot to spot as in the "Trekveld." Now a large extent of these Crown lands has been leased. Since 1866, the quantity leased was over a million morgen, at prices giving a yearly rental of £8,000. On a great part of the lands, improvements are being made, especially in the construction of dams and the opening of wells. The capabilities of the district are in this manner being gradually developed.

Its great drawback is drought, which careful men provide against either by storing water or removing and reducing their stock on the approach of an adverse season. Hope Town is situated in a small valley or basin adjoining the Orange River. Its population is about 700 white and coloured. It contains a large Dutch Church, many well-built houses and stores, and has a considerable business, particularly in connection with persons trading over the boundary, who purchase merchandise, which they barter with the natives or settlers beyond, and bring in return ivory, skins, feathers, and other produce from the Interior. A little time ago, the value of the goods which passed through Hope Town for the Interior was £50,000, and the produce brought out was about £75,000. Diamonds of the first water have been found on farms in the district, at various places far apart from each other, as well as along the banks of the Orange River, from near where the Vaal joins it. These have all been picked up on the surface soil, generally by most ignorant people, and without any systematic search having been made. The spots where they have been found are known as Proberfontein, Rittlemahoo, Swemkuil, Remhoogte, Muishook, and other places. On some of them there are deposits of "river drift" as at Pniel and Hebron, while others have areas of soil corresponding to Bultfontein and Du Toit's Pan, and at twenty feet deep there is ground very similar to the Kimberley mine, in the adjoining territory of Griqualand West.

Colesberg adjoins Hope Town on the eastern side. It is a fine pastoral division. In 1865 it had upwards of half a million woolled sheep and yielded 1,592,702 lb. of wool, thus standing first in the production of that staple; Richmond being second, Cradock third, and Graaff-Reinet fourth. It embraces an area of about 6,000 square miles, comprising between 300 and

400 granted farms, averaging 4,000 morgen, and a good extent of Crown lands held under lease. The pasturage formerly was grassy, but now bush has spread in every direction, either entirely taking the place of the grasses, or forming the mixed herbage known as gebroken veld. This change is greatly attributed to the numerous flocks of sheep wandering about, making paths, in which when rain falls water flows as in so many little channels washing away the earth and destroying the grass roots. Inferior shrubs such as the "bitter-bush" are establishing themselves in these places, and may in course of time become predominant, although by a little care and trouble more nutritious varieties, such as the "schaap-bosch" might easily be propagated and maintained. Some of the farms have great capabilities, and large prices are paid for them. One property, Mr. Theunissen's, Oorlog's Poort, changed hands some years ago for as much as £15,000. The estates of Mr. Van Zyl, Buffel's Vley, and of Mr. Thos. Bedford, and of Mr. Maltitz, are also very superior, and in every respect well-equipped, all of them having extensive sheds for the protection of the sheep in winter, which in these northern parts is bitterly cold with keen frosts and snow. The district is watered by the Zekoe and Oorlog Rivers, both affluents of the Orange; but dams are constructed on most farms, and many have several of them. About two or three thousand morgen of land are brought under cultivation, and a considerable quantity of wheat, barley, mealies, oat-sheaves, and some wines and dried fruit produced. The crops, however, are frequently subject to injury from hail-storms, late frosts, and the ravages of locust. In the field-cornetcy of the Hantam, on the eastern side, horse-breeding is largely carried on, although frequently losses are sustained from the horse-sickness, which appears in an epidemic form from March until

May. The principal breeders are Messrs. Pienaar and Hermanus Van Zyl, whose studs supply many of the neighbouring districts. The value of farms, including buildings, averages about 12s. 6d. per morgen throughout the division. Crown lands occasionally adjoin private properties and some of them are hired at comparatively high rates from the convenience they afford of additional grazing or change of pasture. It is no uncommon thing too for flocks of sheep to be hired by young beginners, possessors of these lands. Such flocks sometimes range up to several thousands, and are classed according to their ages—one, two, or three years—the lessee returning the same number and class at the end of the term of lease, and paying an annual rent for them, usually at the rate of 1s. 6d. per head. Ostrich-breeding has been pursued very successfully for a long time past, some of the farmers, such as Messrs. Murray, Sluiter, Heathcote, and Maltitz, having enclosures of many miles in extent for their birds.

The town of Colesberg is about an hour's ride from the Orange River, near the base of a high conical hill, known as Coleskop. The locality is said to have been originally the site of a Bushman kraal. The streets and houses are crowded together in a narrow valley quite enclosed by the greenstone ridges which surround it. This gives it a very hot and arid look which is not belied by the reality. The Dutch Reformed Church of this place is a novelty in ecclesiastical architecture, being externally of octagonal form. In its present unfinished state, and wanting the fine spire of 150 feet high, originally designed to ornament it, it has rather a nondescript appearance. It has cost about £20,000 and more funds are required to complete it. The separatists from the Dutch Church, known as the "Doppers" have a very simple substantial church in the immediate neighbourhood. There

is also a Wesleyan Church, and an English Church, adapted in point of size to its small congregation. The houses and business-places of the town are pretty numerous, and there is a considerable amount of trade transactions with the adjacent farms, as well as with the people of the Free State, beyond the Orange River. At present this river is only passable by pontoons, one of which is situated on the direct road from Colesberg at Mr. Roos's farm, and another higher up at Mr. Norvall's; but funds have been granted by Parliament for the construction of a bridge across it, and plans have been prepared for erecting an iron structure of nine spans of 100 feet each. The spot selected for its site is half a mile above the first-mentioned pontoon. The extent of traffic here may be estimated from the fact that more than 3,000 wagons alone have crossed the river at this place during twelve months. There are two other townships in the Colesberg division,—Hanover to the south-west, near the boundary of Richmond, and Philip's Town to the west, and both of them bid fair at no very distant date to rival the chief town.

The district of Middelburg was formerly part of Colesberg and is still associated with it as an electoral division. It is situate between Colesberg and Cradock. Some years back when the notable Nimrod, Roualeyn Gordon Cumming, was at the Cape, this part of the country was in undisputed possession of springboks and wildebeestes, and was the scene of his first hunting exploits. Now it is dotted with flocks of wool-bearing sheep, farmers' dwellings, cattle enclosures, corn-mills, vineyards, and gardens, and numbers of reservoirs of water. On the estate of Mr. Distin, Tafelberg Hall, which comprises about 12,000 morgen, there is a very capacious dam utilised for driving a mill, and other purposes, as well as irrigating a large extent of arable land, vineyard, &c. This and the neighbouring properties of Messrs. Southey, Collet, Smit, and others are

all well-stocked with merino sheep, cattle, horses, mules, and ostriches. As a rule they are provided with sheds for lambing stock, dipping tanks, and every appliance for pastoral purposes. There are also two or three farms about 20,000 morgen in extent, the property of Messrs. J. O. Smith & Co., who have very fine flocks, including some from stock imported from Australia, under the excellent management of Mr. Vigne. In this district, too, there are many agricultural farmers, the lands along the Little Brakke River being capable of irrigation, and a very fair amount of grain is raised in ordinary seasons. The average value of land may be stated at £1 per morgen.

The town of Middelburg is well watered by a furrow led out from the river, and there are fine gardens contiguous to the dwellings. It is not a large place, but there are a number of stores which do a very profitable business, principally with the farmers. Many of the latter are "doppers,"—a section of the community, in appearance and manners somewhat of the old Puritan stamp, who regard the use of "hymns" in church service as very objectionable. They have a large place of worship, presided over by one of themselves, in opposition to the Dutch Reformed Church which has also a considerable following. Here, as in most of the inland towns, the church services draw together great numbers of the families from the surrounding country. It is creditable to the South African farmers that they consider their attendance on religious worship an imperative duty and they will travel many miles to perform it. The administration of the sacrament or "Nachtmaal" is the special occasion when they most assemble; then the towns are as crowded and lively as during a fair. Their solemn religious duties once discharged, a visit to the general stores and shops follow, affording them an opportunity of laying in a quantity of household supplies, and a very considerable and

lucrative business is carried on by the various merchants and dealers.

Next to Middelburg, is the important division of Cradock. Westward it is divided from Graaff-Reinet by the Wagenpadsberg, and other minor ranges of the Sneeuwberg; northwards it stretches to the higher plateau of the Bamboes and Stormbergen, and eastward it extends along the spurs of the Great Winterberg. Although the general aspect of the division is dry and sterile, yet for grazing it is excellent, and large flocks are depastured throughout it. The herbage is chiefly of the ordinary Karoo character, and in the hilly parts mixed with nutritious grasses. In 1865 the number of merino sheep was over 600,000, and the clip of wool 1,277,757 lb. The capability of the pasture is an average of one sheep per morgen. The soil throughout the district is deep and extremely fertile, suitable alike for grain, vines, or fruit, and only requires irrigation to yield abundantly. The vineyards in some instances are extensive, and quantities of brandy and raisins have been manufactured and sold in the district. There are numbers of reservoirs, and many powerful springs on some farms. These properties generally command very high prices; from £5,000 to £7,000, for a farm varying from 3,000 morgen and upwards is not uncommon, and there are many old established estates which could not be purchased for double these sums. The ordinary price of land, however, may be stated at 30s. a morgen. Among the largest holders are Mr. J. Trollope, Mr. John Collet, and Messrs. Mechau. The two first named have properties of from 25,000 to 27,000 morgen in extent. Mr. Collet's flocks number about 10,000, and are all first-class stock; his clip of wool, as well as that of Mr. Vermaak's, realizes exceptional rates. Formerly on several farms there were numbers of good horses, and as many as 120 have been pur-

chased out of an enclosure in one day; at present the only regular breeders are Messrs. Mechau and Louw van Heerden, although most of the farmers still keep from thirty to fifty horses each. Troops of cattle range from 100 to 200 head. The angora goat, which has lately been introduced, and ostriches, are becoming common,—flocks of the latter, numbering eighty to 100 being an ordinary occurrence, and lately as much as £100 to £150 has been given for full-grown birds, £40 for birds of fifteen months and £15 for three months' birds.

The town of Cradock is a large and thriving place. It is on the main trunk line from Port Elizabeth and Graham's Town to the northern districts and the Free State, and has recently been fixed upon as the terminus of the northern line of railway, now in course of construction from Port Elizabeth. At present it has by far the finest ecclesiastical building in the Colony. This is the Dutch Reformed Church, designed with handsome facade and steeple after the style of St. Martin's-in-the-Fields, and constructed entirely of a beautifully dressed free-stone found close to the town. The clear dry climate of the district serves to keep the stone clean and unspotted as when first cut, and the finished character of the building renders it, in contrast with its surroundings, "a thing of beauty" as well as "a joy for ever." The church cost about £30,000, raised almost entirely amongst the farmers of the district, who also gratuitously contributed their labour in carting the stone from the quarry whilst it was in course of erection. Besides this building there is a neatly-finished English Church, Wesleyan and Independent Churches, schools, a library, and reading-room, stores, banks, newspaper office, hotels, and other institutions. The town is well supplied with water obtained out of the Fish River, some distance above, and brought in

by a water furrow protected by mimosa trees. This enables many of the houses, especially in the lower part to have excellent gardens and many trees with an abundant supply of fruit.

The Fish River has its source sixty miles higher up than Cradock at a place named Quagga's Hoek, 4,200 feet above the sea. In its course to the coast it drains an area estimated at 12,000 square miles, being fed by several considerable tributaries and in the rainy season it is a most formidable mud-charged torrent rushing along its rocky tortuous channel with a volume and impetuosity that render any attempt to ford it extremely hazardous, and at times altogether impracticable. Above Cradock, however, it is a comparatively narrow stream, capable as already stated of being led out for purposes of irrigation, and it has often been proposed to utilise it on a more extensive scale by the construction of a series of dams and furrows forming a chain of reservoirs at intervals from its source, and so effectually affording a check to the entire current. Works of such a character if carried out successfully would completely change the appearance of the country and largely multiply its productive and exportable capabilities.

In several parts of the district, there are valuable salt pans, yielding many thousand bags of salt each year. About two miles from the town are what are termed the "Baths,"—springs of splendidly clear water, strongly impregnated with sulphur. The water here is soft and admirably adapted for wool-washing, and there are establishments for that purpose in operation, belonging to Messrs. Flemmer, Cawood, and others.

The distance from Cradock to some of the outlying portions of the division is very considerable, in some directions being as much as twelve or fourteen hours'

ride on horseback. This has lately led to the establishment of new villages, and to the creation of a separate magisterial district under the name of Tarkastad. The new villages are Steynsburg and Maraisberg. The former was commenced in 1873 by the sale in erven of a property near to Mr. Louw Pretorius', on the flats between Middleburg and Burghersdorp, and near Kneehalter's Nek. In less than a year there were upwards of 130 dwelling houses and stores built, a church for one of the Dutch Reformed congregations completed and another in progress, and the business-places in twelve months, amongst other produce, received wool to the value of £26,000. The other village, Maraisberg, also on the plains, is about seven hours from Cradock, an equal distance from Middelburg, and nine hours from Burghersdorp. It is a central point for the farmers from Doorn Hoek, Bamboesberg, and Vlekpoort.

Tarkastad is situated north-east of Cradock, near to the Tarka River and the peculiar mountain peaks known as the Twee Tafels (Two Tables). It embraces the fine agricultural and pastoral district from the northern slopes of the Great Winterberg to the boundaries of Queen's Town and Albert. The township although as yet a small one numbers many substantial houses, hotel, stores, public offices, a commodious parsonage, and a new Dutch Reformed Church in progress. It is some distance from the Tarka River, but has a good supply of water from a strong and never-failing fountain. The farmers in the neighbourhood, like those of Cradock, are generally descendants of the old colonists, but latterly a number of English have settled amongst them. They have large flocks of sheep and herds of cattle. The wool purchased by the local storekeepers is now about 4,000 bales per annum.

## VII. THE EASTERN DISTRICTS.

We leave the Karoo, as we cross the outliers of the Great Winterberg, and returning to the seaward side, enter upon what is by far the most beautiful part of the Colony—the Eastern Districts. These may be said to commence with the coast districts of Humansdorp and Uitenhage, stretch inland over the lower end of the Zuurberg up to Somerset, and thence extend in a line eastward parallel with the Winterberg, Katberg, and Chumie Mountains, to the old frontier boundary, where the Keiskamma River runs down to the Indian Ocean. The area of this territory is estimated at a little under 19,000 square miles, and it includes no less than twelve divisions, namely, Humansdorp, Uitenhage, Port Elizabeth, Alexandria, Bathurst, Albany, Somerset, Bedford, Fort Beaufort, Stockenstrom, Victoria East, and Peddie. In 1865 it contained a population of 130,500 souls. The conformation of the country is highly pleasing, and often very picturesque. Along the seaboard there are grassy hills and dales variegated with luxuriant copse or clumps of natural shrubbery; gradually rising above these, are bold krantzes or ridges, and undulating flats, occasionally covered with dense bush, reaching up to the mountain ranges, which are verdant and wood-fringed to their rocky crests. The soil in most places is adapted for agriculture, but the large extent of sweet grassy pasture, forming the richest sheepwalks, has naturally enough made wool-growing and cattle farming the favourite and most profitable pursuits. The clip of wool in these divisions in 1865 was 4,000,000 lb., and there were

depastured—of woolled sheep 2,022,483; African sheep, 13,600; Angora goats, 39,850; common goats, 759,323, besides horses and cattle. The ground under cultivation was 84,410 acres, and the yield of wheat (exclusive of other cereals), 128,000 bushels, of which Humansdorp, Uitenhage, Alexandria, and Bathurst alone raised 100,000 bushels.

The chief port for these districts as well as for most of the midland territory, the Free State, and the Interior, is the indentation of the coast beyond Cape Recife, forming what is known as the harbour of Algoa Bay. Here, on what was a ridge of barren sand-hills there has grown up the town of Port Elizabeth, whose rise and progress conspicuously represent what colonization has accomplished and is accomplishing in South Africa. Fifty-four years ago, a small fortification and a few huts occupied by two or three traders and fishermen were the only evidences of life—a mere dot of civilization on the margin of a savage wilderness. Then came the flow of British immigration, dispersing over the country and developing production and creating Commerce, of which this, as the principal seaport eastward of the Cape, became “the golden gate.” Anyone now arriving in Algoa Bay will find before him all the evidences of an enterprising, prosperous, and populous place. For two or three miles along the water-side and up the sloping hill ascending from it, and on the brow of the height above, there rise in succession warehouses, stores, manufactories, shops, offices, dwelling houses, churches, schools, hospitals, villas, and other buildings, of every description and variety of architecture.

The harbour is an open but safe roadstead, with good holding ground, and the loading and discharging of steamers and ships are very expeditiously done by means of lighters and surf-boats,

and large gangs of Fingoes and Kafir labourers. There are two landing jetties, where passengers may reach *terra firma* without the discomfort and danger which formerly attended debarkation, when the alternative was a leap into the surf or being carried in the embrace of nude aborigines. Close to the principal landing-place, in Jetty-street, is the Eastern Districts' Railway Station, and along the sea wall skirting the water's edge the lines of rail are laid which will shortly connect Uitenhage and the Midlands as well as Cradock and the Northern Districts with the port. Immediately above this is the central and business part of the town, forming what is known as the Main-street, extending from Market-square through Queen's-street, and Prince's-street to the Prison-buildings at the North-end. Nowhere in the Colony is there a livelier, busier scene than here, especially during the wool season, when the huge transport wagons, carrying from 6,000 to 10,000 lb. come in laden with bales of wool, skins, or ivory, to load up again with merchandise for the Interior towns and villages, as far even as the limits of the Free State and the Transvaal Republic.

Some idea of its aspect may be formed from the accompanying illustration, representing the Market-square, crowded with groups of dealers, vehicles, and animals, the produce wagons with their long teams of oxen being a prominent feature. The large building on the left hand is the Town-hall, of which Port Elizabeth is justly proud. It is a stately and commodious structure somewhat in the Italian style, but with a portico of Corinthian columns, and is said to have cost £25,000. The Borough Council Offices are there, as well as the Chamber of Commerce, the public reading-room and Library, and a small Museum; and there is a magnificent hall about eighty feet long by forty broad—undoubtedly the finest in South



MAYNARD SC. LONDON

TOWN HALL AND MARKET SQUARE - PORT ELIZABETH - 1874



Africa—for public assemblies and entertainments. On the terraced ground above, there is St. Augustine's Roman Catholic Cathedral, of graceful gothic order, with tower and spire. To the right again are the offices of the agents of the Union Mail Service (Messrs. W. Anderson & Co.), and adjoining them the Magistrate's Court-room; while on the opposite side of the square are the Telegraph Office, the Post-office, and the large and well-conducted Phœnix Hotel. Along Main-street there are several very handsomely finished edifices used for business purposes, which would be creditable to any English city. The Guardian Insurance Buildings, the warehouses of Dunell, Ebden, & Co., W. Dunn & Co.'s, Mosenthal's, Deare and Deitz, Taylor & Co., Kettle's Emporium, and the new offices of the London and South African Bank, built of dressed free-stone, quarried from near the Zwartkop's River, are among the most imposing and ornamental.

The immense stocks and the amount of business transacted in some of these mercantile establishments unmistakably indicate the commercial enterprise and wealth of the Bay merchants. One of the largest stores is that recently completed by the old colonial firm of Messrs. Blaine & Co. Their premises have a frontage to Jetty-street, of over 200 feet, with a depth of 190 feet down Damant-street on one side and nearly 300 down Commerce-street on the other, and are three stories in height with cellarage below. The Jetty-street frontage is divided into three compartments, one being the counting-house, 104 feet by forty-three, fitted up with every convenience; another being the forwarding room, 120 feet by sixty-five feet, and the remainder being occupied as bonding stores, wool-pressing and engine rooms. The upper stories are apportioned for the different departments of the business,—one comprising building materials, such as

galvanized iron, deals, slates, and all kinds of fittings; a second provisions and oilman's stores; a third agricultural implements and general ironmongery; and a fourth Manchester and all sorts of soft goods, &c. In these departments, again, there is a sub-division of various articles, and the visitor may see in one, for instance, hundreds of ploughs, which are now greatly in demand by the frontier Fingoes and Kafirs; or in another, a large array of musical instruments, from which as many as 100 harmoniums and fifty pianos are sold off within a month or two. In the wool stores there is accommodation for 6,000 bales of wool, the average quantity in store during the season being 4,000 bales. Four double presses are constantly at work, and can press as many as 800 bales a day, the presses and machinery being worked by steam power, and hydraulic pressure in the form of an "accumulator," weighing thirty-two tons. There are also lifts and weighing machines, circular and upright saws, and lathes, and other appliances for repairing or making machinery for the wool-washing and other establishments. The machinery and buildings on the property are insured for about £40,000 and the stock for £80,000. Besides Messrs. Blaine's, there are other warehouses which, although not quite so extensive nor so well arranged, have equally valuable stocks, and whose branch establishments are spread throughout every district northwards and eastwards.

The population of the town is estimated at about 15,000, and the value of fixed property assessed at upwards of £1,200,000. Land and buildings in the Main-street and its neighbourhood have of late years increased in price to an unprecedented degree. The extent of ground available for business stands being restricted, sites which formerly sold for a few pounds now realize as many hundreds and in some instances thousands. The original erf or allotments at the

corner of Main and Jetty-streets exchanged hands prior to 1834-5 for a small cask of wine. Last year a tenth part of this block, having a frontage of about fifty feet, was secured by the London and South African Bank, as the site of their new offices, for £5,000. Another site more recently purchased by the Standard Bank, with about thirty-five feet frontage in the Main-street, also cost a like amount. In the adjoining thoroughfare of Strand-street, the inferior tenements which formerly existed are giving place to large goods' stores, and other buildings, and the Town Council have in contemplation further improvements in that locality.

The residences of the principal inhabitants, however, are on what is termed the "Hill,"—in contradistinction to the "town below." This is a flat table-land, on the terraced ground above the Main-street, the ascent of which is rather trying to the obese pedestrian on a hot day. Its aspect and surroundings are very pleasant and enjoyable, as the height is generally fanned by fresh cool breezes from the sea. Scattered irregularly over it are many fine mansions and pretty villa residences. There are also one or two handsome churches, such as the Scottish Presbyterian and Trinity Church;\* an admirably managed hospital; a well endowed collegiate establishment, the Grey Institute; and a well regulated Club, where, after the labours of the day, the mercantile class usually congregate for relaxation, and courteously extend their hospitalities to visitors. On the open flat beyond the Hill, there is the attractive St. George's Park, laid out and planted by the corporation of the town some ten years ago and

\* The Churches in Port Elizabeth number no less than sixteen, embracing Church of England, Wesleyan, Independent, Presbyterian, Baptist, and Roman Catholic places of worship; there is also a building used as a Jewish Synagogue, and a very tastefully designed Malay Mosque.

maintained by an annual vote of £500 from the local rates. It has most agreeable walks through avenues of trees, shrubs, and flowering plants, and is ornamented with a fine conservatory, rock-work, water basins, and grassy plots. The Park, like the Grey Institute, the Hospital, and the Town-hall, was originally created chiefly by the aid of the revenues accruing from the waste lands with which Port Elizabeth was liberally endowed during the Governorship of Sir George Grey. Part of these lands were some time ago sold in allotments for building purposes, yielding an annual quitrent revenue available for the maintenance of the local institutions. A portion of the park lands still remain unsold and as the town progresses their value will be greatly enhanced. There are at present no suburbs corresponding to Rondebosch or Wynberg, where the inhabitants can resort, although some localities such as Walmer, Emerald Hill, and the woody coast lands towards the Van Staden's River might easily be rendered very attractive in these respects. In their neighbourhood, are to be found many pleasant verdant slopes and patches of bush and clumps of trees, with cool freshening breezes from the sea, which naturally suggest a pleasant retreat from the "weariness, the fever, and the fret" of the Bayonian's incessantly hard-working life.

Port Elizabeth has been truly described by one of its writers as "a place of business—not of pleasure. The man who goes to reside there, presuming he goes for the reason which attracts nine hundred and ninety-nine out of every thousand, to get a living, must make up his mind not only to work but to work hard. A drone receives no mercy, be his status in society what it may. If he be a man of independent means people write him down as an ass for selecting such a spot for the enjoyment of dignity or ease. If he be dependent upon his physical or mental resources to earn his daily

bread, he soon discovers to his cost that sloth and apathy find no ready response there. If he be sober and industrious, and willing to work there is work of all kinds for him to do, and plenty of it if he goes the proper way to look for it." The amount of business done and the extent to which it has progressed may be gathered from the statistics of the port. These show that while forty years ago, the goods imported were only valued at £20,288, they amounted in 1872 to £2,447,280. The exports of produce in 1835 were valued at £33,000, and in 1872 they reached £3,137,400. Of the articles of colonial export contributing to this large increase, the principal one is the staple of wool. In 1835 the quantity shipped from this port alone was 79,848 lb. In ten years it increased to more than 2,000,000 lb. In 1855 it exceeded 9,500,000 lb. In 1865 it extended to nearly 30,000,000 lb.; and in 1872 it swelled to 39,396,927 lb.

Although, with the exceptions mentioned, the country about Port Elizabeth is very uninviting, stretching for miles over the dry plains known as the Bay flats, the adjoining divisions abound in beautiful vegetation and picturesque scenery. Uitenhage is only eighteen miles distant, and will shortly be almost within an hours' reach by railway. The town was described many years ago as "a pretty secluded spot, well laid out, and supplied with water from a spring in the Winterhoek Mountains, which gives 2,512,632 gallons in twenty-four hours. The consequence of this in conjunction with the salubrious climate and rich soil of the locality, is a profusion of fruits, trees, and flowers of the most luxuriant growth, adding considerably to the beauty of this part of the country." It occupies an area of one square mile, the streets are each a mile long, very wide and run at right angles with each other; the footpaths on either side are separated from the road by watercourses, and in most

places shaded by oaks which here attain a large and luxuriant growth. Originally each house had two acres or about a morgen of garden ground attached to it; but in the business centres, where the value of land has increased, the erven have been sub-divided many times. Caledon-street, now the chief street in the town, contains about thirty stores or offices, many of which are large handsome buildings, and are occupied by wholesale merchants and importers, who do a considerable trade with the farmers of the extensive district. In the same street are also the Standard Bank, Oriental Bank, Dutch Reformed Church, Anglican Church, Native Church and school-room, Malay Mosque, Public Library, Dutch Reformed Church school, Government school, Native Government school, town offices, gaol, court-house, Drosdty, three hotels, and several smaller shops, private residences, &c. This comparative concentration of trade to one street has caused the less populous parts of the town to fall into neglect; so that in winter it presents a rather dilapidated appearance; but in spring, when the numerous trees burst forth into leaf and blossom, and the hedges are covered with roses, the aspect of the place fully merits the description we have quoted, and the appellation "Garden of the Eastern Province" by which it was long known. A few years ago Uitenhage was famed for its two Botanical Gardens, then the property of Mr. Brehm and Mr. Dobson. These have been neglected lately, but that known as "Belham's" still possesses some of the rarest and most valuable plants, native and foreign, to be found in the Colony; the exotics having been imported by the late Mr. Brehm with a lavishness of money and trouble characteristic of an enthusiast.

Besides the churches already mentioned, there are two Native Churches under the London Missionary Society, two Wesleyan Native Churches, a Roman

Catholic Church, and an English Wesleyan Chapel, the latter a very handsome and commodious gothic building. In addition to the educational institutions already mentioned there is the first-class aided undenominational school and several boarding seminaries for young ladies. A sale of land granted by Government in aid of a building fund for the undenominational school took place recently, twenty acres selling for £2,500 and subject to a perpetual quitrent of £48 per annum. This money will be applied to the purpose of erecting spacious school buildings, masters' residence, &c. A water service is in course of construction for which the municipality are authorized by Act of Parliament to borrow £12,500.

Among the public institutions, &c., of the place are a Ladies' Benevolent Society, a Choral Society of nearly fifty members, two Good Templar Lodges, two Benefit Societies, Board of Executors, and a Library and Reading-room. Two newspapers are published, one in English, the other in Dutch.

During the last twelve years an important industry has sprung up in Uitenhage, viz., wool-washing. There are now ten establishments in the river Zwartkops, the soft and alkaline property of whose water render it peculiarly adapted for the purpose. The steam-machinery at these places is of the most costly and perfect description. From statistics recently collected we ascertain that £200,000 capital is invested in these establishments. The quantity of wool washed is about 200,000 bales per annum, the carriage of which to and from Port Elizabeth will form a considerable item in the traffic returns of the Port Elizabeth and Uitenhage railway, now nearly completed. These establishments employ, in addition to the extensive machinery, a great number of Kafirs and other natives at high wages. The result of this is that labour is very scarce and dear in Uitenhage, and

the business of the numerous canteen-keepers very prosperous.

There are two extensive salt pans near Uitenhage, one at Bethelsdorp, worked by the natives of the London Society mission station, the other at Coega, the private property of Mr. John Hitzeroth. The salt produced by the latter is of the very first quality; and the quantity appears inexhaustible, for although 40,000 muids per annum are taken out, there is no apparent diminution of yield.

The division of Uitenhage comprises an extensive area. It is broken by mountains—the Coega, Elandsberg, and Winterhoek, formed of Devonian sandstones and slates, rising one after the other; but the lofty peak of the Winterhoek, known as the Cockscomb, stands high above the rest, its summit commanding a glorious panoramic view northward even as far as the Sneeuwbergen. Along the coast and in the valleys, some of which are well-watered, there are good agricultural lands, while the mountain slopes are excellent for cattle-grazing. The number of draught oxen and other cattle maintained here in 1865 was upwards of 43,000 head. There were also 337,000 sheep depastured, and the clip of wool was 767,789 lb. The best sheep farms, however, are in the more inland parts of the district which have sweet grasses and Karoo herbage. The norsedoor or euphorbia is at times found to be of value in some localities. There are several varieties of it, one the “bok-norse” being used for small stock and the “kars-norse” for all kinds. In seasons of drought it is fired, and from the long grass between it, readily burns. The plant is thus partially roasted and the thorns cleaned off. It is then greedily devoured by goats and cattle which not only thrive but fatten on it. The ‘vinger-pol’ is another succulent plant in use; it has great fleshy fingers growing out of a crown a foot in diameter. This is regarded as a nourishing food for

oxen and is used by carriers and others for that purpose, especially when the pastures are dried up. Aloes are plentiful and many of the natives find employment in the preparation of the drug, 40,000 lb. having been produced in 1865. The division has lately made great progress. The rateable property, which in 1870 was valued at £483,769, advanced in 1874 to £1,607,543. This includes the magisterial district of Jansenville. The increase is due chiefly to the great quantity of Crown land leased, and now bringing in a rental to Government; and also to improvements in the shape of homesteads, dams, &c., that have been made on many of the farms. Since 1869 the waste lands of Uitenhage surveyed and leased amount to upwards of 487,969 morgen, giving an aggregate rental of £9,447 per annum. There still remains a considerable extent unappropriated.

To the west of Uitenhage is the neighbouring division of Humansdorp, which is also agricultural and pastoral and contains some fine estates, one of the best of them being that of Zuurbron, the property of Mr. Metelerkamp. The township, distant about fifty miles from Port Elizabeth, is situated on a sloping plain overlooking the coast. About nine miles from it is Jeffrey's Bay, a safe but unfrequented harbour in the Bight of St. Francis, at a point nearly equidistant from the mouths of the Kromme and Gamtoos Rivers. Fish and oysters are plentiful there.

Near to Humansdorp is the Moravian mission of Clarkson, and the stations of Kruisfontein and Hankey, belonging to the London Missionary Society. The latter is one of the best establishments of the kind, kept in excellent order, and bearing evidence of industrial improvement. Several hundred morgen of land are under cultivation and irrigated by the waters of the Gamtoos River by means of a tunnel carried through the spur of a mountain at an expense of one or two thou-

sand pounds. Like other mission institutions, Hankey was originally formed as a sort of "city of refuge" where the natives could be gathered together, educated, and protected when necessary; but now they have arrived at that state that they can hold their own, and the Society with the sanction of the Legislature has arranged to divide and sell the lands in freehold lots to the most orderly amongst them, the condition being made in some cases that their lands shall not be alienated for ten years after their receiving title. This plan is regarded as certain to have a permanently beneficial result, as the best of the people may by the acquisition of property rise to a position of independence. Many of the natives both here and in Uitenhage are very well-conducted, possessing flocks of goats and horned cattle, and hiring lands from farmers and lessees of Crown lands on which to depasture their stock.

There are valuable forests in this tract of country, viz., the dense "Zitzikamma" and "New Forests," which are finely watered, and contain every description of colonial timber; "Klein River," situated at the back of Hankey and in detached kloofs along the Gamtoos River; and the "Oliphant's Hoek" Alexandria, covering an area of thirty-five miles long by two and three in breadth, but where with the exception of "sneezewood" the timber is inferior and water is very scarce. There is also "Van Stadens River" which supplies Port Elizabeth with firewood, but has no large timber left, and the wooded kloofs of the "Zuurberg." A fearful conflagration occurred throughout these districts in 1869. A destructive bush-fire, said to have originated from the barbarous system of "veld-burning" extended far and wide, even into the adjacent division of the Knysna, consuming homesteads, farm-stock, crops, forest game, and everything in its course. The damage to property was estimated at upwards of £16,000 exclusive of the forest burnt.

Eastward from Uitenhage the elevated belt of the Zuurberg Mountains run in an almost unbroken line towards Graham's Town. They consist of three or four separate ranges of hills, of rounded or gently-undulating contour, with deep wooded valleys intervening. Across this a splendid road is constructed which has of late been the great thoroughfare for wagon traffic between the northern districts and Port Elizabeth. As a work of art it is magnificent, and the beauty of the scenery throughout it is unequalled in the Colony. The course of this road is over the several hilly ridges or "neks" which are separated by valleys and kloofs, and its length following all the zig-zags of the ridges is fully twenty-four miles, although the distance from one side to the other as a bird flies would be scarcely more than eight. It is in crossing these "neks" or ridges that the peculiar character of the Zuurberg scenery is realized and seen to advantage. The poet Pringle was as strikingly impressed with it forty years ago as any visitor may be now. He describes it as far surpassing anything of the kind he had witnessed elsewhere, or formed a conception of from the accounts of others. "A billowy chaos of naked mountains, rocks, precipices, and yawning abysses, that looked as if hurled together by some prodigious convulsion of nature, while over the lower declivities and deep sunk dells, a dark impenetrable forest spreads its shaggy skirts and adds to the whole a still more wild and savage sublimity." The forest or rather jungle along the base of the range on the south-east side is known as the Addo (or K'Addow) bush; there are still throughout it a number of elephants and buffaloes, but their haunts are now being invaded by the shrill whistle of the railway, which runs along there between the Com-mando Kraal and Bushman's River stations.

Alexandria is on the seaward side of the Zuurberg,

between the Sunday's River and the Bushman's River. The township and seat of magistracy is inconveniently seated far away from the main road to Graham's Town, at the extreme south-east corner of the district, about eighteen miles from the mouth of the Bushman's River. A great deal of land is under cultivation—this neighbourhood being known as the "granary" of the East, and large quantities of cereals are raised, supplying the markets of Port Elizabeth and Graham's Town. The adjoining country, forming the districts of Albany and Bathurst, from the Bushman's River to the Fish River, is of much the same character. To the eye it has a most pleasing appearance, its hills and valleys richly grassy and covered with patches of shrubbery, far surpassing any ornamental parks. The principal produce is oats, either as hay or grain. Wheat and barley are also grown, but the crops are precarious, "rust" being common near the coast, although of late years an hybridised variety of wheat of a hard and flinty kind has been found to withstand the disease and answer admirably. Cotton has been tried, with favourable results, if labour could only be relied upon, and Indian corn, vegetables, and fruits can be raised to any extent. The pasturage everywhere is most luxuriant, often presenting the appearance of fields of hay, but, owing to its sour characteristic, it is generally only suitable for cattle, which attain to magnificent condition, many of the finest oxen employed for transport riding being grazed and supplied from this quarter. Small flocks of sheep are pastured, where formerly it was supposed they would not live, and although the increase has not been great, they have done tolerably well, and with proper selection and care they answer to a considerable extent. The hamlets of Bathurst, Clumber, Salem, and Sidbury, mark the locations of many of the early British settlers, while the village of Riebeck is the only one

representing the old colonists, and still maintaining its Dutch Reformed Church.

These districts are watered by several streams, and at the mouth of one of them, the Kowie, is the harbour of Port Alfred, where extensive works have been carried on for many years, to deepen the channel of the river and render it available for vessels of moderate draught and burthen. Originally the river debouched on the eastern side, and as far back as 1820, when the English immigrants were located in the neighbourhood, a brig of war sailed across the bar and anchored there, while parties of the settlers, with their wagons, passed over the ground on the western side, where at the present day vessels of eleven feet draught may float. The river was many years afterwards altogether diverted to the western bank by Mr. Cock, the proprietor of the land on that side, assisted by a number of settlers, who cut a trench through the sands and led out the stream, blocking up the old channel by sand bags and bush. Its suitability for a port was most enthusiastically urged upon the Government by Mr. Cock and his friends, who formed a company and contributed £25,000 for the purpose of carrying out the necessary works. The late eminent engineer, Mr. Rendell, was consulted and furnished plans for the construction of walls along the river to confine its course and increase the force of its current, so as to clear the bar at its mouth. The cost of these improvements, as carried on by the Kowie Harbour Company up to 1868, was over £100,000. Since then the Government have taken over the whole concern, the few original subscribers remaining having agreed to forfeit their shares, and now the works are being executed according to designs more recently furnished by Sir John Coode. The usefulness of the port has already been amply demonstrated by its trade, which is steadily increasing.

The number of vessels entered inwards in 1871 was twenty-two, and the imports £23,936, while in 1874 the vessels increased to fifty, and the imports to £131,450. The exports also advanced from £49,933 in 1871, to £101,191 in 1872, being double the amount of the previous year, and in 1873 they were £92,940. There is no doubt the trade will be greatly enlarged as soon as the coasting steamers make it a port of call.

At Port Alfred there is excellent holding ground for ships of the largest size at the outer anchorage, and it is never a lee shore, the prevalent winds being up or down the coast, enabling vessels to slip and put to sea at any time. There is a steam tug of twenty-five horse-power, and lighters, for loading and discharging at the outer anchorage, or for bringing vessels of moderate draught (nine to ten feet) into the river, to the wharves, a mile from the entrance, where stores, a bonding warehouse, and Custom-house have been already erected, and there is every facility for landing and shipping as in a dock. The large reach above the present wharves,—a basin three quarters of a mile in length—will, when dredged out to its original depth (thirty feet), make an excellent and commodious dock, which it is proposed to call “The Marie Dock.” The river itself is navigable for small vessels for eight or ten miles, and for boats for upwards of sixteen miles, the scenery being exceedingly beautiful and picturesque, the banks wooded to the water’s edge, varied in the upper reaches above the Mansfield with grassy slopes and high precipitous cliffs. The country, as far as Graham’s Town, has lately been surveyed for a railway, and has been very favourably reported upon. There is every likelihood that if the desired improvement of the port is successfully carried out, the traffic will amply cover the interest on the cost of construction, as well as the working expenses of such a line.

Graham's Town, the chief town of Albany and the metropolis of the Eastern Districts, is about forty miles inland. It is situate in the basin of the hills, forming the extreme spurs of the Zuurberg, where the Kowie has its rise. Originally a Boer's farm, considered so poor as hardly to afford the means of existence to its occupant, and so badly supplied with water as to render it requisite to remove the stock at certain periods of the year, it was selected in 1812 as the site of a military cantonment for the English troops,—being named in recognition of the services of Col. Graham, then Commander of the Forces—and afterwards, in 1820, on the arrival of the English immigrants, it was chosen as the capital of what was termed the "Albany Settlement." From a sketch (preserved in the Albany Library), taken just before the arrival of the immigrants, in which every house is marked down and named, it appears that there were then not more than a dozen houses in addition to the military barracks. In the half century that has since elapsed both houses and population have increased many hundredfold, and other towns and settlements have been established as offshoots by the Pilgrim Fathers of Albany.

Their history from the first is a story of trial and suffering, heroically borne and crowned with success. Placed on the extreme frontier, in close contact with a war-like race of savages occupying a country so densely wooded as to defy detection and elude pursuit—totally unacquainted with the climatic peculiarities and the varying character of herbage and soil—reverses came and succeeded each other with startling rapidity. The rust blighted all their corn, floods washed away their corn lands and cottages, and Kafirs murdered their herds and swept off their stock, till at length, after years of patient endurance, the whole settlement was overrun and every homestead burnt down and

destroyed, Graham's Town only escaping the universal ruin. Becoming thus suddenly the home of hundreds of settlers, the centre of a large war expenditure, and afterwards the head-quarters of the military and civil expenditure of the Province, its increase was steady and rapid. In a few years it formed the emporium of the frontier trade, sending off other towns and settlements in advance of it which contributed in turn to its own prosperity. In this way Fort Beaufort, King William's Town, Queen's Town, &c., were established.

"There's Graham's Town's calf" was the significant remark of a Kafir chief to his followers as they were travelling onwards at the close of one of the wars and King William's Town suddenly came in sight.

The frontier trade with the natives first began as "barter" at periodical fairs held soon after the settlers' arrival, first at the Claypits in Lower Albany, and afterwards at Fort Wiltshire—red clay, beads, and brass wire being the medium of exchange. This soon led to the issue of licences to cross the border and into the Interior, and to a settled trade at Graham's Town, the extent and importance of which may be estimated by the rapid increase of the commerce of Port Elizabeth, which was for a long time the only port of the Province. Direct trade with Europe which may be said to have commenced in 1830, doubled itself every five years for thirty years, until at the end of forty years it had increased forty fold, the returns in the first five years being £340,000, and during the last five upwards of £14,000,000 sterling. This steady advance in prosperity was not attained without numerous drawbacks and difficulties—the settlers' misfortunes and "grievances" also increasing steadily. Besides rust, floods, locusts, drought, perennial plunder, and periodical wars, there were other causes of chronic discontent,—the remoteness of

the seat of Government, and the absurdly small size of their locations, out of all proportion to the more inland farms, 100 acres being deemed ample for the newly-arrived immigrant to live on, and 6,000 acres not too much for the old colonists. Many left their locations in utter despair. Their press had been seized to prevent remonstrance or outcry, and appeals for relief and redress were made in vain. At length war unexpectedly broke out with great fury in December, 1834, lasting two years; and after another interval of pseudo-peace, during which the same causes were gradually ripening, was followed by another and fiercer outbreak in 1846; and a third, still more disastrous and costly, in 1852. Thrice has Graham's Town been virtually in a state of siege, its streets barricaded, its churches turned into places of refuge for the women and children, its whole population on Government rations, their flocks swept off by the enemy or appropriated by the Commissariat without compensation under martial law; and the citizens, who from age or infirmity were declared unfit for service in the field, doing duty as sentries or outlying pickets by night and patrols by day. Each Kafir war had its own specific panacea, which was warranted to prevent all future wars. The reprisal system—the soothing system—the subsidising system—each was tried in turn with the same result. All failed. The Kafirs were Kafirs still. Having no right of property themselves, all being vested in their chief, how could they be expected to respect the rights of property in others? Theft was a tribal virtue and chronic war the normal state of the nation—their only pastime in fact. The war of 1836 cost £300,000; that of 1846, near £1,000,000, and the last £2,000,000 sterling; and the losses of stock, &c., nearly £1,000,000 more, for which no compensation was ever granted. Yet Graham's Town prospered notwithstanding. From a mere military post with

barracks and a dozen houses in 1820, it had a population of 3,800 English in 1834, and of 8,000 in 1865.

Next to the environs of Cape Town, Graham's Town is now beyond question the most pleasant place of residence in the Colony. The approach from Prince Alfred's road, on the Kowie side, affords the best and prettiest view of its features, of which occasional glimpses are caught for several miles as the road winds round the spurs of the mountain. Suddenly above Fort England, the eastern half of the city starts into view—a picture quite English in its pleasing contrast of dark tree avenues, white buildings, neat gardens, and straggling cottages, with the soft green hues of the grassy hills.

From the Algoa Bay road, the first glimpse after emerging from "Howison's Poort" through the toll, is also striking and picturesque, especially in the early morning,—the sunlit town opening out slowly like an unfolding panorama as one winds round the edge of Goodwin's Kloof, covered with aloes, geraniums, cressulas, and other bright flowers, amid festoons of evergreens hanging from clefts in the rocks by the roadside, and the vertical cliff, over which a waterfall tumbles or trickles through mosses and maiden hair fern, just as the season will let it, into the kloof below, where the abandoned Cape Corps' camp is seen, with its lake-dam gleaming in the sunshine close to the dense mass of foliage known as "The Oaks," the old residence of Robert Graham, late magistrate, and son of the founder of the city. Beyond on the left, stretch the villa and gardens of Westhill and Oatlands, and St. Andrew's College, and Bishopsbourne, and the Oatlands Park, with its beautiful church and tall tapering spire, quite a gem of colonial church architecture. Near it St. Aidan's Seminary and astronomical tower, with the wooded "Lynx Kop" or sugar loaf, bounding the

distant view. Next come the Cathedral tower and central parts of the town, as you drive down the hill through the winding avenue of trees into Prince Alfred-street, past the Drosdty and barracks, to Wood's Hotel.

From the Queen's road, on the east, a more distant but most comprehensive view is obtained. The city is seen extending for a couple of miles along the lateral spurs of the mountain; its broad streets lined with trees, its houses interspersed with gardens; the Drosdty and Government-house, Botanic Gardens, and cemeteries conspicuous. The Cemeteries are the most ornamental and the most carefully kept in the Colony and the mortuary chapel erected over the grave of Armstrong, first Bishop of Graham's Town, the only one of its kind for burial services at the Cape. In this Cemetery, and on the Cathedral walls too, are monuments to the various persons of note, military and civil, who have lost their lives in the several frontier wars.

The main road from Kafirland, again, leads past the native locations, Kafir, Fingoe, and Hottentot, with their gardens of mullet and maize, and the native industrial institution and Kafir church.

There are 1,200 houses in Graham's Town, and twenty miles of streets well kept and gravelled, and 250 houses and huts in the suburbs. The principal streets are from 100 feet to 140 feet wide, with side walks lined with trees. The houses are of stone or brick, roofed with slate or iron, thatch being prohibited in all new structures. The principal buildings are of grey quartzose sandstone, easily worked and of excellent quality, hardening on exposure in some quarries almost to a quartzite. A valuable freestone for ornamental building is obtained from Bathurst and Southwell, whence also most of the lime is procured, from the tuffaceous crust overlying the tertiary

limestone. A plentiful supply of pure water is derived from the spurs of the Zuurberg close to the town, whence the Kowie springs issue, which, stored up in three reservoirs, holding 24,000,000 of gallons, is distributed over the streets through twelve miles of iron mains, supplying 600 service pipes or private leadings. In addition there are several public dams, private tanks, and a copious well-supply available in the lower parts of the city, where the rainfall percolating through the gravel to the retentive clay beneath is dammed up by the trap-rock of the valley. The natural facilities for drainage, lateral gullies, gravelly subsoil, and the steep incline of the valley and consequent absence of swampy ground effectually prevent miasma, and the sewage is nightly removed two miles to the leeward, and deodorised in pits with alternate layers of earth. Hence there are no endemic diseases, no fevers, save an occasional sporadic case from the neglect of the ordinary sanitary rules, none in fact but preventible causes of disease.

The military statistics prove it to be one of the healthiest stations of the British army; and the civil hospital returns give incontrovertible evidence of the same facts. Elevated a third of a mile (1,760 feet) above the sea, and distant from it about twenty-five miles in a direct line, the ozone-laden breeze from the coast reaches the mountain-top daily about three p.m., flowing imperceptibly over the Graham's Town valley. At one spot (called from the circumstance "Waai Neck"), at the top of the Howison's Poort, a perfect syphon-system of ventilation, a diurnal indraught from the sea is thus carried on in the calmest weather, the heated air rising from the plains below through the Poort over Goodwin's Kloof, the wooded seaward slopes of the mountain cooling it before it reaches the city. Thus the climate of Graham's Town is cooler, drier, and more temperate than that of

the coast-belt, where the heated current from the tropics sweeping round the L'Agulhas bank keeps up a higher and more equable temperature all the year round, just as the Gulf stream modulates the climate of Devonshire and the south coast of Ireland. One of the chief advantages of Graham's Town as a sanatorium, in addition to its elevated site, fine climate, pure air, and the absence of all local sources of disease, is the facility with which invalids can remove to a higher or lower level, to a moister or drier climate, as taste or the varying phases of disease may render desirable—to the soft warm balmy air of the coast, where no frosts are known, or the keen dry mountain air of the Katberg or Winterberg, 5,000 to 7,000 feet above the sea. When the railways are opened, the coast, or the elevated plateau above Cradock where chest diseases are scarcely known, may be reached in a few hours.

A suburban village, with extensive commonage rights, has been laid out and built upon along the mountain top above the city, which offers peculiar advantages in the treatment of chest affections and chronic diseases. Placed on the summit of the range, 2,100 feet above the sea, in the pure free air and bright sunshine, and sheltered by a belt of firs and eucalyptus trees from the prevalent winds, it commands an extensive view on all sides. On the north and east the blue Amatola Mountains, the "Luheri" of Pringle, the Tabindoda, and the Great Winterberg peak, bound the horizon. On the south and west the sea line is plainly visible from the Fish to the Bushman's River, interrupted only at intervals, while below, a thousand feet down, stretch the wooded undulating plains of Lower Albany. Adjoining Graham's Town, and on the main road to Port Alfred, it is thus within easy reach of the comforts and luxuries as well as the necessities of civilized life, and the pleasures of English society—

advantages most important yet too often overlooked or disregarded in the choice of a suitable residence for invalids. Of what avail to the unhappy consumptive with body and mind out of gear, is a healthful climate if shut out from the world and society, and from all sources of mental and physical enjoyment, in some Free State town or lone farm in the Karoo. Here pleasurable occupation and amusement suited to every taste, with sufficient inducement for out-door exercise—often as essential as medical treatment or pure air in cases of lingering diseases—are readily obtainable. To the sportsman the deep wooded kloofs of the neighbourhood offer abundant excitement. Antelopes of various kinds, the rhebok, blauwbok, and boschbok, with hares, pheasants, partridges are found close by; herds of buffaloes still haunt the tangled thickets of the “Kooms” and the Kowie bush; the stately koodoo is still to be seen in the Fish River bush; the duyker and oribie on the grassy flats near Bathurst, and the graceful gazelle of the Cape (the springbok), with korhaan and guinea-fowl on the plains towards Bedford and Somerset. To the angler the deep shady pools of the Kareiga, within a few miles, offer tempting attractions, and to lovers of the picturesque, those enjoyable picnic and boating excursions to the different watering places—the Kowie, Kasouga, and Kleinemont—afford in all seasons pleasing change and variety. Whilst to those of intellectual habits and literary taste, the various institutions of the city, its reading-rooms, circulating library, museum, and botanical gardens, are at all times accessible. By those fond of gaiety, no doubt the Assembly-rooms and spacious Albany Hall, with its balls, concerts, orations, lectures, and theatrical entertainments will be frequently patronised; as also the very attractive “riding parties,” gallops, and carriage drives across the extensive flats near the

town. The city club and the various other clubs and societies for mutual improvement, and the cricket ground and commodious swimming-bath below the reservoirs, must also be mentioned. Invalids who have experienced the effects of both climates, assert that there is no comparison between the clear, dry, invigorating climate of this part of the Colony, and the warm, moist, relaxing heat of Madeira, which has hitherto enjoyed the monopoly of a sanatorium for chest complaints. Already the voyage from England has been reduced by steamer to three or four weeks, and when the wonderful curative effect of the Cape climate in such affections is more generally known, the claims of Graham's Town and its neighbourhood will no doubt be duly appreciated. By the telegraph wire and postal service, it is already in communication with every part of the Colony, and within a year it is hoped the submarine cable will give instantaneous communion with Europe and India as well. Then the pulse of the patient here may be felt at his home, 6,000 miles off, and the eager inquiries of anxious friends get immediate reply. This will remove much of the natural reluctance of the sickly and delicate to leaving "Home" and risking the imaginary horrors of even a temporary banishment to a distant and unknown clime.

In reference to religious matters, a point of importance in considering the status of social communities, every sect in the Eastern Districts has its headquarters in Graham's Town, excepting the Dutch Church, the community being exclusively English. It is the residence both of the Anglican and Roman Catholic Bishops, having in addition to St. George's Cathedral, four churches connected with the Church of England (St. Bartholomew's, St. Andrew's, St. Philip's, and Christchurch); one Roman Catholic Church (St. Patrick's), three Wesleyan, one Baptist,

and two Independent places of worship. There are about 1,000 scholars under education in the various schools and colleges, public and private, comprising the St. Andrew's College, St. Bart's and St. George's Grammar schools, a large undenominational school, the Kafir College, the Convent Free School and boarding school for girls, and numerous other private educational establishments. Amongst the charitable institutions of the city may be mentioned the Albany Brethren Society and Club house, the Foresters and Odd-Fellows' Societies, Two Masonic Lodges, and a Ladies' Benevolent Society. The Albany General Hospital, situated on an elevated site with extensive garden grounds, and capable of accommodating fifty beds, has a neat building attached for the treatment of mental diseases, and an extensive Provincial lunatic asylum is in process of erection on the site of the Fort England barracks. The two military hospitals and extensive military barracks, and Engineer, Ordnance, and Artillery buildings and officers' quarters are being gradually appropriated to other public uses. For ten years past, too, the city has been the seat of the Eastern Districts' Court, with attendant Judges, Solicitor-General, and a numerous bar. There are three local banks, the Oriental, Standard, and London and South African—all branches of English establishments, a Saving's Bank, several assurance and investment companies, and a Chamber of Commerce recently established. There is a Natural History Society connected with the Albany Museum, a Public Library containing between 6,000 and 7,000 volumes, with reading-rooms, in which most of the English periodicals and colonial newspapers are regularly taken. The Graham's Town newspapers in point of circulation and influence bear the same relation to the rest of the Province as does the metropolitan press to the English provincial press.

The soil of the Graham's Town basin is a rich clay loam derived from the trap rock *debris*, shales, and sandstones, and is highly productive; trees thrive everywhere by the roadside and in the streets, including the oak, fir, blackwood, gum-trees, and various indigenous trees. The public Gardens are picturesquely grouped on the slopes of the rocky hill below the reservoirs, the well-kept grass lawns and flower beds, shady avenues of oaks and handsome conservatory, being a favourite place of resort, and its nurseries and hot houses supplying most of the up-country homesteads and towns. The market gardens are numerous, and most English and tropical fruits thrive well; the orange, vine, guava, lime, loquat, peach, apricot, cherry, and strawberry grow luxuriantly, as do vegetables of all kinds. The Flora of the neighbourhood is particularly rich and extensive, comprising both the Zuurveldt and forest vegetation with that of the grassy plains and Karoo—a fine field for the botanist. Extensive surface deposits of valuable iron ore exist within three miles of the city on Woest Hill, unworked from the want of labour, transport, and fuel: although a careful examination of several tons, sent home to Bessimer for analysis and report, proves it to be equal to any ore known, for the purposes of conversion into steel. There is also an extensive deposit of hematite or "Kafir clay" a few miles down the valley, supplying national paint to the "red" Kafir in the "blanket" or "toga" stage of civilization. Fine ochres of various tints have been made from the Graham's Town shales; and the white clay used for fire bricks, tiles, and drain pipes at the brick kilns is a pure kaolin, equal to the best China porcelain clay,—biscuit porcelain and long-stemmed tobacco pipes of excellent quality having been made from it. Want of labour alone prevents successful competition with the imported article. Formerly

Graham's Town, too, had its cloth factory and hat factory, but it was found cheaper to import than to work up wool. A brass and iron foundry, steam mill and lathe, several tanneries, soap and candle manufactories, and coach and wagon establishments turning out 300 to 400 new wagons yearly, may also be mentioned.

Beyond Graham's Town, the country is broken by the valley of the Great Fish River, whose course is marked by the sombre ridge known as the "Randt," gradually falling away as it runs down to the level of the sea at Waterloo Bay. Although grassy pastures generally extend on each side, a narrow slip along the river is quite of a Karoo character, and upon it are some very fine sheep farms, the properties of Messrs. Currie, Bowker, G. Wood, Lombard, Nel, and others. Some portions, again, are covered with almost impervious bush, consisting of euphorbia, spekboom, and other succulent thorny plants, which in the by-gone war times were occupied by the Kafirs as a natural stronghold, whence they could surprise their objects of attack, or elude their pursuers. The Ecça Pass leads through this bush, forming one of the most romantic of frontier roads.

Towards the coast from the Fish River to the Keiskamma is the district of Peddie, which is considered as rather indifferent for grazing, and very dry even for agricultural purposes; but it is filled with a great number of natives, who cultivate Indian and Kafir corn, and garden produce. This is looked upon as a most suitable locality for the growth of cotton—the large population (about twenty-seven individuals to the square mile) offering facilities for gathering the crop, and it is possible that the natives themselves may, by the force of example, be induced to try and continue its cultivation. These natives are mostly Fingoes—the remnants of a scattered race, who were held in bondage by the Kafirs, but after the war of

1836 released and located in the Colony by the Government, since which time they have proved faithful subjects. They show much more aptitude than the Kafir to adopt European customs, and have already made considerable advance in civilization—many of them purchasing farms, owning wagons and cattle, engaged in transport riding, improving their flocks of sheep, using ploughs and other implements of husbandry, and raising wheat and oat-hay, besides the ordinary native crops.

The upper or more inland part of the country is the division of Victoria East—an undulating grassy tract, studded with mimosa bush, and very productive as well as particularly healthy for sheep and cattle. It extends up the Chumie Basin to the Hogsback Mountain on the ridge of the Amatolas, and includes the town of Alice, the Industrial Mission Station of Lovedale, and the small church-village of Aberdeen. A few farms in this district were sold for the first time in 1848; they averaged each about 1,000 acres in extent, and only realised the upset price of two shillings an acre. Afterwards, the contiguous lands were parcelled out, and granted to adventurous frontier men, on condition of permanent occupation. Now they have immensely increased in value. Here, also, there are several populous locations, where the Fingoes are making marked progress, and living on very good terms with their European neighbours. The number of native residents is roughly estimated at 8,000, and the live-stock owned by them is over 3,000 head of cattle, 10,000 sheep, 6,000 goats, besides horses and wagons.

To the left of Victoria East are the districts of Fort Beaufort and Stockenstrom, which, in respect of picturesque scenery, as well as of fertility and capability of production, are unsurpassed in the Colony. The heights of Gaikas Kop, Menzie's Berg

the Elandsberg, and Katberg form a bold back-ground, from which minor hills run out, enclosing charmingly beautiful valleys, verdant, wooded, and well watered. One of these, named Lushington, extends from Peffer's Kop to near Elands Post, the seat of magistracy for Stockenstrom. Another, and the most important, is that known as the Kat River Settlement, embracing an area of about twenty-five miles north and south, by about twenty miles east and west. This was once the home of the Chief Macomo and his tribe; and, after their expulsion for treason and disorder, it was set apart for the location of the aboriginal Hottentots, who were scattered about the country. It was mapped out into villages, named Hertzog, Balfour, Ebenezer, Philiptown, Buxton, and Fairbairn, and occupied by nearly four or five thousand Hottentots, with a few white inhabitants scattered amongst them. Although there were many individual instances of industry and progress encouraging to the philanthropic friends of the aborigines, still the district, as a whole, was never a prosperous one, and the part taken by many of the people in the rebellion of 1851 led to the breaking up of its exclusiveness as a national settlement. The forfeited properties, about 130 in number, were given to English and Dutch farmers, each having an allotment of arable land, varying from five to twenty acres, with grazing rights on surrounding blocks of commonage land. By this means a more well-to-do and energetic class have been introduced, supplying the place of masters and labour employers, which it would have been a wise policy to have adopted on the first distribution of the land. It is of this district the late Sir George Cathcart said, "There is no country in the world where a man with a family could thrive better if given an erf of half an acre, or one acre at most, with sufficient commonage for his cows, goats,

and pigs." There are also several forests along the mountains filled with timber of large size, and of the most useful description, open to the industry of any one for a trifling amount of license-money.

The mountain pass across the Katberg, and leading to the Queen's Town division, is very grand and picturesque. The road winds up along a shoulder of the mountain to an elevation of 3,000 or 4,000 feet, passing across emerald-green slopes, through bush and forest and rocky krantzes, and over water-falls and deep gullies, which make one marvel at the intrepidity and skill of the engineer who laid it out—the late Mr. A. G. Bain. At some points nothing can be more striking than to gaze upwards to the forest-crowned heights, and then to glance down into the yawning depths of still grander forests beneath. From the summit a magnificent outlook is to be had, and, according to the season of the year or the state of the weather, it changes from the picturesque to the wild and fantastical. We have visited it on a bright, clear summer's day; but it may be seen under different circumstances—such as in winter, when snow enwraps the heights in its white wreaths; or in dark storm, when loud thunders echo over the rocky peaks, and vivid lightnings illumine the yawning precipices around; and at other times, when the spreading vales below are covered with a sea of silvery mist, out of which the tops of the hills rise up like solitary islands on an expanse of ocean.

The Kat River, which waters these valleys, flows through a succession of beautiful glens to the open plain where Fort Beaufort lies, in an amphitheatre of hills. From a mere military post Fort Beaufort has become a town of considerable interest and importance, containing a number of handsome and substantial dwelling-houses and stores, and extensive barracks buildings. The streets are lined with the Indian lilac,

or syringa-tree, and there is a central public garden, worthy of imitation in every village in South Africa. The "Grove," as the garden is termed, was the work of the late magistrate, Mr. Meurant, who, with local convict labour, converted a dry, baked, naked piece of waste ground into an ornamental public square and pleasant promenade. It shows how easily, and at little cost, an indifferent soil and situation may be clothed with timber trees, which in time become a source of wealth, improve the appearance of the country, and add to the comfort of its inhabitants. Around Fort Beaufort are numerous valuable sheep walks and cattle and grain farms,—the properties of Messrs. Ayliff, Ogilvie, Blakeway, Godlonton, Stokes, and Gilbert. In the summer season the whole district is richly beautiful, extending in every direction in ridges or meadows, bright with verdure and dappled with the fragrant flowering mimosa, or clumps of other evergreens. The pasturage in average seasons carries a sheep to an acre, besides cattle and horses, all the year through, but in times of protracted drought, which periodically occur, the grass withers rapidly, and stock has to be reduced or removed elsewhere for food.

North-westward from Fort Beaufort are the wood-crested heights known as the Kromme Range, which embrace the Waterkloof, Fuller's Hoek, Blinkwater, and other forest fastnesses occupied by the Kafirs in past wars. Beyond them is the Didima, and high above, at an altitude of 7,800 feet, is the Great Winterberg, commanding a magnificent view of all the eastern districts as well as of Cradock, Queen's Town, and even part of Kafirland. This is almost an Alpine region, the mountain summits in winter being covered with snow. It contains fine agricultural, as well as sheep and cattle farms. Many streams, which have their sources at a considerable elevation, are easily led out for the purposes of irrigation, and artificial water-

courses have been constructed at comparatively small expense, from which large gardens, orchards, and corn-lands below them are easily cultivated, and yield most abundantly. These streams lower down form the Koonap River, which after leaving the mountains passes through the village of Adelaide, and thence on until it unites with the Great Fish River. Adelaide has a large Dutch Reformed Church, built of stone at a cost of from £20,000 to £30,000, chiefly contributed by the surrounding farmers. The village is only of recent creation, and the population is small, but the progress already made in the formation of the several streets, the establishment of a school, a bank, a wool-wash, and a local newspaper, indicate the activity and enterprise of its inhabitants.

Crossing the Koonap, we enter the division of Bedford whose township is situated in a pretty nook under the wood-crested ridge of the Kagaberg. The estate "Maastrom," belonging to the Stockenstrom family, and the fine grazing lands and flocks of the Messrs. King, are close to Bedford, while in the upper part of the district, formerly known as the Baviaan's River, there are many very superior agricultural and pastoral farms. It was there that the Scotch party led by the poet, Thomas Pringle, were settled in 1820. The condition of the country at the time of their arrival, and the incidents attendant upon the new settlers' life, are graphically described in Pringle's "Narrative." Indeed his sketches and his lyrics have made this neighbourhood classic ground. Few who are acquainted with either will fail to feel an interest in the spot where the emigrant-band pitched their tents fifty years ago—

"When first these mountains heard the Sabbath song."

The Scotch appellation of Glen Lynden was then given to it, and such it is still named. The locality was

well-chosen—"a fertile basin or valley," Pringle says, "spreading out in verdant meadows, sheltered and embellished without being encumbered with groves of mimosa trees, among which in the distance were herds of wild animals, antelopes and quaggas, pasturing in undisturbed quietude." The beauty of these valleys or glens have been sung by the poet in his "Captive of Camalu:"

"O Camalu—green Camalu!  
 'Twas there I fed my father's flock,  
 Beside the mount where cedars threw  
 At dawn their shadows from the rock;  
 There tended I my father's flock  
 Along the grassy-margined rills,  
 Or chased the bounding bontebok  
 With hound and spear among the hills."

And still more sweetly in his "Evening Rambles"—so descriptive of this Arcadian life,—when

"The sultry summer noon is past;  
 And mellow evening comes at last,  
 With a low and languid breeze  
 Fanning the mimosa trees,  
 That cluster o'er the yellow vale,  
 And oft perfume the panting gale  
 With fragrance faint: it seems to tel  
 Of primrose-tuft in Scottish dell,  
 Peeping forth in tender spring  
 When the blithe lark begins to sing."

"Sae that's the lot o' our inheritance then?" quoth one of the party—says the Narrative—as they came in view of the location, "Aweel, now that we've really got till't, I maun say the place looks no sae mickle amiss, and may suit our purpose no that ill, provided thae haughs turn out to be gude deep land for the pleugh, and we can but contrive to find a decent road out o' this queer hieland glen into the lowlands."

With courageous hopeful hearts they settled down in the wild domain, and at once applied themselves to

the task of teaching "the waste to yield them daily bread." After the first difficulties were surmounted and they became familiarised to the country and its various inhabitants, they prospered exceedingly well. Houses were built, crops were reaped, gardens and orchards were stocked, and flocks and herds accumulated. Pringle had the satisfaction of witnessing this success, and thanked God for the good providence which had directed their course to the wilds of South Africa. His relatives still flourish here, the chief of them now surviving being Mr. Dodds Pringle of "Glen Thorn," who is conspicuous for his activity and enterprise in his agricultural and pastoral pursuits, vieing with his neighbours for the possession of the best imported stock or the most improved reaping and thrashing machines, cultivators and other modern labour-saving appliances of good farming.

The division of Somerset East adjoins Bedford—the Great Fish River, which comes down from Cradock, forming the boundary between them. The town like that of Bedford, is situate at the foot of a charming wood-fringed hill, the Boschberg. It is of considerable size, with well-laid out-streets, and many gardens and trees. English, Dutch, Wesleyan, Presbyterian, and Mission Churches show the religious necessities of the people are well attended to. There are two excellent hotels. The stores and banks do a prosperous business. A weekly newspaper is published, and there is a college with some able professors attached which has been endowed by the liberality of a colonist, Dr. Gill, formerly a resident of the town, who bequeathed for this purpose the bulk of his property valued at the time at £24,000. The handsome buildings occupied by the college were erected from funds raised among the inhabitants of the district, and cost about £6,000.

The Somerset division is chiefly pastoral. In

1865 it carried over 500,000 woolled sheep, the clip of wool being valued at 914,997 lb.; 11,000 angora and 171,000 common goats; 7,624 draught oxen, and 13,000 other cattle, and about 5,500 horses. The increase since then has been considerable. The pastures, up to last year's drought, were considered overstocked, carrying about two sheep and goats to each morgen. The average at present is one and a quarter. Sheep with few exceptions are shorn twice a year,—in October and November, and during April and May. The average weight of fleece is  $2\frac{1}{2}$  lb. in the grease. The farmers living on the Fish River wash their sheep before shearing, running them three or four times through the pools of water, by which means the loose dust is got rid of. The lambing season varies, sometimes being in March, but mostly in April and June, much depending upon the condition of the ewes, which is affected by the state of the pasture. The herds of cattle which were common in former years have been reduced, partly by lung-sickness which still breaks out occasionally, although never severely, but chiefly owing to the grazing lands being everywhere occupied by sheep. On a few farms there are valuable cows, but the quantity of butter produced is very inconsiderable although the market is good. Horse-breeding is also a thing of the past. The late Sir A. Stockenstrom had a stud farm at Zwager's Hoek; Mr. Botha and Mr. Bolleurs had similar establishments in Vogel River, and many horses were bred for the remount of the Indian Army and the Cape Corps; but of late years this business has died out, and no one has as yet succeeded Bolleurs, the last of the breeders, although the increasing demand for good horses is such as to make it worth while to revive this branch of farming.

There are only a few grain farms, the principal being Glenavon and Prinsloo, adjoining Somerset and

enjoying the water of the Naude's River, flowing from the Boschberg; the Groot Plaats, which has a dam in the Little Fish River below Somerset; the adjoining farm, Muis Vlakte, similarly watered, and two other farms lower down the River. Buffel's-font at the entrance of Zwager's Hoek is a splendid agricultural farm, and is supplied with water from the Boschberg. Doornbosch, in Zwager's Hoek and Stockdale and Upsal, at the sources of the little Fish River, are also excellent, the latter being the most important grain farm in the division. Along the Vogel River there are the farms Vredenburg and Sunday's River, and on the plains near Pearston the farm Galjen-Bosch, of the late Mr. Bolleurs, which is irrigated from an immense dam resembling a small lake. There are orchards on most of the farms and on several orange-groves and vineyards.

A valuation, for ratable purposes, of the immovable properties of the division was made in 1874, after a most severe drought, succeeded by the ravages of locusts. The standard for freehold land per morgen, was 15s. 6d.; for quitrent land, 13s. 1d.; for leased land, 5s. 5d.; and the average of all lands in the division, 12s. 8d. The valuator, Mr. W. W. Maskew, for many years officially and intimately acquainted with every part of the district says:—  
“The late drought, more than any other, has brought to the test the real capabilities of the different localities of this division, consequently the farms in the field-cornetcies of Boschberg and Zwager's Hoek, with their grassy mountains and valleys, and never failing waters, and those a little less happily situated on the slopes and summits of Zuurberg have been appraised somewhat higher, whilst a considerable reduction has been made in the value of the farms in Brak and Vogel Rivers, where the arid Karoo plains have caused so much loss of stock. We are fast approach-

ing the limits at which grazing farms will be sold, until we have a revolution in stock-farming; whereas the prices which have and are likely to be given for produce, for a long time to come, will continue to increase the value of all farms where extensive agricultural operations are practicable."

The climate may be considered mild and healthy. In a normal season spring opens with a few light showers in September. Heavy rain in October from the south-west; heavier in November, with occasional thunder-storms and showers of hail. Thunder showers in December and January. February, in a good season is also a wet month, south-east winds still prevailing. March dry. April showery (ploughing time). May to August dry, with sharp frosts. As a rule the winters are dry and summers wet.

Winter days are delightful. Bright snow falls occasionally on the Boschberg and Zwager's Hoek Mountains, the heaviest being on the Coetzee's Berg, and remains unmelted for a week. Frost is very sharp in the valleys and uplands. The greatest heat is during January and February.

## VIII.—THE BORDER DISTRICTS.

Eastward of the Keiskamma, and extending from it to the mouth of the Great Kei River, a distance of some eighty miles, we have the sea-board of the Border districts,—an exceedingly beautiful tract of country, highly favoured by nature in regard to its fertility, its resources, and its capability of improvement. The area of this territory is about 15,400 square miles, and it embraces the divisions of East London, King William's Town, Queen's Town, Wodehouse, Albert, Aliwal North, and Herschel, each rising in successive steppes from the coast to the highlands of the Stormbergen and Quathlamba. According to the census of 1865 the aggregate population was 146,534, of which upwards of 100,000 were native Kafirs; the ground under cultivation was near to 50,000 acres, producing wheat, maize, and other cereals: the yield of wool was 3,000,000 lb., and the stock depastured included 1,522,670 woolled sheep, 10,000 Cape, 3,400 Angora goats, 142,147 common goats, about 50,000 horses, and 140,000 cattle.

Most of this country was first permanently occupied by European settlers only twenty years ago. After the last war in 1853, Sir George Cathcart, and his successor, Sir George Grey, adopted the policy of removing the most noted rebellious Kafirs beyond the border line; their places being partly occupied by chiefs and people of proved loyalty, who were thus rewarded for their fidelity to Government, while the remainder of the forfeited and vacant territory was filled up with enterprising burgher colonists. The latter received free grants of farms of from 1,000 to 4,000 acres, on condition of erecting a defensible homestead, to be occupied per-

sonally, or by one or more retainers, well armed, and prepared to stand by each other for mutual support. These "grantees," as they were termed, formed the advance-guard of colonization, but so rapid and marked was their progress in settled prosperity and security, that the conditions of personal occupation and armed retainers were dispensed with several years since, and the properties are now held on the ordinary quit-rent tenure. At the same time ample provision was made for the accommodation of the numerous native population, who in all respects are treated with justice and consideration. Throughout the whole frontier, large tracts of the very richest lands have been expressly set apart for them under the name of "reserves" and "locations;" and at most of these places European superintendents or missionaries are stationed with them to advise and instruct in everything tending to their advancement in civilization. The greater body of them live in those locations, many having individual titles to the land; and, as a whole, they are now enjoying far greater comfort and prosperity than ever they had any experience of in their former days of barbaric independence and perpetually recurring tribal wars.

The districts of East London and King William's Town formed what was known as the province of British Kaffraria up till 1865, when by Imperial as well as colonial legislation they were annexed to the Colony. This tract is bounded on its inland side by the Amatolas,—a continuation of the Katberg and Chumie mountains running eastward from near Gaika's Kop. These are intersected by deep rocky kloofs, clothed with forests of large trees, and opening out into rich and fertile valleys, presenting very attractive scenery. From the base of the range, an undulating country, sometimes rising into high ridges, falls away to the sea; it is generally covered with rich grass, varied

with clumps and woods of mimosa bush, and in every direction is traversed by rivers or small streams.

The coast-lands from the Keiskamma to the Gonubie Mouth, and extending twenty miles inland, are most excellent for cattle grazing; the pasture, which reaches to the water's edge, being very luxuriant and suffering but little from drought. With the exception of this belt (in which sheep do not do so well) the remaining portion is admirably adapted for sheep and all kinds of stock, which are gradually increasing in number. In every part, however, the soil is fertile, and suited for agricultural purposes. Along the coast, coffee, pine-apple, bananas, and sugar-cane are grown; the hilly slopes and mountain sides, especially in the Amatola Basin, are extensively cultivated by the natives, who raise large quantities of maize; while every variety of grain, vegetable, and fruit is supplied to the local markets by the German settlers.

These districts are the most recently colonised part of the Colony. There were few Europeans here prior to the Imperial Government arranging for the settlement of the disbanded German Legion, after the Crimean war. About two thousand of them were landed, and intended to be located in villages chosen with a view to the defence of the country, but many of their number soon after left to offer their services in India at the time of the Sepoy mutiny. Then some hundreds of able-bodied inhabitants of the Eastern and Western Provinces were granted 1,500 acre farms, on condition of personal occupation for three years and the requirement that they had sufficient capital to stock their lands. At the same time upwards of two thousand immigrants of the agricultural class were introduced from Germany as cultivators of the soil, to whom small grants of land were also made under easy conditions of repayment. The various elements thus brought together, and added to

by enterprising families from other districts of the Colony, served to constitute a community which in a very few years rapidly attained a marked degree of prosperity. The farming population generally are flourishing; their productions are increasing in quantity and value, and their properties have risen considerably. Land, which even three or four years ago could be got for 2s. 6d. or 5s. an acre, has now risen to 15s. and 20s.; and several farms then sold for £500 and £800, are now changing hands for £1,500 and £2,000.

But the progress of the German immigrants especially show that a selection of men more suited to the requirements of the country could scarcely have been made. They were settled upon their lands without any means of subsistence beyond the ration of bread and meat provided by Government for them; but they at once adapted themselves to their position. They lived in the rudest dwellings, and were most frugal in their habits. Men, women, and children laboured industriously on their small plots of ground; and shortly afterwards it was no uncommon sight to see the women carrying vegetables, or literally harnessed-in to their rude wooden trucks, laden with farm produce, and dragging these to the market. This was their position after their arrival in 1859 and 1860. They have since become a thriving, well-to-do class. They have brought their lands to a high state of cultivation—in many instances by purchase have added considerably to their original grants—and accumulated a quantity of live-stock. The rude huts they first dwelt in have been superseded by comfortable homesteads, with stabling and other conveniences. In some cases they have been able to pay £500 and £1,000 in cash for property; and substantial stone buildings, with iron roofs, are to be seen studded over the country, all the result of their frugality and industry. While they

have thus prospered materially, their moral and social habits have not been neglected. Their churches and schools, and faithful, painstaking clergy, bear testimony to the liberality of the people, and their desire to foster and promote education and morality; and as a result, on any festive or holiday occasion, there are to be seen at the various villages groups of young people comfortably and neatly clad, who would be a credit to any peasantry in the world. Many of these Germans are engaged in the transport service, others have trading stations; the sons frequently join the Mounted Police for a time, and return with their earnings and the military experience gained, to farming pursuits; and some of the daughters go out as household servants, and are sought after from all parts. While these immigrants have thus benefited by their settlement in the Colony, they have greatly contributed to the advancement of the country generally. They are large producers of farm produce—tons of potatoes and other articles are supplied by them to the markets, and by careful cultivation and the judicious selection of seed, good varieties of wheat are being raised by them. They have thus proved that even with variable seasons, every inch of the agricultural lands of Kaffraria can be made to yield a fair return for the labour spent upon them, and that the country is capable of maintaining a very dense population.

King William's Town, or "King," as it is sometimes curtly termed, now ranks as the fourth in size and importance of all the colonial towns. It is well situated for the purposes of commerce, being on the highway from the harbour of East London to the interior, and from the eastern districts to the Transkei and Kafirland. A considerable part of the trade from Cape Town to the Free State and Griqualand passes through it, *via* East London, and in seasons of drought goods from Algoa Bay are forwarded in this direction,

owing to the superiority of pasturage for draught cattle. Besides these advantages it has the chief command of the native trade, extending beyond the border and north to Basutoland. The town itself is pleasantly situated, stretching along the banks of the Buffalo River, which is spanned by an elegant iron bridge. At the western end is the native location, the spot on which the first Christian missionary in Kaffraria, the late Rev. J. Brownlee, established his station half a century ago. Next comes the military barracks and officers' quarters, where a handful of English troops serve to maintain the prestige of Her Majesty's arms among the tribes of South Africa. Then there is the business part of the town with its public buildings, churches, clubs, stores, and private residences; while more to the eastward is the German town, and its thatched verandahed cottages; and beyond that the camp and head quarters of the Frontier Armed and Mounted Police—the nucleus of our colonial defensive force. The Town-hall is a large and capacious building, reflecting credit on the place. Between it and the river is the Botanic Garden, with an area of about fourteen acres of alluvial soil of the richest description, where everything grows in the greatest luxuriance. On a rise to the north, again, is the handsome and imposing edifice erected by Sir George Grey (and known as the Grey Hospital) for the purpose of breaking the belief of the natives in witch doctors, by placing skilful medical treatment and maintenance within their reach, free of charge. Close to this spot the new public offices are about to be erected. The population of the town is about 4,000 souls, of which 1,000 are natives. The value of landed property for local purposes is £133,000, while its actual value must be at least over £160,000. Its rapidly increasing commercial importance is indicated by the demand for property, there not being a

single dwelling unoccupied, and new stores and buildings of various sorts are being erected in every direction.

The native population of the district, it may be said, are in a transition state. Many of them are acquiring stock, and turning attention to the usages and habits of civilized life; but there are numbers who adhere to their aboriginal ways and customs, and are adding to that the vice of drunkenness. The Kafir tribe of Sandilli (the Gaikas) are amongst the most numerous, and, it may be added, the most savage. They occupy a location above King William's Town, adjoining the Stutterheim and the Upper Kabousie Crown Reserve; its extent is estimated at 800 square miles; the population is about 25,000, and, according to the last returns, their stock consists of 1,200 horses, 14,000 cattle, 25,000 sheep, 30,000 goats, and 300 ploughs. There are twenty-five trading stations among them, doing a fair business in wool and skins. No "canteens" are permitted by Government within their boundaries, but there are several in the neighbourhood, where the annual consumption of brandy by the tribe is computed at 25,000 or 30,000 gallons.

Between King William's Town and Queen's Town, on the northern spurs of the Amatola range, at an elevation of 3,000 or 4,000 feet, there is a stretch of comparatively unoccupied ground, known as the Bontebok Flats. This is a succession of rolling downs, grassy as a rule but different in their aspect from the green pastures of Kaffraria. During the last few summers they have been covered with thousands of sheep, who have found good grazing there when their usual homes on the Fish River Valley, or the Eastern grass veldt, were suffering from drought. These lands are adapted for agriculture, too, being well watered, and having more than the average rainfall.

Lately the portions surveyed have been readily leased or purchased by Eastern district farmers, some of whom are now permanently settling there, erecting homesteads, and constructing sheds for the protection of stock in winter, which is severely cold, especially during continued snow-storms.

From here we pass into the division of Queen's Town—a succession of beautiful plains or basins surrounded by hills of singularly picturesque shape. Some of these basins are quite clear of bush, except near the sides of the mountain; others have not even these towards the north. The soil generally is of a fruitful character, and the grass cannot be surpassed as pasture for horses, sheep, and cattle, although it is sometimes subject to severe drought. The best part for pastoral purposes is the block of farms on the Upper Zwart Kei, adjoining what was originally the Cradock division, now the district of Tarkastadt. The farms Mapassas, Leven, Bower's, and some others at the Zwart Kei Poort, abutting on Kafirland, are of the same character. For agricultural purposes the Klip Plaat Valley has abundance of water and good soil, as well as the basin of the Bongolo, which has also the advantage of being close to Queen's Town. Most of the farms have a river frontage, and the others are supplied with springs, and nearly all the arable lands are brought under water. There are no large stock holders: the properties as originally laid out, in 1,500 morgen lots, being too small to allow of that; but many adjoining places have been bought up by one proprietor, forming blocks of three or four farms. Mr. William Hart, of Thorn River, and Mr. John Frost, of Thibet Park, have each about 4,000 woolled sheep, with 200 head of cattle, and 100 horses; Mr. Jas. Phillips owns more large stock—about 300 head of cattle and 200 horses, and perhaps 3,000 small stock—and Mr. van

de Vyfen also has a considerable number of the latter. The pastures of the district as a rule bear one sheep to every morgen, with fifty head of cattle and twenty horses for a farm of 1,500 morgen; but overstocking has taken place in some cases, and the losses during drought, such as occurred last year, have been heavy. The average fleece of wool in the grease is three-and-a-half to four lb. Wheat yields from ten to twelve bushels per acre, and oathay about 25,000 lb. per acre. The natives raise maize and Kafir corn in large quantities, and at Kamastone a good deal of wheat is grown; but the grain crops would be greatly increased if the natives were more encouraged to occupy and cultivate the land by the sub-division of the locations, and the issue of freehold titles among them. The locations at Kamastone, Oxkraal, and Lesseyton are peopled chiefly by Fingoes, and that at the Bolotwa by Tambookie Kafirs. The latter contains about 20,000 inhabitants. It is divided into 104 farms of from 1,500 to 2,000 morgen each; of these eleven have been granted from time to time to the former chiefs of the tribes or their sons, or to other Tambookies who have by exceptional services deserved well of the Government. The other farms are in charge of headmen, appointed by the Government. Besides the headmen of farms, some senior headmen have been appointed, to whom the others are subordinate, and who receive their instructions directly from the magistrate. These people are all but universally heathens, believing in witchcraft and the wild customs of their forefathers. The use of European clothing and agricultural implements is, however, more common amongst them than formerly, and they are beginning to understand the value of woolled sheep, a considerable amount of wool being now produced upon their locations.

Queen's Town, the capital of the division, is situated in the centre of it, on the Komani or Bush River.

Twenty-two years ago antelopes were coursing over the grounds where now stands one of the most flourishing places in the Colony. The number of inhabitants is about 1,200. There are Dutch, Anglican, Congregationalist, and Wesleyan Churches, a town-hall and library, a masonic lodge, botanic gardens, two banks, two newspapers, and many large stores, all indicating the prosperity and commercial activity of the people. The houses are comfortable and substantial, and many of them even elegant in style, with gardens attached, and all the streets are lined with willow trees. It differs from other colonial towns, which are mostly of rectangular or parallelogramic form, inasmuch as it was laid out according to a "strategic plan," approved by General Cathcart, who may be said to have been its founder. The central square, used as a market place, is of hexagonal shape, with broad streets radiating from it in six several directions. It was originally intended to have had a fortified building in this hexagon, to serve as a rallying place for the grantees, whence any advancing foe might be swept off at once, no matter what quarter they came from. Now that the country has been peaceably settled, and the town enlarged, the strategic arrangement is not considered the most convenient for ordinary business purposes. Visitors who find themselves for the first time in the place realize what has been termed "the puzzling intricacies of a maze," so ramified are the obtuse and acute angles of the cross streets and blocks of houses, although converging to a common point.

There are two small villages in the district, one named Whittlesea and the other Tylden. The former was the scene of an heroic defence by the burghers during the last war; and the latter was named in honour of a gallant officer, Colonel Tylden, who with a small number of volunteers, drawn up in line like the "thin red line" of the Highlanders at Balaklava,

met and defeated hordes of Kafirs led by the Chief Kreli, on the open flats of the Imvani. The burghers of Queen's Town are notably the flower and chivalry of border farmers, both Dutch and English. They are active, intelligent, and enterprising. To this is greatly attributable the rapid advancement of the division, which is certain to attain to still greater importance when the railway between it and the nearest port, East London, is constructed.

Above Queen's Town, the plateau of the Stormbergen rises to a height of over 6,000 feet, forming the watershed of the country, the rivers from one side flowing into the Orange River, and those on the other falling seawards. To the north-westward they are called the Bamboosbergen, while the continuation of the chain to the north-east is known as the Wittebergen and Drakensberg, or Quathlamba Mountains. They are flat-topped or conical, and singularly uniform in character; the horizontal beds of sandstone and shale, of which they are built, cropping out in parallel tiers all round their sides. The harder beds of sandstone, sometimes seven or eight in number, stand out in bold relief, while the softer shales usually form grassy slopes between, and here and there they are traversed by greenstone or trap rock, occasionally forming horizontal cappings. It is in these mountains that the Mesozoic carboniferous seams occur. At Bushman's Hoek, half-way between Queen's Town and Burghersdorp, the coal has been worked for some time past, and many hundred tons are used for local consumption, within a radius of eighty miles from the pit's mouth; beyond that distance the cost of carriage is at present prohibitive. In Albert, Aliwal, and Wodehouse, as in many of the Midland districts, fuel is very scarce, and that ordinarily used is disagreeable and expensive, being principally dried manure obtained from sheep kraals, or mimosa sticks. The presence

of coal is therefore of vital consequence. At present it is employed and answers well, at Queen's Town and other places, for steam flour mills, steam wool-washes, and ordinary domestic purposes. Last year it was very successfully tested by the Government engineer at the East London harbour works, when it was found to give sixty pounds of steam in thirty minutes, and after working all day, using 500 lb., of coal, there were no clinkers, but a good deal of ash. On the next day a trial was made with Welsh and Tanfield coal, producing exactly similar results; so that the 500 lb. of Stormberg coal proved to be as good as that imported. The largest workings of these mines hitherto has been at Mr. Vice's, near the newly formed village of "Molteno," but there are many other seams all the way from within a few miles of Burghersdorp, eastward beyond Dordrecht; and there are indications of further deposits extending northward and eastward in Basutoland and Kaffraria, as well as Natal.

From the Stormbergen the country gradually descends towards the Orange River, the coal-bearing rocks being left behind near Burghersdorp, and the Upper Karoo, or dicynodon beds, similar to those of the Cradock and Queen's Town basins, again entered upon. Here are situate the north-eastern border districts of Albert, Aliwal North, Herschel, and Wodehouse, the greater portion of which was declared part of the Colony in 1848.

The first of these, the district of Albert, is almost entirely pastoral in its nature. The farms are large and well adapted for sheep, cattle, and horses. Nearly all the farmers are Dutch, and although education has not as yet done much for them, they are wealthy, contented, and essentially conservative in their notions. Agriculture answers well where irrigation can be carried out by means of reservoirs, but owing to the

cost of carriage to the sea port, the raising of grain for export has never yet been attempted. The Stormberg Spruit is the only river of any size in the district.

Burghersdorp is the town and seat of magistracy, and is a well laid out and regularly built place. Most of the inhabitants are English, with a considerable number of Germans. There are several public buildings, of which the chief are the Dutch Reformed Church, the church of those who have separated themselves from that body, the "Doppers," the Church of England, a dissenting place of worship, town-hall, academy, masonic lodge, &c. In all the towns of these districts a large number of houses belong to the farming population, who inhabit them only from Saturday to Monday, when they come in to attend service. On such occasions the towns present a comparatively crowded appearance, very different from the other days of the week. The Bethulie drift, beyond Burghersdorp, crosses the Orange River on the direct route to Bloemfontein, Free State, and is an important route for wagon traffic from Port Elizabeth.

The district of Aliwal North is similar to that of Albert, except towards the north-east, where it is extremely mountainous, and in parts inaccessible for vehicles. The latter portion forms a separate ward, or field-cornetcy, called New England, and differs from the rest of the district by being a rich grain-producing country. The soil is exceedingly fertile, and the rainfall sufficiently steady to admit of cultivation without irrigation. Wheat, maize, oats, potatoes, &c., are raised to a large extent, and find a ready market, chiefly at the Diamond-fields. Pastoral farming, however, is not neglected, and is increasing; the obstacles at present are the too great richness of the herbage, and to a less extent the wetness of the country. This part of the district was formally

settled in 1866, upon the same terms of occupation as the Queen's Town grantees before mentioned. This servitude has, however, been since removed, and has caused a great impetus to farming. Ground which was originally sold for £100 would now find a ready sale at £1,000, and in many cases much more.

With a very few exceptions, all land in this district is held in freehold, subject to an annual quitrent of a few pounds; the average size of farms may be 4,000 acres. Fully three-fourths of the district form part of the watershed of the Kraai River, a large and important feeder of the Orange River, with which it unites near the town of Aliwal North. The Kraai (or Crow) River has an average breadth of about 120 feet, and varies in depth from a few feet in winter to some fifteen in summer, when it becomes a dangerous torrent, bringing down trees and *debris*, with which the banks are lined everywhere. Considerable use is made of this river for irrigation purposes and for driving mills. In times of severe drought the water is invaluable, since, owing to its sources being in the Drakensberg, or Quathlamba Mountains, at an altitude of some 7,500 feet above the sea, this is one of the few South African rivers which has never been known entirely to "dry up," and its use for watering stock becomes of great importance when every other source of supply has ceased to flow.

The climate of this district is peculiar. Owing to the great difference of altitude of from about 6,500 feet in New England to some 4,500 in the lower parts there is considerable variation. In the higher parts the cold is very severe, and frosts may occur in any month of the year, except, perhaps, January and February. At the town of Aliwal North, which is about the lowest part above the sea, the greatest temperature registered in the shade is 106° Fahr., and lowest, 11° to 21° below freezing point. Frosts may

be expected from April to August. In summer, although the heat is great, the nights are never oppressive, which is not the case in the lower districts of the Colony. In winter the nights are exceedingly cold, but the days are generally bright and genial. The mean annual rainfall (according to observations made from 1866 to 1874) was 25·31 inches, extending over ninety-five rainy days.

The average value of land throughout the district may be taken at 10s. per acre, including whatever homesteads, buildings, or improvements are on each farm.

The chief town is Aliwal North, situate on the Orange River. It contains about 900 inhabitants, of whom 800 are Europeans and the remainder coloured, chiefly Basutos and Hottentots. The town is not well laid out, but the streets are wide, and gardens are numerous and well kept. The township is irrigated by water from two mineral springs, led into the town by a furrow about two miles long. The supply is constant, and is unaffected by rain or drought. This water, although not the best for vegetation, is useful for some crops. The cereals all flourish on it, but leguminous plants, and indeed most others, do not thrive well, although they are kept from perishing during drought until rain falls. At the source where the fountains well-out with much force, the water has a constant temperature of 98° Fahr., and possesses a disodour, of which visitors are unpleasantly aware, but which one ceases to perceive after a while. By the time the water reaches the town the smell disappears, and the temperature is reduced to that of the air. These springs should be better known than is the case, as their healing properties for cutaneous and rheumatic affections have been established beyond doubt. The inhabitants make considerable use of the waters, and occasionally strangers come and pitch

their tents alongside to obtain benefit from a course of bathing.

Aliwal North possesses no less than five churches; that of the Dutch Reformed Church and the recently erected one of the Primitive Methodists (the only one in the Cape) have some pretensions to architectural design. There is a public library, and also a literary society. The Magistrate's and Civil Commissioner's offices, and the post office, are spacious and convenient, but will shortly be surpassed by some fine buildings about to be erected by Government at a cost of some £5,000. The bank is a flourishing institution, and trade generally appears to be carried on with energy and profit. The town is fast increasing in size and importance, and is regarded as one of the most flourishing of border settlements. It was founded in 1848 by Sir Harry Smith—the hero of Aliwal.

The Orange River has here one of the best fords to be found. The river is some 900 feet broad, and when the stream is full, which may be from November to March, the traffic is ferried across on pontoons sufficiently large and strong to bear a loaded wagon and sixteen oxen; and as there are several of these structures working close together, a very animated scene occurs after a flood, or any detention which causes wagons to accumulate. The traffic is very extensive, this being the chief route between the sea ports and the Free State and Diamond-fields, as well as Basutoland. Provision has been made by Government for the construction of an iron bridge over the river at a cost of £40,000.

About four miles distant, on the Kraai River, which, as before mentioned, joins the Orange River near the town, is a large and important wool-washing establishment, where this most necessary operation is carried on in a vigorous and extensive manner, and on a scale far beyond most places of the kind, except

Uitenhage. The importance of wool being washed near the spot where it is grown will be apparent when it is borne in mind that one of the greatest, and in some cases, the only\* drawback to some of the Cape exports is the cost of land carriage. On wool this is about  $1\frac{1}{4}$ d. per lb., of which half the weight is grease and dirt, costing this sum to the sea port. As the wool must be washed previous to use, it is evidently a gain to do this before incurring the cost of carriage. The risk of erecting mill works on the Kraai, or indeed any South African river, is, however, very great, owing to sudden and devastating floods. In the present instance the works have twice been swept away in recent years.

Lady Grey is the second town of importance in the district, and is situated at the base of the Lady Grey hills, about thirty miles south-east of Aliwal North. As the town does not yet possess a "through" road, and is inaccessible from but one direction, the place cannot well progress, to any extent, until the back country of New England be communicated with. The origin of this town was a church which the farmers attended when the Kraai River was impassable, or the distance was felt to be too great to attend Aliwal North. The leaders of the congregation bought the farm, laid out a township, sold the erven upon a quit-rent, and thus secured an income for their church. Some shops of importance have since been opened, and although not an increasing place, the trade is of a healthy character, and competes with Aliwal North.

Until recently the district of Herschel formed part of that of Aliwal North; it is now separated for all but electoral purposes—together they send two members to the House of Assembly. Herschel, for-

For instance, maize is sold in London at about 28s. per sack; here it costs 5s. to 7s. 6d., but the land carriage to nearest seaport increases it to 35s. per bag. If this were 15s. it would answer to export.

merly known as the Wittebergen Reserve, is unlike other districts, inasmuch as the land is not divided into farms, but the whole extent is reserved for the use of native tribes. These are located in different parts, under the direction of the resident magistrate. Although the ground has not been sub-divided in any manner, the inhabitants are nevertheless disposed of in regular native villages under the care of a "headman," who is made responsible to the magistrate for the good conduct of those under his charge. The sites of such collections of huts are chosen for reasons which make them suitable for village purposes,—as, for instance, nearness to good grazing ground, arable land, good water, &c. There are about 25,000 coloured inhabitants, and a few hundred Europeans, mostly traders who set up business near to native villages, or wherever natives can be got together. There are almost forty such shops in the district. The gross revenue, chiefly derivable from a tax which natives pay for each hut they build, amounts to £3,000, of which Government expends £700 in keeping up the magistrate's establishment. No European is allowed to own soil in this district, and indeed can only open business upon sufferance, for which Government sanction must first be obtained. The natives consisting chiefly of Basutos, Fingoes, and Bastards, raise immense quantities of maize, wheat, &c., and, like the farmers of the ward of New England, which they adjoin, supply the country for a considerable distance, as far as the Diamond-fields. About 35,000 sacks of grain is estimated to be the annual amount raised. This is the country to which natives retire after a time of successful service down in the Colony, and to which they are continually returning, generally laden with stock as the reward of service. Stock thus accumulates to a great extent; in fact, the whole district is fully grazed, and flocks

require to be sent away from time to time to new pasturage in Basutoland or elsewhere. The country generally is exceedingly beautiful, and the scenery grand; the mountains are imposing, and there is nothing of Nature on a small scale. All water flows direct into the Orange River, which bounds the district on the north side. In most respects the country is identical with New England, before described. It forms, in fact, one range of mountains, of which the highest ridge is taken as the separating line. Except on horseback, these mountains cannot be crossed, and no communication between Herschel and New England can be effected but by an enormous detour, twice the direct distance.

The district of Wodehouse was created as recently as 1872, by portions being taken out of the surrounding districts of Queen's Town, Albert, and Aliwal North, the last-named contributing more than two-thirds of the whole extent. Probably this is the coldest district, as it is the most elevated, in the whole Colony. The Stormbergen range crosses it and divides the watershed of the rivers which flow eastward into the Indian Ocean, such as the Indwe and Kei, and those which feed the Orange River flowing westward.

Wodehouse differs from Aliwal North chiefly in its possessing more of mountain country, similar to New England, which it adjoins, the Kraai River being the boundary. This tract has but recently been added to the surveyed portion of the Colony, and had been known for many years previously under the general name of Waschbank lands. It extends to the ridge of the Drakensberg or Quathlamba, from which one can see across Nomansland even to the Indian Ocean. This portion of the district of Wodehouse is farmed at the disadvantage of possessing no "brak soil," without which stock cannot thrive

or even exist long. Hence farmers must purchase salt to a large extent; and the evil of dear and inefficient land carriage is forcibly shown by increasing this necessary article from 7s. 6d. a bag at Port Elizabeth to 50s. before it reaches the consumer.

A township has been laid out sixty miles to the north-east of Dordrecht in the Lange Kloof, and named after the present Governor, "Barkly." It is expected to succeed, as Dordrecht, the capital of the district, is too far distant to be often visited. The neighbourhood is supplied with shops, which are scattered all over the country, and a Dutch Reformed Church has been flourishing for some years. In all likelihood there is no part of the Colony where farms are so mountainous as in these highlands. One is lost in the deep kloofs and gorges, and a plain is altogether unknown. As might be expected, the country is well supplied with rain, and crops can be cultivated to any extent. No storing of water in dams or reservoirs is necessary, nor would such structures stand against the torrents which rush down when heavy storms occur. Stock is farmed at a disadvantage, however, owing to the extreme cold in winter, snow falling from April to August or September: and farming is not yet sufficiently advanced to provide shelter during the severe weather, and still less to raise crops for use in such seasons. Hence great numbers of sheep, horses, and cattle succumb at times, and flocks do not increase as fast as in other parts of the district. Grain could be sent away in great quantities but for the bad state of the roads, which at present are barely passable, and at times not even that; matters are, however, mending in this respect. The inhabitants have pioneered a new route to the sea coast across the Drakensberg, which, if properly opened up, may prove of great use. This road proceeds from Barkly along the Langekloof to the summit of the Drakens-

berg, where it descends abruptly some thousand feet near the sources of the T'Somo, a tributary of the Great Kei, and joins the main road through Kafriland, having communication with East London and Natal on one hand, and King William's Town on the other.

Dordrecht, the seat of magistracy, distant forty-eight miles from Queen's Town, has the same history as to origin and progress as Lady Grey. It has, however, gone far beyond the latter place in material prosperity, since it is fed by traffic and business from all directions, and has steadily advanced in size and importance for some years past. The site in itself, however, is bad in nearly all respects, and little can be done to make the place attractive, except for business purposes. The usual buildings in a country town of this size have been erected, such as public offices and town-hall, Dutch Reformed Church, bank, public library, &c. Close by the town is a kloof, forming in some parts natural and picturesque grottos, which abound in old drawings of Bushmen. These drawings are found in caves, or on smooth pieces of rocks, and in general the subjects are either animals or something of a war-like character. Most of the representations are in colour, and, remembering they must have been done many years ago by a race now nearly extinct, they have a peculiar interest attached to them. There are many specimens in other parts of the district, and they are naturally cherished by those to whom they now belong. It is a matter of regret that time is slowly effacing all these ingenious works of Bushmen, and that probably in another half century not one will remain. Fac-similies have been preserved by Mr. G. W. Stow and others, but real specimens for museums can seldom, if ever, be detached from the massive rocks on which the drawings are invariably made.

As in Albert and Aliwal North, the wealth of Wodehouse is derived from pastoral pursuits, wool being the chief product. The present prohibitive land carriage discourages the raising of corn beyond the immediate requirements of the inhabitants. The value of lands here, however, has increased from the upset price of 7s. 6d. per morgen, fixed by Government in 1872, to 15s. to 25s. per morgen, according to the improvements made. The country generally is treeless, although towards Nomansland the yellow-wood grows, and its timber is of value; for purposes where sun and moisture are excluded it answers well, but when exposed it warps and twists in an extraordinary manner.

A large portion of the Tambookie location is enclosed within the division of Wodehouse on the north-eastern side, and though the population is not so dense as in the adjoining part (in the division of Queen's Town) it may be estimated at 10,000, including Fingoes and Basutos. The resident magistrate, as the representative of Government, is looked upon as "the chief" by these natives, the mass of whom are heathen, not attached to the Government by any warm feeling of loyalty, but by self-interest in the security of property, impartial administration of justice, and facilities of accumulating wealth. About 400 bales of wool are yearly produced in the location, and almost every native has a horse, cows, and sheep, or goats; some have wagons, and agriculture is greatly extending amongst them.

The nearest sea-port for these north-eastern Border districts is the Buffalo River mouth, at East London, about 130 miles from Aliwal North *via* Queen's Town and King William's Town. But Port Elizabeth, although 330 miles distant, is at present the place through which the greater part of the imports are made,—the usual mode of carriage being the

lumbering ox-wagon, which, when drawn by sixteen oxen, carries about four tons at a rate of about twelve or fifteen miles per day. To remedy the disadvantage of such expensive and tedious transport, works designed to improve the harbour of East London, and a railway from there to near the foot of the Stormbergen, have been authorised by Parliament, and are now in course of construction. The railway as far as Queen's Town will be 150 miles in length, and is calculated, with stock, to cost £1,069,000. Already the earthworks have been made up to King William's Town, and in another year the first portion may be opened for traffic. The importance of the undertaking in its immediate benefit to trade, as well as in its indirect influences upon the civilization of the native races, cannot be too highly estimated. The country traversed by it is one of the richest and fairest parts of the Colony, capable of supporting a dense population, and producing agricultural and pastoral products almost to an unlimited extent, while adjacent to it are the territories of Kaffraria, Basutoland, the Free State, &c.

The success of the harbour improvements at East London will likewise have an important bearing on these districts and territories. If the "bar" at the Buffalo River mouth can be removed, the broad deep reaches inside will form the most commodious natural docks possible, with water acreage and quayage sufficient to accommodate several hundred ships or steamers. Every other year the floods or freshets in the river serve to clear the bar to a depth of seventeen feet, and vessels are then able to pass inside and discharge cargo without the use of surf-boats or the delays and risk attendant upon lying at an open anchorage outside; but usually after these floods the bar is liable to silt up again. The works now in progress, under the direction of Sir John

Coode, are intended to keep the passage permanently clear. Training walls, which will form quays, are being built inside the river so as to narrow the channel and thereby increase the scour, and a breakwater of concrete blocks, like that of Portland, is being built in the form of an arm outside, to prevent the sea from checking the action of the river and driving the sand back upon the bar. Notwithstanding the disadvantage of uncertainty which the port has hitherto laboured under, its trade has made remarkable progress. The value of direct imports has advanced from £51,000 in 1872 to £527,521 in 1874; while the exports, which in 1870 were £33,000, amounted to £96,985 in 1874. The quantity of wool shipped in this last year was 1,340,579 lb., but in 1872 it was higher, viz., 2,060,067 lb. It should be borne in mind, as already stated, that in addition to this a large portion of the Border trade still finds its way through Port Elizabeth.

The Border trade comprises a very extensive business with the native Kafirs, Fingoes, and Basutos. King William's Town and Queen's Town are the centres where this branch of commerce is especially studied and developed, hundreds of shops and out-stations having been established by them throughout the several locations, as far as St. John's River and its tributaries, and over the mountains into Basutoland, supplying native wants. For the "red Kafirs," or heathens, there are varieties of beads, brass-wire, chains, and red clay, of which they are large consumers. For those in a transition state there are imported ornaments such as arm-rings, bracelets, ear-rings, &c.; but the chief item is the woollen blanket,—it is generally in use, and at least 60,000 change hands at King William's Town in the course of a year. Cotton blankets and sheets are also in request. The demand for European clothing

as well as for agricultural implements is greatly on the increase. The purchasing power of the natives for these and other articles is at present estimated at not less than £400,000 a year, and their productions—such as wool, Angora hair, hides, horns, goat and sheep skins, tobacco, and grain, and cattle—are valued at three-quarters of a million sterling per annum. The amount of native produce purchased by one firm alone in King William's Town we know to have been over £58,000, from January to December, 1873. Wool forms the chief staple among the Fingoes and Kafirs, but in the district of Herschel a great deal of grain is raised, and Basutoland last year supplied 300,000 bushels to the Free State and Diamond-fields. Leaf tobacco is produced in considerable quantities by the Galekas and Pondas; and the natives near St. John's River do a large trade in cattle, taking blankets and other articles in exchange.

This industrial progress of the natives, so observable in many directions, is very hopeful of promise for the future. The increasing desire to possess property, as evidenced by the eagerness with which they compete at the Government sales of land or leases,—their demand for ploughs, of which more have been sold within the last two years than during the ten years before,—for wagons, saddles, tools, and household requisites, and clothing,—all show that they are rapidly acquiring wants which will induce amongst them a spirit of work and labour as opposed to the spirit of idleness hitherto characteristic of their race. Another favourable indication is the willingness with which they now pay for the education of their children, whereas formerly they considered they conferred a favour by sending them to free institutions. At the Lovedale Industrial Seminary last year, about £1,000 was paid by natives; and the Rev. Mr. Mullins,

principal of the Kafir Institution at Graham's Town, says "it is quite cheering to witness the readiness with which they pay for education now as compared with a few years ago." In Fingoland £1,500 has been subscribed by the people themselves for an industrial institution similar to Lovedale, and although some may have contributed to please others over them, there is little doubt the work has originated from an honest desire on the part of a great many to place educational advantages within the reach of their children. There are a few colonists who may not regard these movements very favourably, and are occasionally loud in denouncing the thousands of "niggers wallowing in idleness, pampered by missionaries and other philanthropists," while their fields and flocks are without labourers or herds. The Kafirs and Fingoes take all such vapouring very philosophically, seeing no reason why they should work for the farmers' benefit. But civilize them, increase their wants, show them the value of labour to themselves, and the result will be very different. This is what the missionaries in Kafirland are labouring to accomplish; and much of the progress the natives have hitherto made is due to them.

## SEASONS AND CLIMATE.

To many persons the clear sky and brilliant atmosphere of the Cape are an attraction in themselves, apart from more material considerations the colony may present. Being situate in the temperate zone, it possesses the mildness and salubrity so congenial to invalids, or those of delicate frame; and yet one may select within its borders, according to the locality and the time of the year chosen, whatever temperature or weather may be thought desirable for enjoyment—whether pleasant, fine, and dry, or wet and inclement—extreme heat, or bracing frost and snow—such are the transitions obtainable as at the different seasons the coast is exchanged for the inland plains or the high mountain lands.

The seasons come in reverse order to what they do in the northern hemisphere, and may be thus defined:

AT THE CAPE.		IN EUROPE.	
December... ..	} <i>Summer.</i>	{ June,	
January ... ..			{ July,
February ... ..			{ August.
March ... ..	} <i>Autumn.</i>	{ September,	
April ... ..			{ October,
May ... ..			{ November.
June... ..	} <i>Winter.</i>	{ December,	
July ... ..			{ January,
August ... ..			{ February,
September ... ..	} <i>Spring.</i>	{ March,	
October ... ..			{ April,
November ... ..			{ May.

There is, however, some difference in the period of the commencement, as well as in the character, of the seasons in the south-western and north-eastern portions of the Colony. In the west the seasons are generally a month earlier than in the east. The north-west winds prevail during the winter of the west, carrying regular and copious supplies of rain to the first boundary of the Karoo plains; whilst in the east, during the spring and summer, the north-eastern winds, laden with moisture from the ocean, scatter refreshing and fertilizing showers. In the central basin of the Colony, again, the rain fall is more irregular and limited, being greatly dependant upon the electrical conditions of the atmosphere.

The Colony, generally speaking, is not a hot country. The greatest heat of calm summer days is not more than in the hottest parts of Europe; and these are extraordinary, and last but for a short time. The prevailing winds and the dry atmosphere temper such excesses, rendering the warmest day quite supportable; and the balmy coolness of the nights are surpassingly agreeable and enjoyable. Nearly all the old travellers and visitors testify to the beauty of the climate, and in the statistics of the Army Medical Department it stands as one of the healthiest in the world. This has led to its being highly recommended as a sanitarium for European invalids, especially those suffering from the various forms of pulmonary diseases. The researches of Major Tulloch and Dr. Balfour show that the low ratio of mortality among the troops stationed here in their time was greatly attributable to the extreme rarity of diseases of the lungs; and Dr. Ross, the health officer of Cape Town, has shown from the books of Somerset Hospital that, out of 2,722 patients sent there for treatment of all types of diseases, not more than 84 have died of lung complications in five years. These

facts, as well as the remarkable exemption from cholera, fevers, hepatic, and other affections which colonists have hitherto enjoyed, are set forth by Dr. Ross in an interesting paper on "Our Climate,"\* published in 1869, in which he says:—"Here, then, in South Africa, we can offer a home to the delicate which, within a moderate radius from Cape Town, affords several distinct climates for those whose lungs, livers, or joints are painfully out of gear. These atmospheric differences are as distinctly marked by local peculiarities and characteristics as are Torquay, Bournemouth, Hastings, or the Isle of Wight, and are all within the soothing influences of sea breezes and the sandy beaches of our numerous bays. It is partly owing to the shelter of woods, and partly to the proximity of mountain peaks, that there is such a very pleasant difference to be found in the qualities of the air and the degrees of temperature along our coast, both of the eastern and western provinces. The intervention, too, of hills, and the existence of well-wooded ravines, are not confined to a few favoured spots, but form a feature of the colony, which, in connection with elevation above level of the sea, and the direction and velocity of local winds, makes all the difference between the Frontier, Seaboard, and Karoo districts, and which are, on the question of residence, a fit subject for medical advice. . . . The best period for arrival is towards the end of August. A long sea voyage by sailing vessel is an admirable introduction to the lovely scenes which September, at the Cape, yearly produces. The fields are then covered with verdure; the hills and plains are brilliant with patches of bulbs and heather in full bloom; and all nature is gay with the surpassing freshness and variety of spring. The air is then truly intoxicating; while the purity and transparency of the atmosphere

\* *Vide* "The Cape and its People." Juta & Co., Cape Town.

is such as literally to stagger the minds of many who have been only accustomed to judge of distances through the medium of haze, and cannot be brought to realise the fact that mountains fifty miles off are as plainly visible as if within half-an-hour's walk, and to the naked eye as minutely traceable as by aid of telescope. . . . It is, however, in winter months that Cape Town forms the most pleasant of residences for invalids. Being well sheltered by mountains, there is always plenty of calm, clear weather, and even in the stormiest season of the year, as in May, when the north-west gales are tossing enormous breakers against our iron-bound coast, and but for breakwater works would be making wild havoc among the shipping of our bays, a night of destruction will be followed by perfectly heavenly weather, lasting perhaps for five or six days. During this period of exquisitely calm and temperate days, we are always blessed with Italian skies, and with air so cool, so soft, so dry, so grateful to the lungs, that it is a positive source of happiness to feel oneself to be alive." "No climate in the world," says Dr. Stovell, "could be more agreeable to the feelings—and very few more beneficial for the usual class of Indian invalids—than a Cape winter. There is an invigorating freshness about this season equally delightful and beneficial; the moment the rain ceases the clouds rapidly clear away, and the sky remains bright for several days."

More recently, in the *Lancet* for 1873, a valuable series of papers have been contributed by a lay correspondent who has had personal experience of the country as an invalid, and who declares that, "taking the whole of the colony into consideration, there are few better climates in the world than can be found here."

Meteorological observations have been, and are still being carried on in various divisions of the Colony, under the auspices of a commission appointed

by Government, and the tabulated results obtained generally published in the official Blue-book. But at the Royal Observatory, in the neighbourhood of Cape Town, there has been a systematic register kept for many years, which shows as a result that the mean temperature of the air throughout the year is about  $61^{\circ} 26'$  Fahr., in the shade, the hottest days being in January, with an average temperature of  $68^{\circ} 92'$ , the coldest about July, with an average temperature of  $54^{\circ} 03'$ . Elsewhere the observations have not been extended over any long period, but they are sufficiently reliable to serve as an index to the climate. For instance, we have the extreme limits of temperature at the following points:—

	HIGHEST.				LOWEST.			
				°				°
Graaff - Reinet	1865	December 20	105.0		1864	June 24	28.0	
Worcester .....	1868	January 10	106.5		{ 1862 May 30 } { 1863 June 28 }		29.5	
Mossel Bay ...	1862	March 24	97.0		1862	July 17	39.0	
Port Elizabeth	1867	January 31	92.0		1868	August 22	41.0	
Simon's Town	1865	March 11	95.0		1862	September 25	42.0	
*Amalienstein	1868	January 11	110.7		1867 { June 17, 21 } { July 21 }		27.5	
Royal Obser- vatory .....	1864	March 18	99.5		1864	June 8	39.8	
Graham's Town	1858	February 6	106.5		1856	August 8	32.5	
Aliwal North...	1867	December 24	93.0		1867	June 21	20.0	

\* This is still less than in South Australia, where, during the hot months of January, February, and March, the temperature of the air on the plains about Adelaide exceeds 100 deg. for several days together, and rises to 115 deg.

The general observations made at Graham's Town, Graaff-Reinet, and Worcester are also very noticeable.

	Height above sea level.	Mean Temper- ature.	Mean daily range.	Rainfall.	Humid- ity.
Graaff-Reinet.....	Feet. 2,517	64.41	24.52	13.196	55.98
Worcester .....	776	62.88	24.91	11.795	54.99
Graham's Town .....	1,750	62.65	18.59	32.591	70.30

We have here in evidence the high and great range of temperature, the small amount of rainfall, and humidity of the air at Graaff-Reinet. At Worcester the annual temperature is 1.5 degrees lower, yet the ranges, humidity, and rainfall are pretty nearly the same. At Graham's Town the mean temperature is 2 degrees lower than at Graaff-Reinet, but the diurnal range is 6 degrees less, and the rainfall  $32\frac{1}{2}$  inches, or  $2\frac{1}{2}$  times more abundant. The times of observation are not coincident, but the intervals are of sufficient length to establish the relative types.

On the western coast, north to Namaqualand and Bushmanland—a tract of country particularly dry—there are marked extremes of heat and cold, which Mr. Wyley, in his observations on the climate there, attributes to the great evaporation caused by the dry winds which sweep over it.

On the eastern side of the Colony, up to the boundary of the Great Kei River, and nearing the tropic of Capricorn, there is an approach to a semi-tropical climate; but the winds from the Ocean, and the elevated formation of the country proceeding

inland, considerably modify the effect of decreasing latitude. The land rises in a series of steppes from the sea to the interior, and the higher country has a most bracing atmosphere. The air is dry, and in summer warm, but never, or only for a short time, oppressively so, owing to its dryness. During winter, again, on the coast, the warm ocean current coming down from the tropics moderates the temperature; and during the season, if there are any frosts, they are not sufficient to kill, or even damage, any sub-tropical plants that may be under cultivation. But in the Midland and Border districts thick ice is formed on the water, and there are sometimes very heavy snowstorms; and on the mountain ranges the snow lies for several days together. In the south-western districts, as a rule, fires are only used in the dwelling-houses for cooking purposes; but in the highlands of the midland and north-eastern parts, the cold is such as to require the old familiar comforts of "home."

The rainfall in the neighbourhood of Cape Town, and over a considerable part of the Colony, is equal during the year to the average fall at Greenwich or Edinburgh. During twenty years of observation recorded at the Royal Observatory, the mean quantity was upwards of 24 inches—the lowest being 18·8 inches in 1844, and the highest 36·7 inches in 1859. But the impression of a wet or dry year sometimes depends less on the quantity than on the number of days on which rain falls, so as seasonably to promote the germination and growth of vegetable productions. We have a guide to this in the following table, showing the number of days on which rain fell in the neighbourhood of Cape Town in the years 1752, 1858, 1859, and 1862; and any departure from this average is exceptional. The first is extracted from the journals of the French astronomer, La Caille (who was

here in 1752), and the others are given by Sir Thomas Maclear:—

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Amount of rain.
	days	days	days	days	days	days	days	days	days	days	dys	dys	days	in.
1752	7	4	5	10	11	8	11	10	6	12	11	8	103	...
1858	8	5	7	8	7	8	10	14	8	10	5	3	93	24.1
1859	9	6	4	4	12	14	13	15	6	13	6	7	105	36.7
1862	4	6	4	5	8	15	14	15	10	14	8	2	105	32.0

The rainfall of the country districts occurs in a very singular way. Generally, beyond the first range of mountains the supply of moisture diminishes, and some tracts will be for many months without even a passing shower. From the registers, we find the fall at Bishop's Court and Wynberg, along Table Mountain, as high as 44 and 39 inches per annum respectively; while at Worcester it is only 11 inches; at Bredasdorp (Caledon Coast), 14 inches; at Amalienstein, 31 inches; at Concordia, Namaqualand, about 9 inches; at Lower Nels Point (Beaufort West),  $9\frac{1}{2}$  inches; Goliath's Kraal, near Graaff-Remiet,  $13\frac{1}{2}$  inches; at Port Elizabeth, 26 inches; at Graaff-Remiet, 14 inches; and at Aliwal North\* about 25 inches. It

\* From observations taken by R. Dowling, Esq., from 1866 to 1874 the mean rainfall at Aliwal North was deduced as follows—Rainfall for January is 3.775 inches, with 24 rainy days; February, 4.89 inches, with 11.5 rainy days; March, 3.32 inches, with 12.5 rainy days; April, 1.83 inches, with 8 rainy days; May, 1.11 inches, with 7 rainy days; June, .56 inches, with 2 rainy days; July, .47 inches, with 3 rainy days; August, .51 inches, with 4 rainy days; September, .77 inches, with 6 rainy days; October, 2.04 inches, with 8 rainy days; November, 2.87 inches, with 9 rainy days; December, 2.99 inches, with 10 rainy days—giving a mean annual fall of 25.31 inches, extending over 95 rainy days.

increases towards Kaffraria, and on to Natal, where the rains are inter-tropical. However, even the driest districts of the Colony at times are visited by deluging thunderstorms, and every year the rivers tumble into the sea as much water as might convert the whole country into corn-fields, vineyards, orchards, and rich pastures, if only proper measures were taken for using it—

If we could but stay the streams  
Which past us flow, while we, too slow,  
Stand wrapt on the bank in dreams.

The winds which generally prevail at the Cape, as already stated, are the north-west and south-east; others only last a short time, and frequently are merely transitions from the north-west to south-east and *vice versa*. There is a notable phenomena attending one of these winds—the "south-easter" or the "Cape doctor" as it has been termed, which blows most frequently from November to March. Then appears the cloud on Table Mountain known as the "Table Cloth," which to a stranger has a singular effect, and in certain conditions is to every observer of Nature, no matter how often he may have seen it, a truly magnificent sight. The wind charged with vapour rises from the sea south-east of the Cape in masses of white fleecy cloud which steal over the mountain until they cover the highest summit with a dense white sheet, the upper surface of which usually assumes a well-defined outline, and appears to remain stationary,—a veritable table cloth,—while the lower part condensed by contact with the heated rock disappears in light woolly flakes as soon as it has fallen a few yards; or at other times rolls like a mighty cataract, a perfect Niagara of vapour, over the precipitous sides of the mountain, until it becomes invisible and blows with tempestuous force over the valley and city, raising whirlwinds of dust and drying up the ground and gardens.

Hot winds are experienced occasionally during summer in some of the Eastern Districts. They blow from the north-west, carrying with them waves of heated air from the central plains, and raising the temperature to  $118^{\circ}$  and  $120^{\circ}$ . Fortunately, they are not of long duration, for they are most objectionable and uncomfortable.

Hail storms are not very common in the south-west, but in the Northern and Border districts they occur with such violence as to cause considerable damage to vegetation and stock.

Thunderstorms are also comparatively rare in the neighbourhood of Cape Town, but more inland and along the Northern and Eastern border they are frequent and at times very fearful and grand. The ordinary indications of their approach are snowy clouds rising on the horizon, and swelling and darkening until the lightning flashes along them and the thunder peals out with prolonged and increasing reverberation. It is then a magnificent sight to watch the brilliant colours and forms of the electric discharges and their varied track against the inky black sky—now forked, now straight, now zig-zagged, now in quivering rays and horizontal flashes, appearing and disappearing rapidly, in the twinkling of an eye. Such striking exhibitions of Nature's elements, however, do not last very long; after them the rain ceases, clouds roll up and disperse, and a delicious and exhilarating cool atmosphere succeeds.

## LAND TENURE AND LAND LAWS.

Although the greater portion of the most valuable land within the old settled parts of the Colony has already been alienated and become the property of private individuals, there are still many eligible spots in the coast districts, and large tracts in the Midland and Northern territories, which belong to the Government. These are approximately estimated at 50,000,000 acres. This colonial domain embraces dry pastoral plains, rich forest lands, and well-watered mountain slopes, capable of yielding varied productions. Until lately no effort was made to turn these possessions to account, and they were allowed to lie waste and unoccupied. The exigencies of Government, however, enforced attention to them a few years since, and the result has been the enactment of land laws offering facilities for lease and purchase to all classes of people, which are gradually bringing the whole country under occupation and developing a rich mine of wealth in the expanding rent-roll of the Colony.

Before stating what these laws are, we may briefly glance at the systems under which lands were granted in the "good old times." The early settlers, after the first occupation of the Cape by Van Riebeeck, had small freeholds given to them along the skirts of Table Mountain; these did not exceed twenty acres, and were burdened with the payment of tithes and other servitudes—to one of which, the planting of trees, the vicinity of Cape Town is still indebted for its present embellishment. In addition to this, tracts of land adjoining those freeholds, or in other parts, were granted under the name of "loan places." The tenure of these was at the will of Government. Any-

one desiring a loan farm selected the spot he deemed suitable, planted his mark and put down his name for it for a while to make trial of it, or to see if any one had ground of objection; if not, he got it on loan or annual lease, renewable on payment of the rent fixed by the Government—generally an assessment of one-tenth of the stock the ground was estimated to maintain, or a nominal value of £4 16s. per annum. No legal title was issued, nor survey made; the position of the land being defined by a central point, which was generally a local feature, as a spring of water or conspicuous rock, and often a beacon was placed when no local feature existed. From this central point commonly known as the “ordinantie,” the right of the lessee extended no further than a walk of half an hour direct, which was considered to be, and adopted as the radius of a circle containing 3,000 morgen (over 6,000 acres). The uncertainty of the “loan” tenure does not seem to have prevented the frequent transfer of those places by sale, and although the buildings and improvements were the only property that was ostensibly sold, the value of the land was allowed to be indirectly included in the consideration; and a transfer duty (the “heerenrecht”) was levied upon this, as well as upon all other lands and houses which exchanged hands, from as early a date as 1686.

These “freehold” and “loan” tenures and some short “quitrent leases” were the terms on which lands were held up to the time of the cession of the Colony to England. Then in October, 1812, a proclamation was issued expressing the “intention of Government to grant land on perpetual quitrent,” and in the following year it was determined to allow the holders of all lands on *loan* who might regularly apply for the same, to convert their places into perpetual quitrent properties, and to hold the same hereditarily for the annual payment of a sum to be

prescribed according to the situation, fertility, and other circumstances of the ground, but in no case to exceed 250 rix-dollars (£18 15s.) per annum. The object of this was, as Governor Sir John Cradock's proclamation states, a paternal desire on the part of Government to give to the farmers the security of title to their land without any claim to resumption, so that they might be encouraged to "*improve and extend agriculture* by having the right to dispose of their places as they chose, by dividing the same among their children, letting, selling, or otherwise alienating it, and *cultivating it in the prospect of remote benefit by the planting of timber, &c.*" Thus began the perpetual quitrent tenure, a small annual payment dependent on the value and circumstances of the land, which continues in force as an essential feature of the laws at the present time. In all cases, however, the Government made a reservation of its rights on those lands to precious stones, gold and silver, as well as of making and repairing roads, and raising material for that purpose.

During the period up to 1830, the disposal of colonial lands was the prerogative of the Crown, exercised by the Governor, and there are many stories told of the manner in which the colonists in these early days secured farms by favour or interest. This system, however, was set aside by instructions from the Secretary of State in May, 1838, and the rule laid down that lands in future were not to be alienated except by public sale, and that no further applications for loan or "request places" would be received. A few years later, in 1843, the redemption of quitrent and the conversion of the tenure into freehold on the payment of fifteen year's purchase was sanctioned as a temporary measure, in order to replenish the colonial exchequer. At the first sales which were held at that time (1844), the upset price

was by rule fixed at 2s. per acre, and many extensive and valuable areas got into the hands of speculators, who retained them in many cases unoccupied until a favourable opportunity occurred of disposing of them. In a short period the proprietors saw their estates growing more valuable every year, independently of labour, industry, or skill; while in cases where these were exercised, a certain competence and largely increased wealth was ensured. The advantage to the Government, however, was not so evident, and an apprehension that the continuance of the system would lead to results similar to those which followed the destruction of the goose that laid the golden eggs caused a stop to be put to it.

A special exception to the general rule in the disposal of land, was made after the last war, when Sir George Cathcart, and subsequently Sir George Grey, gave grants of farms on the frontier and in Kaffraria, on conditions of military service or defensive occupation; but these conditions being found no longer necessary, have since been relaxed, and the occupants continued in possession on the general quitrent tenure.

The Land Law of the Colony now in force is contained in the Act No. 2 of 1860, which provides for the *sale* of all Government lands on perpetual quitrent by public auction, excepting grants made for public purposes with the concurrence of the Legislature. A subsequent enactment (Act 19 of 1864) authorises lands to be *leased* by public auction for periods of from two to twenty-one years; and another (Act 5 of 1870) gives the lessees permission with the consent of Government at any time during the continuation of their twenty-one years' leases to *purchase* the land at a sum not less than the rent capitalised at six per cent., and a quitrent of £1 per cent. For the encouragement of small agriculturists a further Act was passed (No. 4 of 1870) making provision for the

disposal of agricultural areas in allotments of not more than 500 acres; the terms, for conditional purchase, being an annual rental of one shilling per acre; and of absolute purchase, the payment in advance of ten years' annual rent, and the expenses of survey and title. Extents of Crown land not yet surveyed are let by the civil commissioners from year to year by auction, without reserve, the various lots being roughly defined by description only, published in the *Government Gazette*.

To acquire land under the Act of 1860, the first step is to make application for its purchase to the Colonial Secretary, or to the Divisional Council of the district in which it is situate, setting forth as far as practicable the position, boundaries, and extent of the land referred to. This application is referred to the Surveyor-General and also to the Divisional Council as a local land board, who may make an inspection and report as to any circumstances connected with it, and give instructions as to survey, diagram, &c., being prepared, the amount of cost of which the applicant may be called upon at once to deposit. These reports being favourable, the Surveyor-General takes steps for fixing a day for the sale of the land, which, after being duly advertised, is held by public auction at the office of the civil commissioner of the division. It is usual to name an upset price which will cover at least the expenses of inspection, survey, erection of beacons, and title-deed, and then it is disposed of to the highest bidder. The conditions as to payment of the purchase-money are, that the survey expenses be paid on the day of sale, and one fourth of the balance within three months after, failing which the sale lapses. When the sale is effected the purchaser has the option of discharging the whole or any portion of the remaining three-fourths of the purchase amount at once, or by passing the necessary

bond to mortgage the land for the balance, payable in three instalments at five, six, and seven years respectively, with interest at 6 per cent. per annum.

Parties wishing to secure small pieces of Government land adjacent to their own properties, and within the watershed, may make application for the same, and according to the recommendation of the Divisional Council or the Surveyor-General, such ground may be so allotted or divided amongst two or more farms as may be deemed just and expedient, at a reasonable and equitable price to be fixed by the Council and approved of by the Governor not being less than the expenses of survey, deed, &c., and subject to a quitrent.

Of late years, the Land Law of 1860 has not been so largely availed of as previously, excepting for the purposes last mentioned of securing particular lots of land.

The Act of 1870, which enables lease-holders to convert their leases into perpetual quitrent tenure, is now more generally taken advantage of by those who are desirous of making purchases of extensive tracts of the waste lands. The mode of leasing is regulated by Act 19 of 1864 and Act 4 of 1867, which empower the Governor, with the advice of the Divisional Council, to offer lands for lease at public auction for a term not exceeding twenty-one years, to the bidder of the highest annual rent, not being less than an upset price fixed according to the average value of the land. The lands offered for lease, and the terms and conditions of lease are advertised from time to time in the *Government Gazette*, and the local papers. The rent is to be paid annually, and payment for the first three years is to be secured by sufficient securities, but a payment of two years' rent in advance may be made in lieu of giving such securities. The lease is not transferable, nor to be sublet, either wholly or in

part, without the previous sanction of the Government, but the latter has the right at any time of resuming the whole or part of the land so leased on giving compensation to the lessee or remitting portion of the rent as may be agreed upon by arbitration. When a lease has not been sold for the upset price at auction, the Governor may dispose of it by tender or private contract, at any rent exceeding the highest offered at the sale, but only for a term of twelve months, when it has again to be put up to public sale, and if a higher bid than the private offer should then be made, and proper security given, Government is bound to grant the lease to such highest bidder.

The liberty of purchase of the property so leased is provided for by Act No. 5 of 1870, which gives to the Government the option of selling, but requires that the sum received shall not be less than that which capitalized or reckoned as a principal sum at six per cent. would produce a yearly rent equal to the rent reserved on such lease; and in the event of the amount demanded by Government being greater than such principal sum, the matter may be referred to arbitration. The land is also subject to a perpetual quitrent of one per cent. on the purchase-money. As soon as the price is agreed upon, the amount may be paid at once, when title will be immediately granted, or the purchaser may pay it in three instalments, the first forthwith, and the other two at intervals of one year respectively; but until the entire sum is paid the terms of the subsisting lease continue.

The progress of the occupation of land under the leasing Act of 1864 has been very marked. During 1866 the quantity of land leased was 605,118 morgen; in 1867, it was 731,372 morgen; in 1868 it was 137,345 morgen; in 1869, 1,154,759 morgen; in 1871, 1,730,729 morgen; in 1872, 2,051,354 morgen; and in 1873, 1,625,159 morgen. The rents paid vary according to locality and circumstances. In 1867 the

average yearly rent realised *per 100 morgen* was in Albany, £2 4s.; in Cradock, £2 5s. 4d.; in Hope Town, 16s. 8d.; in Colesberg, £1 10s. 3d.; in Fraserburg, 13s. 8d.; in Riversdale, 3s. 3d.; in Worcester (Karoo), 1s. 6d.; in Richmond, £1 0s. 8d.; in Malmesbury, £2; and (in 1868) at Graaff-Reinet, 19s. 9d.; Murraysburg, £1 1s.; Victoria West, 8s. 2d.; Namaqualand, 11s.; Hope Town, 18s. 1d.; and Cradock, £1 3s. 9d. In 1873, the rents *per 100 morgen* were:—At Humansdorp, 12s.; Clanwilliam, 3s.; Uitenhage, £2 9s.; Robertson, 14s.; Victoria West, £1 3s.; Beaufort West, £2 5s.; Queen's Town, £4; Cradock, £3 18s.; Prince Albert, 15s.; Fraserburg, 18s. The rate for King William's Town division was £16 14s. *per 100 morgen*, but this is exceptional, being principally for Kabousie allotments with commonage rights, and otherwise for comparatively small sections of good land. The rate of rents for the whole Colony for 1873 was £1 6s., and excluding King William's Town, £1 3s. *per 100 morgen*.

The increase of the rent-roll of the Colony is shown by the following returns of the land revenue from 1870:—

	1870.	1871.	1872.	1873.
Quitrent ... ..	£24,726	£25,807	£27,127	£25,725
Lease Rent under Act 19 of 1864 .. ..	19,797	28,683	46,582	62,429
Do. other Leases ... ..	8,999	10,297	15,523	9,306
Hut Tax ... ..	8,384	11,052	10,656	12,275
Islands ... ..	1,636	1,246	1,548	983
Timber Licences ... ..	662	1,120	1,530	2,549
Fishing do. ... ..	...	..	...	63
Mineral Leases ... ..	43	51	152	86
Licences to Grazing Cattle	1,116	1,513	932	577
Do. remove Guano and Salt ...	542	623	209	333
Do. cut Firewood ... ..	...	...	...	...
Sundry Receipts ... ..	38	15	21	39
Total ... ..	£65,935	£80,407	£104,280	£114,365

From the preceding, it will be seen that the rents received in 1873 for waste lands leased under Act 19 of 1864 amounted to £62,429. This at six per cent. (the minimum rate of conversion) would give upwards of £1,000,000 as representing the value of the lands then surveyed and leased if realised under the provisions of Act No. 5 of 1870. The survey of many more millions of morgen of these waste lands is still proceeding, and from time to time these are put up to public competition.

The purchase-amount of the lands sold under the Act 5 of 1870, up to the end of 1873 approached near to £300,000 besides yielding a perpetual quitrent of one per cent. per annum. The whole of this capital sum was until lately placed to the credit of the sinking fund, set apart for the liquidation of the Colonial debt; but now it is included in the general revenue available for carrying on railway and other works. A sinking fund for the repayment of the colonial debt has been specially provided by the Consolidated Public Debts Act of 1870, which will secure the extinction of the whole debt in thirty-seven years.

The following figures showing the extent of the lots of Crown lands sold, and the average value per morgen\* paid for them in 1873, will inform the reader of the price at which these lands may be acquired in the Cape Colony:—

*Amount and Value of Crown Lands sold in 1873.*

DIVISION.	EXTENT OF LOTS.				RATE PER MORGEN.
	Morgen.	Sqr. Rds.	Morgen.	Sqr. Rds.	
					£ s. d.
Aliwal North .. ..	705	..	..	...	0 12 9
Albert .. ..	1,224	20	..	..	0 10 0
Albany.. ..	1,486	..	..	..	0 16 2

\* A morgen may be assumed as equal to 2.11654016 imperial acres.

DIVISION.	EXTENT OF LOTS.				RATE PER		
	Morgen.	Sqr. Rds.	Morgen.	Sqr. Rds.	MORGEN.		
					£	s.	d.
Beaufort West..	..	from 367	300	to 11,607	516	0	1 6
Bedford ..	..	.. 674	..	.. 1,721	213	0	8 4
Bathurst ..	..	.. 1,077	477	.. ..	..	0	7 6
Craadock ..	..	.. 295	201	.. 3,205	252	0	7 0
Colesberg ..	..	.. 556	174	.. 7,284	17	0	2 8
Calvinia ..	..	.. 1,317	359	.. ..	..	0	1 6
Cape ..	..	.. 5	275	.. ..	..	20	0 0
Clanwilliam ..	..	.. 2,433	398	.. 2,635	133	0	0 5
East London ..	..	.. 559	30	.. ..	..	1	3 10
Fraserberg ..	..	.. 1,007	235	.. 14,362	280	0	2 2
Graaff-Reinet ..	..	.. 134	230	.. 10,200	450	0	3 0
Hope Town ..	..	.. 136	6	.. 10,866	...	0	5 10
King William's Town..	..	.. 26	240	.. 885	85	1	2 1
Mossel Bay ..	..	.. 1,060	240	.. ..	..	0	5 6
Prince Albert ..	..	.. 507	96	.. 5,214	10	0	1 5
Queen's Town ..	..	.. 228	34	.. 6,420	526	0	9 6
Robertson ..	..	.. 397	280	.. 4,628	531	0	2 1
Richmond ..	..	.. 1,878	569	.. 13,034	208	0	2 10
Swellendam ..	..	.. 525	425	.. 72,714	381	0	2 6
Somerset East..	..	.. 564	330	.. 2,239	384	0	10 1
Tulbagh ..	..	.. 3,618	5	.. 8,362	270	0	1 3
Uitenhage ..	..	.. 282	444	.. 5,358	253	0	5 1
Victoria West ..	..	.. 134	350	.. 28,989	270	0	2 10
Worcester ..	..	.. 3,634	304	.. 17,997	512	0	0 11
Wodehouse ..	..	.. 837	565	.. ..	..	0	6 0

## PASTORAL AND AGRICULTURAL RESOURCES.

The Colony in its varied aspects and conditions, as already described, gives scope for every kind of pastoral and agricultural occupation. Numerous flocks of sheep and goats, and herds of cattle and horses, feed entirely on the natural plants and grasses; wheat, and all sorts of grain, give astonishing returns from the soil; and most of the products of the temperate or semi-tropical zone may with moderate ease and trouble be successfully cultivated. Farming here is accordingly, in judicious and industrious hands, a profitable as well as an independent employment.

It should be understood, however, by persons who are desirous of pushing their fortunes in this direction, that an initiation into the colonial peculiarities of climate, seasons, soil, pasture, management of stock, and, it may be added, native labour, as well as vernacular Dutch, the spoken language of the country, will be of very essential service. A new-comer would therefore do well to take up his residence for a time, or even to seek an engagement for a short period, with a good colonial farmer, whence he would soon acquire a knowledge and an experience that would be invaluable, and which with energy and enterprise would ensure success.

The conditions of life upon a Cape farm are much dependent upon the locality and character of the place. In the old settled districts—especially Stellenbosch, Drakenstein, and the Paarl—there are many magnificent estates, the possession of which one would be loth to exchange for all the attractions of a Con-

tinental principality. Situate on the hillsides, or nestling in the valleys, the homesteads are surrounded by trimly-kept vineyards and corn lands, or embowered among trees, orangeries, or orchards. They are large, substantial, white-washed, thatch-roofed dwellings, built of stone or brick, with a paved stoep or terrace along the front, and an ornamental central gable rising over the doorway to the level of the ridge of the roof, in the old Flemish style. The rooms are usually lofty, cool, and spacious, with polished boarded floors and ceiling, formed of the colonial yellow-wood. In many of these houses will be found every finished comfort of home life—music, pictures, books, and flowers, indicating the culture and tastes of the family; and the visitor who is introduced to them is invariably treated and cared for, during all the time of his stay, with unbounded hospitality. On the front and rear of the main dwellings there are long ranges of out-buildings, forming the wine cellars, grain stores, stables, and servants' quarters. Then there is generally an enclosure for cows and heifers, a kraal for sheep or goats, or a camp for ostriches. There is also an open square, termed the "werf," where three or four horses may be picking leisurely at the grass, while knee-haltered—that is, the head attached to the fore leg by a thong, tied in a peculiar knot below the knee. Or, standing under the trees on one side, there will be a Cape cart—something like an English spring dogcart, but covered with a tent of white canvas, supported on a light wooden frame-work. Or, failing the cart, there will be the genuine Cape ox wagon, with its glistening white canvas tilt, the heavy "reimschoen" beneath and the long "trektow" with its yokes attached, coiled neatly together and lying against the head of the pole or "disselboom," and the great bamboo whipstick and thong of plaited hide laid carefully along the side.

Within a radius of about a hundred miles from Cape Town, homesteads with surroundings of such a description may be seen at short intervals, almost within sight of each other; but after crossing the mountains and entering the Karoo they are few and far apart. The dwellings then met with are of a more primitive fashion—small houses of stone, or soft brick, thatched with straw or reeds, the rooms only three or four in number, and the floors of earth, or clay, or smeared with cattle manure—while adjacent to them are the sheep kraals, and a few huts or “pondoks” (the native shepherds’ quarters), where ebony-coloured urchins are rolling about in company of goats, fowls, or tame springboks. The picture may be relieved by some weather-beaten thorn or fig trees, or a clump of poplars, with a little bit of garden and cultivated ground; but usually it is bare and desolate enough. Many occupiers of such places are for several months of the year on the “trek,”—moving away with their flocks for change of pasture, and they and their families enjoying the healthy air of the plains, and living for weeks together in wagons or tents, or reed huts known as “haartebeeste houses”—only returning to their homes after the rains have fallen, when the fresh young grass has sprung up, or the aromatic bushes are flowering, and the country to the grazier’s eye is “supremely beautiful.”

The residences of the principal flock-masters in the Midland districts are, however, very comfortable quarters. Many of them, indeed, are big establishments, sometimes approaching to little villages, and embracing trading places which supply the general wants of themselves and neighbours, who may be far distant from a township. The stores at such stations combine everything for which a demand is likely to arise—produce as frequently as money being taken in exchange for the merchandise. There may also be a

smith's or a wagon maker's shop, a mill, or a wayside hotel, all carried on by the same energetic individual, uniting the superintendence of these matters with the ordinary avocation of sheep, cattle, or ostrich farming. This business versatility is, however, more generally met with as one proceeds northward and eastward. In the Eastern and Border districts, too, the farmhouses are of the square, brick-built English style, sometimes having thatch, or tile, but generally flat, or corrugated iron roofs, with cosy, comfortable interiors. Along the undulating slopes of Lower Albany, and over the mound-shaped hills of British Kaffraria, more than anywhere else, these settlers' homes approach in appearance to those of the rural districts of the old country.

Sheep and wool form the chief pastoral productions of the Colony, affording occupation to the greater part of its inhabitants, and contributing the principal amount to its exports. The origin of this industry dates back about eighty years. A Colonel Gordon, who was then (1790) in the Dutch service, received some thoroughbred Spanish rams from Europe. A few of these he parted with to the Van Reenen family, who made a commencement with them among ewes of the Cape hairy sheep, and in nine years afterwards 150 of these half-bred sheep gave them 3,300 head, carrying a good fleece. After Colonel Gordon's death several of his pure flock were taken by the captain of a merchant vessel from the Cape to New South Wales, where they fell into the hands of Captain McArthur, and formed the original stock of the merino sheep in that part of Australia.

Prior to this, the old colonists had the hairy, fat-tailed sheep of the country, which made very good mutton, and was prized for cooking purposes—the heavy tail taking the place of lard, while the skin was highly valued for tanning for home-made shoes,

jackets, and even breeches, familiarly known as "velbrooken." The farmers were very slow to appreciate the advantage of the wool-bearing animals. Apathy, and the prejudice proverbially ascribed to pastoral inhabitants in all countries; also the want of ready money to pay for rams, and the suggested difficulty of getting the fleece washed on the sheep's back—in those days considered a *sine qua non*—all contributed to impede the new enterprise. Still, in 1804, a merchant in Cape Town, Mr. McDonald, was able to purchase from one grower 4,000 lb. of wool for exportation. Another grower, who had been presented by a mercantile firm with a merino ram, came up from the Graaff-Reinet district to market with his usual supply of butter, skins, &c., and about 50 lb. or 100 lb. of wool from the first cross. After disposing of his load, he exhibited his small bag of wool, and several merchants purposely ran it up to a fictitious price—the astonished Boer receiving as much for it as for his whole load of butter. He returned home with his wagon full of rams, and the story of his wool sale did more than any argument, entreaty, or arbitrary order of the Government could have done to make what was then known as the country around the Sneeuwberg a wool-producing district.

At a later period, flocks of pure-bred sheep, similar to Lord Western's stock, were imported by Governor Lord Charles Somerset, and kept at the Government farm at Groote Post; and several others were introduced by the English settlers of 1820. Once the industry was fairly set in motion, a spirit of rivalry amongst those engaged in it was soon evoked. Messrs. Reitz and Breda, in Swellendam; Mr. Van Reenen, of Ganze Kraal; Mr. Eksteen, of Platte Kloof; and Mr. Proctor, of Drooge Vley, in the west; and Lieut. Daniell and Mr. T. White, in the district of Albany, Mr. Dalgairns, of Uitenhage, and others in the east,

entered actively into it, and in 1830 the shipment of wool rose to 33,000lb. During the time that has since elapsed it has multiplied and increased with wonderful rapidity, the export now advancing close upon fifty million pounds—equalling, if not actually surpassing, that of New South Wales and of New Zealand, and only eclipsed by the colony of Victoria.

Of late years our more intelligent sheep farmers have fully realised the advantages of pure blood, and have imported and bred pure merino flocks, by which means the general average of the quality of our wool is greatly improved. They have also eschewed the introduction of any kind of English long-wool sheep into their flocks, but endeavoured to perfect the quality of the pure merino by judicious breeding and selection. By this means several very fine flocks have been established here, and we shall in a few years, if the same sensible course is preserved, be able successfully to compete, as to quality, with the finest clips in the London wool markets.\*

Sheep farms are of various sizes. The general average is somewhere above 3,000 morgen, or 6,000 acres. There are some, however, that are four or five times this extent; but then on these, as on even the smaller ones, there are out-stations, or divisions of both flocks and farm, under the care of separate herds. The old and still most common practice of farming is to graze the flocks by day, under the care of a herd, who guides their depasturing over the part of the farm allotted to the special flock under his charge, and at evening time

\* The Rambouillet breed have recently been greatly in favour. Mr. Van der Byl, of Nachtwacht, Caledon, has had from one ram and four ewes, imported five years ago, a progeny of 69; and of these he has sold several rams, a few months old, to neighbouring farmers for about £30 a-piece. The weight of fleece in the grease from these sheep is 16 lb.

drives them home to the kraal, where they are kept all night. The kraal, or fold, is made of various materials, the commonest fences being a high, thick hedge of thorny bushes, or an enclosure built with blocks cut out of the accumulated dung and *debris* of the old kraal. Stone walls are erected in many places where stones are handy, and in some of the more exposed situations, where the farmer has the enterprise and the ability, the stone walls are converted into sheds. The coming home of the flocks at night is a pretty sight, and gives the full opportunity to the owners to count them, look to their health, and other matters of management, as well as to check depredations both human and brute. But whatever may have been, or is still, the necessity of the case, this kraaling has no doubt an injurious effect both on the farm and the flocks, injuring the wool and the health of the sheep, collecting the manure and strength of the land into great useless heaps many feet deep, and wearing out the pasture by the constant treading of the ever-moving animals. Arrangements are being made by some of the eastern and western farmers by which the sheep can run night and day, and feed and rest at their leisure in the open veldt, and many miles of fences for this purpose have already been put up.

One of the chief diseases to which the sheep are subject is the scab; this, though not fatal, or only so as it reduces the strength and condition of the sheep and renders them unable to bear bad weather, is a great trouble to the farmer. The "gal zeickte," or gall sickness is also a common disease, and the chief barrier to the rearing and grazing of sheep in the Zuurveldt. There are a few other diseases, such as the geel, tongue, and various forms of fever, which in some parts of the country are occasionally fatal. Another of them is the "fluke," the cause of the rot, so well known in England. This scourge is

confined to certain localities, and, though it causes the loss of numbers of sheep now and then, is not so destructive as in the old countries of Europe. All over the sheep-farming districts there are large spaces of ground which are saltish, known as "brak;" and though the ordinary herbage of the surrounding veldt will not grow on these brak patches, salt bushes flourish there, and this, with the ground itself, which the sheep lick, will be, or rather is, found a remedy or preventative to the spread of this parasite. We have heard of no cases of fluke in the Karoo. As the salt bush in Australia prevents or cures fluke, so the bitter and saline plants of the Karoo are a preventative.

There are some farms that used to carry sheep well which do not now answer for them at all. This deterioration has been brought about by one or two more prominent causes. The first is overstocking when the food gets scarce, as in time of drought the sheep eat all the good plants down into the quick, and they die, and as a consequence the inferior, useless, and unwholesome kind get an advantage and increase. The next most obvious cause is the constant treading of the sheep, by which the finer particles of the soil get loosened, and in heavy rains washed away. The remedy proposed is fencing-in these farms, and giving them rest; and under such treatment there is hope they will in some degree recover, especially if some little trouble is taken to extirpate useless weeds and encourage the growth of grasses and other good and nutritious plants. Some of the frontier farmers are adopting the old plan of occupying two farms—one suitable to the summer, and another for the winter. This, when it can be carried out, is obviously of considerable advantage, and in times of drought will be found specially useful. While the lands at the ordinary level may be scorched and dried up, there

is usually some rain, and consequently grass, on the mountain ranges which constitute the summer farms.

Since the discovery of the Diamond-fields the prices of all kinds of sheep have greatly increased. Three or four years ago one could buy good "hamels" (wethers) for 8s. 6d. each; they are now, if fat, worth fully double as much, and well-bred stock ewes about the same price, or ordinary ones, about 10s. or 15s. each. Of course such prices make the increase, or surplus, which is one of the sources of profit on sheep farming, a very considerable item.

The average clip of wool in the twelve months from the very best flocks in good seasons is about 8lb. of grease wool per sheep; if this wool fetches 8d., which some of it does, we have the annual return per head of 5s. 4d. But then, as already stated, the increase is also a large item of profit in good years. A ewe flock is supposed to raise 75 per cent. of its lambs, so that, if there is an equal number of ewes and wethers in a flock, we may predicate its doubling itself in four years. Of course we are here speaking of a good well-bred flock, with good management, in a fair season.\*

Some flocks there are that do not return 5lb. of wool, and the wool scarcely fetches over 5d. per lb., and the increase is nothing at all—either on account of bad management, or being on a poor, worked-out farm. In times of severe drought the best flocks and the best farms cannot yield, of course, but a comparatively poor return. The last two years were very trying ones to the flockmasters, there being a great drought over some of the finest districts, so that the total wool export for 1873 was only 40,000,000 lb., and for 1874 43,000,000 lb., against 48,000,000 lb. for 1872, which was the largest hitherto known.

\* We know of an instance in which 1,300 mixed sheep increased to 4,000 in less than four years.

Very many of our sheep farmers have flocks of goats—in most cases the common goat of the country, but often mixed with various grades of Angora blood. These original goats are a very hardy race of animals, and live where sheep cannot, and supply meat which, though not equal to Southdown wether mutton, is quite passable, and very useful on a farm. They breed and increase very fast, having as many as five kids at a birth, and seldom less than two, and are, altogether, a useful animal, yielding a famous and valuable skin.\* We hardly think a goat farm would pay by itself; yet a number of these animals are useful, and not at all, or but very little, in the way of the sheep.

Angoras are comparatively a recent introduction. The first were brought to the Cape by a Colonel Henderson in 1836, and the stock obtained from them found its way to Caledon, Swellendam, Graaff-Reniet, and Richmond. Messrs. Mosenthal Brothers, who appreciated the value and importance of a fleec-bearing goat as next to a wool-bearing sheep, tried to obtain some pure-bred animals from Angora, and, in 1856, succeeded in doing so. About the same time Dr. White obtained some fine stock, through Sir Titus Salt, and since then several importations have been effected by other private individuals and mercantile firms. Unfortunately the same process of bastardisation was perpetrated on the imported Angoras as was originally tried on the pure merinos, and, as we believe, to the detriment of both. In the case of Angoras, we had better have stuck to the pure blood, and depended alone on the natural increase for the extension of this

\*The Cape goat skin is unequalled for the manufacture of superior leathers. Between 300,000 and 400,000 of these are sold annually in the London market, where they have realised as high as 95s. the dozen. They are tanned in bark for the manufacture of black leather, and in shumac for that of coloured leather, called morocco.—*Vide* "Robinson's Report on Vienna Exhibition, 1873."

industry, than have filled the country with cross bred nondescripts, that give neither profit nor satisfaction to their owners. So much is the disadvantage of such a method of breeding that many farmers are saying Angoras won't pay, and returning to the old hairy sort. Several of the larger breeders, however, are fully aware of the value of pure blood, and are raising flocks of true and uncrossed animals, although it will take a little longer to get a large flock. Amongst these breeders of pure stock we may mention Mr. J. B. Evans, in the Zwaart Ruggens, whose clip of 5,000 lb. was sold the other day at Port Elizabeth for 3s. per lb. Softness and fineness and lustre are the prime qualities desired by the manufacturers in mohair, and some samples sent out from the Chamber of Commerce at Bradford well illustrated this fact; for while one sample was valued by these gentlemen at the metropolis of the mohair trade at 6s. per lb., others, and all from Asia Minor, were valued at 3s. 6d. It is alone a study of samples of mohair, under the guidance and counsel of the manufacturers, that will enable a farmer to understand what quality is most valued and more valuable; and it is the want of this knowledge that has misled so many in the matter of crossing.

Angoras are the prettiest and merriest of our domestic animals, and to see them coming home through the veldt and bushes in the evening is a sight any lover of animals would delight in. They look like animated streams of pure milk flowing on towards the homestead; while their gambols and pranks—very much like practical jokes, which they play off on each other—are very amusing. Owing to their being all white, and to the circumstance of their generally lambing at the same time (as many as 100 kids being dropped at Mr. Evans's in one day), they require a great deal of care in the lambing season. The animals themselves seem to be puzzled to recognise their

young, and for a day or two the kids have to be given to them. A time of drought, when the poor creatures have little milk, is also very trying to the farmer. The fleece is generally in perfection in July, and it must then be taken from the animal, as otherwise it begins to shed the best hair, and the growth of the short summer hair begins to push its way amongst the long, greatly to the depreciation in value of the latter. July being one of the coldest months, there is much danger of losing one's whole flock if a cold rain should set in, as with their coats off they cannot stand any inclement weather. Sheds are therefore indispensable to shelter the goats for a fortnight or so after shearing. In Asia Minor it is said that three drops of rain falling on a goat after it is shorn is enough to kill it.

The advantage of breeding Angoras is that they scarcely interfere with the pasture of the sheep flocks, and will often live on herbage the latter discard; whilst the fleece, if improved, commands a high price, and is an important addition to the exportable products of the country. Although mohair only began to figure on our exports in 1862, the quantity then being 1,036 lb., in 1871 it increased to 536,292 lb., valued at £43,000, and it advanced in 1874 to over 1,000,000 lb., valued at £107,139. This production now nearly equals that of the vilayet or province of Angora itself—for the consular reports from there for 1873 give the export of mohair (best and fair average qualities) at 902,800 lb., valued at £124,000. The vilayet of Kistamboul also produces largely, and the total quantity of all sorts exported from Turkey in 1873 was 5,120,000 lb., obtaining an average price in England of 2s. 10d. per lb. The British consul at Constantinople says that, exceptionally severe weather coming at the time of kidding, has lately (in 1873) caused disastrous losses in the Angora and other districts—the losses at a moderate estimate being set

down at 70 per cent. of the stock—which cannot but have a considerable effect upon the production for several future years.

Another new branch of farming which has now become a very important one, is the domestication and breeding of ostriches. One of the first to try it in the Colony was the late Mr. Kinnear, of Beaufort West. He commenced about 1860, and his success in breeding and rearing these birds was such as to induce many persons, far and wide, to enter upon what has since proved to be a very interesting and highly remunerative pursuit. On an eight-acre garden plot, attached to his residence in the town of Beaufort West, he had at the time of our visit, in 1870, a flock of thirty birds, and several broods of young ones. A portion of the eight acres was divided by hedges into paddocks, sown with lucerne; the remainder was formed into kraals, or small enclosures, where the birds were pairing, the male and female sitting alternately on the nests in carrying on the natural process of incubation. Adjoining the spot there were one or two outhouses and sheds, where the young birds were sheltered in cold weather, and where the old ones were penned up at the time of feather-gathering, to be relieved of their valuable plumage. Mr. Kinnear's observations on the management and habits of the birds were communicated by him at that time in the following memorandum:—

The number of birds that can be kept on a given area of pasture depends entirely on its quality. A full-grown ostrich will consume 20lb. of chopped lucerne, a sheep 12lb., and a horse of 14 hands 70lb. The birds do not like grass, or green forage; they prefer cabbage leaves, fruit, grain, &c., but for permanent food there is nothing equal to lucerne, or clover.

As far as my experience has gone, they do not lay in general until they are 4 years old or upwards; a very few lay at 3, more at 4, and some not till 5. Out of 6 cocks I had, but one was capable of pairing at 3 years old, four at 4 years, and one not until 5.

In a wild state, there are sometimes as many as five hens to one cock. I think there should always be two; but then there should be an incubator for the surplus eggs, which cannot be covered. If, however, there are equal numbers of cocks and hens, I separate them into pairs. The cock should not, I think, be separated from any of the hens after pairing. The birds for the most part begin to lay about the beginning of August, and continue for about six weeks, when they commence hatching. In about a month or six weeks after they have done hatching (at least if the young birds have been removed) they begin to lay again, and continue a month or five weeks. At the first laying they lay from 15 to 20 eggs, and at the second from 12 to 16.

Incubation lasts from six to seven weeks from the time the bird begins to sit. I take the young ones away when they are so strong that they leave the nest, which is in a day or two. Some persons leave them with the hen, and often give several broods to one hen, in which case they are driven into a shed at night, or during wet weather, as they are very sensible to cold or wet. The hen with the chicks is kept apart from the others. The chicks get for food chopped lucerne, cut as young as possible, as they do not like the stalks, and some grains of wheat may be scattered about for them to pick up, and also maize, as they get older. Clover would do as well as lucerne, and perhaps vetches. I also give them sand, earth, and crushed quartz and bones, and as much water as they please. They like to bathe, and roll in the dust. If taken away from the hen, they should be kept warm, especially at night. I put mine into a high box, with a woolly sheepskin to lie on, and the top covered so as to retain the warmth, but taking care there is sufficient air. In very cold weather I heat the room, and don't allow the birds to get out until the weather gets warm again.

The above observations are general, and from my own experience. There are, of course, exceptions. For instance, I have heard that a hen has hatched at  $2\frac{1}{2}$  years old; and I had last year one hen of 10 years old, which laid only three eggs at the first laying, and did not sit or lay any more at all, although she frequently paired. I had also a pair of three-year-old birds which laid at both layings, but did not sit. The male sat now and then for a day or two, but the hen would not. The following year they hatched two birds. I had another pair which did not lay till they were  $4\frac{1}{2}$  years old. The hen is sitting now, but the cock not. Another pair, now nearly five years old, has not yet laid. Last year I had a pair of eight years old, which hatched the first brood; but at the second laying the hen did not sit, although the cock sat off and on for a week.

Previous to this, the artificial incubation of ostrich eggs occupied the attention of others who had followed Mr. Kinnear's example in domesticating the birds. Dr. Atherstone, of Graham's Town, was one of the first to suggest the process, and his suggestion was taken up by Mr. A. Douglas, of Hilton, near Graham's Town, who afterwards patented an improved apparatus made by himself. Similar appliances, with modifications, by Dr. Lawrence, of George, and others, are now in use all over the country. Mr. Douglas's success has, however, been as notable as any. In 1872, from six breeding birds—four hens and two cocks—he reared a progeny of 130. In the following year the season was not so favourable, owing to severe drought, the increase being but 120 from 20 breeding birds, and last year the number hatched was 140 birds. Considering that the value of an ostrich a week old is now about £10, and that its value increases rapidly as it grows older, it will be apparent that ostrich breeding at present pays remarkably well.

In some parts of the Colony, where there are considerable flocks, the birds have extensive runs, and are depastured and driven something like sheep; but generally they are enclosed in camps, within fences or rough stone walls. When paired and breeding, they are allotted small paddocks, fenced in with wire and bush, as the male birds at such a time are vicious and dangerous to approach. The eggs, which are laid in a hole slightly scooped in the ground, are collected and taken away, to be placed in the incubator, one or two being left, or artificial ones placed in their stead, till, perhaps at the end of the season, one or both hens are allowed to sit. In this way the birds, if kept in good condition, continue to lay for a longer time, and there is no injury to their feathers from sitting. The artificial hatching has proved quite a success. Mr. J. M. Beyers, of Nooitgedacht, near Stellenbosch, has seve-

ral of these machines at work, and out of every dozen eggs deposited in them it is seldom that more than one of the number fails to generate. The incubator consists of a wooden box about three feet square, opened from above, and capable of containing 25 eggs. It rests upon a copper or zinc pan, or cistern, three inches deep, and equal to the size of the box. This is filled with hot water, and has four or five openings through which the vapour ascends into the box. The warm temperature of the water is maintained by a paraffin lamp, kept burning underneath the pan; but in some cases this has been found objectionable, as the fumes of the lamp affect the young chicks as they leave the egg, and it is an improvement to have the lamp burning in an adjoining apartment,—an extension of the cistern or pan about a foot wide, being carried through the partition, or wall, and the lamp placed under it. The heat can be regulated as necessary, thermometers being constantly in use. The temperature of the box where the eggs are placed is  $102^{\circ}$  Fahr. when they are first put in; after two weeks it is gradually reduced to  $100^{\circ}$ , and in two weeks more to  $98^{\circ}$ . The period of incubation is 42 days. The eggs are turned and aired, by opening the box and blanket-covering once or twice a day. A fortnight before the expiry of the time, they are held up against the light to examine their condition, and a week after are slightly, but carefully, punctured near the top with a sharp pointed steel, to enable any of the chicks in weak condition the more readily to break the shell. When hatched they are turned out, kept warm, and fed with cut lucerne, and allowed to run about their enclosures like ordinary fowls. Last year Mr. Beyers had 24 birds breeding—8 males and 16 females—and he has turned out a brood of upwards of 100 chickens. The large birds are fed on grain of all sorts—5 lb. of food per day keeping them in excellent condition,

varied with lucerne, bones, crushed granite, and shells from the neighbouring beach. The young birds that are not old enough to breed run in troops of forty or fifty together, and make up a comical and very docile lot of domestic fowls. They live principally on grass and other herbage, but readily eat Indian corn.

In some of the inland divisions there are still numbers of ostriches running wild; these are now carefully preserved by the owners of the land on which they live. In the breeding season their nests are watched from a distance by a man placed on some eminence commanding a view, who every now and then visits the nests. As the time approaches for the chicks to break the egg, a very close watch is kept upon the birds, and the young caught and removed before they are more than a day or two old. On the occasion of the leasing of some of the waste lands of George and Beaufort lately, the Civil Commissioners were astonished at the keen competition for some arid spots, which fetched prices far above the valuation officially set upon them; but it was afterwards ascertained that this arose solely from the fact of these localities being frequented by wild ostriches, whose nests would become the property of the lessees, and yield them a handsome return.

The feathers, of course, are the produce for which the birds are bred. The plucking of each adult bird gives as much as from £10 to £18—prime white feathers fetching from £35 to £45 per lb, while others of the wing and tail are also very profitable. There is little likelihood of this beautiful article of dress or ornament becoming out of fashion. With increased production prices may rule lower; but there is a very wide margin, and it will be some years before ostrich breeders need fear the effects of over production, or that they will be farming at a loss.

Horse-breeding was formerly a favourite pursuit,

and the requirements for the remount of the army, and the sporting tastes of Indian visitors, made it both pleasant and profitable. But the horse sickness which spread over the greater part of the Colony in an epidemic form, in 1853-4, sweeping away no less than 70,000, shattered many of the breeding establishments; in many instances, indeed, parties relinquished them altogether for sheep and other stock. An official inquiry was made into the origin, progress, and effects of the malady which had so disastrous an effect, and the results were published in a pamphlet by the late Mr. T. B. Bayley—himself one of the leading horse-breeders, and a loser by the scourge. The facts established were that the sickness is produced by exposure to the night air in a season of *malaria*, arising from causes not clearly known; that horses stabled before sunset, and not turned out to graze before the dew is off the grass, are safe from its attacks, though exceptional cases may occur; and that relatively high and dry elevations are comparatively free from it. Notwithstanding the diminished number of breeders, the demand for horses at the time of the occurrence of the Indian Mutiny, in 1858-9, served to show the capabilities of the Colony were still very considerable. Upwards of 5,600 horses and 100 mules were shipped from here by the Indian remount agents,—the average cost of each horse sent, including shipping and all charges, which were naturally high at a time of such emergency, being about £65.

The wonderfully hardy and enduring qualities of the Cape horses have been acknowledged by all who know them. Staff Veterinary-Surgeon Thacker, in his report on the horse trade in the colonies in 1874, says that while he was serving “in the Cape and Kafirland, sixty and eighty miles a day were frequently accomplished, the horse having no other food than grass;” and Colonel Apperley, the late remount

agent at the Cape, writes: "Cape horses are peculiar animals. I admit they are not handsome; but they surpass any horse I have seen out of Europe in their untiring and unflinching endurance during the longest and hottest days of the year." The original stock came from South America; they were afterwards improved by pure Arabs, who gave them their characteristic of good constitution and indomitable pluck; and they have since had a large infusion of English thoroughbred blood. During the past fifty years, from Lord Charles Somerset's time to the present, upwards of 200 sires, many of whose names are distinguished in the stud book, were imported and have done good service to our horse-breeders as well as contributed to the race courses of the Colony, Mauritius, and India, sons and daughters worthy of their lineage. Among other introductions for stud purposes were Mr. Martin, Gorhambury, Sponge, Evenus, Rococco, Saraband, Student, Bismarck, Brian Boru, Nugget, Beladrum by Stockwell, and Robin by North Lincoln, while more recently there have been Gladiator, Minstrel, St. George, Commissioner, Belfast by Stockwell, Prince by Daniel O'Rourke, Bossington by Camerino, Catalpa by Maccaroni, Ivanhoe by Broomielaw, and the Maid Marian colt by King Tom out of Maid Marian. Several dams have also been brought out, more attention being given to the character of the brood mares than formerly. The number of breeding establishments, however, is very small, several of those who delighted in this branch of farming having lately passed away. The principal studs in the West are those of Mr. A. Van der Byl, Nachtwacht; Mr. C. Barry, Mr. Manuel, Mr. Melck, and Mr. Kotzé. The increased demand for good horses is such, however, as to encourage others to enter upon breeding, and in some of the midland and eastern districts there are indications of a

reaction in favour of this line of business. Last season thoroughbred colts sold at prices ranging from £150 to £300 for one to three year olds, and the other day one only a fortnight old was purchased for £100. Most of them are secured by up-country buyers, and in a little time afterwards change hands for double and treble the amount in the Eastern and Northern districts and the Free State.

Horned cattle were found in tolerable abundance when the Dutch first settled at the Cape, and for brass beads and buttons, tobacco, and tinder-boxes, the aboriginal Ottentoots were always willing to supply the shipping and the garrison. In time, as the Colony became occupied by Europeans, the Dutch breed was introduced to cross with, and although the thorough native species have well-nigh become extinct, a dash of the long-horned Hottentot breed is not discarded when long journeys on bad roads and often starvation allowance as to grass are required. The cattle now met are made up of contributions from nearly every breed known in England and Holland; and it would appear that the only idea of improving their cattle many breeders have had was to cross them with some other breed, no matter what, so that they could obtain a cross. Some of our more intelligent men, however, now see the advantages of pure blood, and have been selecting their herds for some time past, and some good short-horned bulls of undoubted pedigree have been got direct from the first breeders in England.

A good extent of pasturage along the coast, and in the Eastern and Northern districts, are well adapted for cattle, more especially the Zuurveld. In these places, of late, cattle-breeding must have been a very remunerative occupation. Many, or nearly all, of the farmers in the Zuurberg district are not only cattle breeders but "Kurveyors" (transport riders), and have always some wagons on the road. A span con-

sists of 16 oxen, so that a few wagons take a hundred head, counting supernumeraries. Some men we know have thus employed more than 500 oxen. The Kurveyors who were provided with oxen of their own breeding, or bought them before the great rise, and engaged pretty largely in the traffic to the Diamond-fields and other parts of the Colony, made very handsome profits, and accumulated pretty good sums of money. Oxen bred for transport purposes were selling a few years ago at £5 to £6 each; now £16 is a common price, with every likelihood of their becoming dearer. Beef has also risen in price, and sells at almost English rates.

Closely connected with cattle breeding is dairying, a branch of farming that we think it would pay anyone who well understands English dairy work to embark in, as not only does butter fetch good prices, but good colonial cheese would find a ready sale. English cheese sells at 1s. 6d. to 1s. 9d. per lb. Of course it is at this price a luxury; but there is no doubt a good colonial cheese would sell readily and in considerable quantity at 1s. per lb., if it could be made to approach the English in quality. The yield of milk very much depends upon the quantity of food the cows can get; and as they are entirely dependent upon the natural veldt, unless there is a good season the share of milk that comes to the dairy is but small. By-and-bye, the raising of artificial food, to be used in scarce times, will come into use, not only to aid the dairy, but also to fatten cattle and produce a better quality of beef. Allied to the dairy in England is the production of pork and bacon. This is also a kind of farming that we believe may be very largely extended. The price of colonial bacon of first quality is always high; for some time it has been above 1s. per lb., and the average is scarcely ever below 8d. per lb.

We now turn to Agriculture proper, in regard to

which we may say the capabilities of the Colony have been as yet very imperfectly developed. The cultivation of corn was always considered essential to the prosperity of the people, and the directors of the Dutch East India Company declared, a century-and-a-half ago, that the country which failed to produce its own food-supply was scarcely worthy of a name. But in those "good old times" one of the laws in force at the Cape was that the exportation of corn should be regulated by the views entertained by the Government of the sufficiency of the supply. Under the British authorities the same restriction upon free trade continued, and it was declared in 1818 that "the Governor's license would not be available at the Custom-house for the export of wheat when the market price should exceed 130 rix-dollars per load of 10 muids, or something more than 48s. 9d. per quarter." No doubt this tended to check the exertions of the farmers, confining the ordinary extent of their industry to domestic supply; and it is only of late years that they have been stimulated by the spirit of commercial enterprise and competition to cultivate and produce more.

Every part of the Colony seems adapted for the growing of grain crops, the only impediments being want of moisture during some seasons in certain localities, the effect of blight in others, and the distance, difficulty, and expense of transport to a market. These drawbacks, however, never prevail over the whole country at the same time, and it is noticeable that, although one part may suffer in diminished or blighted crops, other places yield abundant harvests. When favourable seasons prevail everywhere, the production is more than enough for home consumption; and yet when droughts set in, supplies have to be obtained from Australia, Chili, or California. The periodical occurrence of these cycles of drought and short crops may be observed from the Import and Ex-

port Returns at the end of this chapter. In the year 1863,—which will be remembered as the culmination of a dry season,—the importation of flour and wheat was over 36,000,000 lb. In 1874, also memorable for the extended drought in the preceding year along the frontier and inland districts, the importations went up to a higher maximum—the amount of flour and wheat imported being over 41,000,000 lb. Favourable seasons happily intervened between these periods, and particularly from 1868 to 1872, during which the necessity for heavy importations gradually diminished, and more grain was produced than was actually required for consumption. The Colony was then, in fact, able to send its surplus to a foreign market, the quantity of wheat and flour exported in 1871 being no less than 9,000,000 lb., and in 1872 5,700,000 lb. The expenditure of the Colony for flour imported during the five years of scarcity ended in 1868 was £560,000, while in the five years of plenty ended in 1873 it was not more than £141,000—thus effecting a saving by the consumption of Colonial bread-stuffs of over £400,000. In the years 1871-2, about 30,000 muids (900,000 bushels) of Cape wheat were sent to the London market, and realised the extreme market rates for the finest wheat imported there. Among the Cape Town shippers were Messrs. Goodliffe, Smart, & Searle, who have furnished us with the following memorandum of the prices realised by them:—

SOLD IN LONDON—				s.	d.	s.	d.	
In July,	1871,	219	qrs. of 496 lb.,	at	61	0		per qr.
In Oct. & Nov.,	"	444	"	"	63	0	to 65	0
In January,	1872,	382	"	"	65	0	" 65	6
In March,	"	1,546	"	"	63	0	" 65	0
In April,	"	623	"	"	64	0	" 65	0
In June,	"	493	"	"	63	0	" 64	0
In July to Nov.	"	2,343	"	"	{	65	0	74
								0
								" in Sept. & Oct.

6,050 quarters of 496 lb. each.

The above quantity (Messrs. Goodliffe, Smart, & Searle state) consisted almost solely of two descriptions—viz., “Baard” and “du Toit’s,” and was pronounced by the London brokers and millers to be equal in quality to the finest Dantzic, and the prices realised were quite as high as those ruling for the latter description. Since then repeated applications have been made for more, the wheat being used by biscuit-bakers for their finest quality of biscuits.

The portions of the Colony most favourably situated for the production of wheat are those regularly visited by copious rains, and where artificial irrigation is unnecessary. The coast districts, especially those contiguous to Cape Town, possess this advantage, and form the principal granary. The tracts known as Koeberg and Malmesbury mainly consist of corn farms,—some of the largest and best worked being Eaton’s, Drooge Vlei; Hauman’s, Kersbosch; Louw, Tweekuyl; those of the Steyns, Smuts, Gous, and Albertyns, in the vicinity of Riebeeck’s Kasteel; Messrs. Kotzé, Melck, and Breda on the Berg River, and the farm Vogel Vlei, Picketberg. In the neighbourhood of Saldanha Bay there are also some fine farms; and near Darling the farms Ganzekraal, Groote Post, Klavervlei, and Conterberg, as well as those of W. F. and F. Duckett, Karmelk Fontein and Orange Fontein, are justly valued for their general capabilities. There is still in that area a good deal of virgin soil which can be successfully cultivated. What the farmers want is cheap and regular communication with the market. One of Thomson’s road steamers was imported by themselves to meet this want, but was found unsuited to the purpose; and now the Government has obtained the sanction of the Legislature for the construction of a line of railway, which will shortly be commenced. The future prospects of these parts, therefore, are good; for when grain can be transported more easily, greater attention

will be devoted to home improvements, and, with a moderate supply of manure, the land retains its fertility. Wheat and oats yield from 15 to 30 fold, according to the season; barley, from 50 to 100 fold; and rye, from 20 to 40 fold. All kinds of grain are sown thin; otherwise, owing to their quick growth under a cape sun, if sown too full, they are liable to run to straw. The yield of wheat per acre, under good cultivation and free from rust, may be taken at an average of 15 bushels to the acre—*i.e.*, at the rate of 10 to the acre at 15-fold, and 20 to the acre at 30-fold. Oats and rye give about the same; but barley generally yields, on new land, in a good season, 50 bushels the acre. The weight of wheat, per three bushel sack, is from 205 lb. to 208 lb.

A decided improvement has taken place of late in the mode of cultivation. The Howard plough and harrow is extensively used on stiff land, and the Swedish plough along the sea board and on sandy fields. Manure is more carefully harboured and judiciously applied. The old-fashioned way of harvesting is also being superseded. The "tramp floor," where the grain used to be trodden out by horses, is giving place to the steam-thrashing-machine, which itinerates about the districts, doing all the thrashing at the rate of 1s. a muid, the farmer supplying fuel and labour. The oat and barley crops are in many cases mowed down by the cradle scythe, in preference to the sickle, for which purpose a straight-handled scythe, made on the farm of Mr. Eaton, Drooge Vlei, is much used, although other experienced mowers choose the crooked handle, with adjustable cradle, of English or American make. In some instances reaping machines are in operation, and effect a great saving in labour and wages. Recently, too, Ridley's Australian "stripper" has been tried, and found to answer admirably, when

the crops can become sufficiently ripe, and the straw and chaff are of no consideration to the farmer.

The Clanwilliam, Tulbagh, and Worcester divisions, and the south-east coast districts, from Caledon to George, yield considerable grain crops in average seasons; while all over the Karoo, with irrigation, almost fabulous returns, from a hundred fold upwards, may be obtained.

In the East, the most extensive arable lands are those in the Zuurveld districts of Lower Albany and Oliphant's Hoek, and next to them in the Queen's Town and other border districts. In these upper districts wheat is usually sown after the turn of the winter, in June or July; and on the coast lands as late as September. Since the country was first settled this grain has been more or less liable to be damaged by "rust," and only the hardy, or flinty kinds, are sown with any chance of a crop. The return in Lower Albany, when not so affected, is from 30 to 35 bags for one sown, if sown early—about ten acres being covered with a three-bushel sack (or muid) of seed. Barley, or bere, returns from 10 to 15 bushels per acre on an average, but on well-cultivated clean land, has given as much as 20 bushels per acre. Oats are largely grown for forage, when nearly or quite ripe being cut and made into sheaves—forming the staple horse food of the country. It is usually sold by the 100 lb., and though in good years it is as low as 2s. 6d. per 100 lb., for some time past it has ranged at from 5s. to 8s. The best variety sown is the white side, or Tartar oat, which, though occasionally slightly affected, withstands the rust better than any other sort which has been tried. The average yield of oat hay is from 2,000 lb. to 3,000 lb. per acre, but as much as 6,000 lb. has been reaped off an acre. The return of grain is from 35 to 49 per cent. A bag of good side oats (3 bushels) usually weighs 160 lb.;

but since rust has commenced its ravages, the average is not more than 130 lb. Wheat averages, in full three bushel sacks, as high as 230 lb. Barley (5-rowed), if thrashed soon after being reaped, 180 lb. to 200 lb. per sack; and English, or 2-rowed barley, 210 lb. to 220 lb. The divisions of Albany and Bathurst and Alexandria grow a great deal more wheat now than formerly, and some of it is of very excellent quality. With more labour, and easy access to a market, they could produce any amount of food supplies; and no doubt, in course of time, they will be very valuable.

Indian corn or maize, known under the name of "mealies," is grown all over the country, and yields most abundant crops of good food, both for man and beast. Along the frontier especially it is largely cultivated. This grain possesses the advantage of coming to perfection in a shorter time than most other cereals, and thus, as was the case in 1873, it can be sown when all chance of a crop of wheat is lost. It requires but little care in cultivation, and is not affected by rust, or any other disease of any importance. It grows almost on any soil; but when severe frost prevails it has to be sown early enough to be ripe before being touched by it.

Kafir corn or millet, is chiefly raised by the natives, being largely used by them, either boiled for food or malted as beer. There are several varieties—one of them being the *Sorghum Saccharatum*, the shoots of which are rich in saccharine juice.\* The late Dr. Pappe, who in 1860 made a report on the various kinds grown in the Colony, says:—"Imphee, or Sorghum, may be sown at different times, so as to have it for

\* The Hon. S. Cawood, of Graham's Town, has introduced from the United States a mill and apparatus for crushing the stems, or canes, of this plant, and boiling the juice for sugar—an operation which is carried on a large scale in America.

consumption several months. The stalks, leaves, and panicles of all kinds furnish a highly valuable and nutritive material for stall-feeding, and may be given, both green or dry, to horses, cattle, sheep, or pigs, &c., all of which are not only exceedingly fond of this fodder, but thrive upon it remarkably well. It may be raised on lands that have grown oats or barley, and yield an invaluable crop of green food to dairy farmers from December to March, without any irrigation whatever."

Potatoes, and all kinds of European garden vegetables and pot-herbs, do well, and can be grown all the year round. Sweet potatoes, pumpkins and melons are produced and supplied in wagon loads. Beet is raised extensively, and from some trials that have been made to test the quality of sugar it contained, it is found equal in this respect to any samples of the plant grown in France, Belgium, or elsewhere. The kindred plant, mangel wurzel, when tried, has likewise proved a satisfactory crop, as have also swede turnips in the Queen's Town district. Comparatively little artificial food for stock has as yet been attempted to be reduced; but there is every reason to believe it would pay well, and the increase of both milk and beef would amply compensate for the trouble of cultivating and storing.

Let us next turn to the vineyards, and wine-making. The culture of the vine has been followed at the Cape for upwards of two centuries. It was originally introduced by the Dutch in the time of Van Riebeeck, who in his "Journal" (1662) reports to his successor the "flourishing state of the vineyards." The French Protestant refugees who arrived in 1685 gave an impetus to this cultivation; and by 1710 the increase was so great that, according to a return furnished by the Governor of the Colony, Louis Van Assenburg, to the Governor-General of Netherlands India, Johan Van Hoorn, the vines planted amounted to 2,729,300,

and the expected produce, although in a bad season, was 1,190 leggers. Considerable quantities were then shipped by the company to Java, and even to Europe. After the cession of the Colony to England, great inducements were held out to the colonists to develop this trade, the "most constant support and patronage on the part of Government" being assured by proclamation, as well as premiums offered to those who planted most extensively. Such encouragement, together with the advantage of differential duties then in force, enabled colonial wines to compete in England with importations from the nearer Continental countries, and for a time wine-growing was a most lucrative industry. This protection, however, was not long afterwards partially withdrawn, entailing severe loss upon many who had embarked all their means in the enterprise. And later, in January, 1860, when the commercial treaty with France was entered into, establishing the alcoholic scale of duty, which is still maintained, the Cape was actually placed at a disadvantage as compared with the Continental wine-growers. The bulk of the wines produced here, like those of Australia, when prepared to arrive home in good condition, require a greater spirit strength than  $26^{\circ}$  (the quantity produced by natural fermentation), in consequence of the warm latitudes they have to pass on the voyage to England. The strength of  $26^{\circ}$  is the limit of the 1s. duty, and everything beyond is subject to 2s. 6d. per gallon, which therefore acts upon colonial wines in a prohibitory manner. The Cape growers have repeatedly made representations to the Home Government on this subject, requesting that in case of a revision of the Imperial tariff wines not exceeding 33 degrees of alcoholic strength should be imported at the lower rate of duty; but hitherto their appeals have been ineffectual, as the Imperial Treasury officers advise that such an alteration would interfere

with the home spirit tax. Meanwhile the operation of the existing tariff has been to diminish the annual export of our wines from 1,000,000 gallons, valued at £153,000, in 1859, to 79,000 gallons, valued at £17,000, in 1874.

Cape wines, unfortunately, have got a bad name in England. They were never fairly brought into general consumption there, but used for supplementing and mixing purposes, when European wines were scarce and dear. This was especially the case between 1854 and 1859, when the Continental vintages were short, owing to the ravages of the vine disease; and the prices then obtainable led to a most objectionable practice by some exporters of shipping young and raw liquids under the name of wine, which justified general abhorrence. Hence *Punch's* severe satire upon, and condemnation of, our colonial product. Yet, as is well known, there are Cape wines, such as the famed Constantias, Paarl Pontacs and Hocks, Drakenstein Lachryma Christi, and Worcester and Montagu Sherries, which, when genuine and of good quality, are as excellent as can be produced in any wine-growing country. It is this class of wines which, notwithstanding an excessive rate of duty, are still in yearly demand by old visitors to the Colony and connoisseurs settled in Europe, including many even in the famous wine districts of Germany and of France.

Within the Colony the people show a most decided preference for their own produce. It is commonly used, not only because it is considered pure and wholesome, but also because it is cheap. The production, which ten years ago could not find an outlet abroad, has now a very profitable home consumption; and, although that production is greater than ever it was at any former time, the growers get as good a price as they did in the palmy days of the export

trade. The digging population of Griqualand West and the gold-fields of Transvaal, and the increasing facilities of transport throughout the country and on the Borders, have created a new and continued demand for it, or its alternative form—spirit. Our wine-growers, consequently, are at present very prosperous, and rapidly acquiring wealth, which it is hoped will be applied to the improvement of their particular industry. No doubt there is great room for it. Amongst the mass of the growers the method of making wine is still of the most primitive character. The grapes are often cut at random, without distinction of colour, quality, or degree of maturity; they are gathered in the hottest weather, thrown into tubs trodden by labourers, and fermentation is allowed to go on in cellars crowded with wagons, harness, skins, and other musty articles—little regard being paid to the condition of atmosphere, or anything else. Quantity, not quality, is most frequently the object cared for; although on some large estates, it is true, the want of labour to secure the vintage properly often prevents sufficient pains being taken with it. In past years, too, growers found little encouragement from the merchants to make superior wines. A difference of £1 or £2 a legger in the value of the best and of the worst quality produced was not sufficient to induce them to depart from the old customs of their forefathers, or take any trouble with the manufacture. But the more intelligent and better class of vineyard proprietors have of late found it to their advantage to apply the lessons of modern practical knowledge and skill to their business. The perfect or imperfect state of ripeness of the grape, the kind of grape, the situation of the wine cellars, the condition of temperature during the process of fermentation, and the preservation of the pure aroma, or bouquet, untouched by spirit, are all matters which are receiving more atten-

tion, and undoubtedly contributing to raise the character as well as the profits upon the manufactured article. To those who are laying out new vineyards the mode of planting and the sites chosen should also be matters of importance. As a rule, the vines are planted too closely, and all varieties are generally grown in the same space, although some should have double that allotted to others. The soil, too, has much to do with the quality of the wine produced. It is well known that there are spots in the Colony where on the same farm—as at Johannisberg on the Rhine—within a few yards from each other, two vineyards will produce wines differing from each other a hundred per cent in value. Connoisseurs readily perceive that there is a material difference in the wines produced in the several districts about Cape Town. It is for this reason desirable that the growers who are endeavouring to improve their products should observe their best wines, give specific names to them, or brand the name of their farms on their casks. The superior wines would thereby soon become known, and their value accordingly appreciated. These and other matters connected with the cultivation, management, and manufacture of Cape wines open up a promising field for intelligence and enterprise.

The famous Constantia vineyards—whose produce still maintains a European reputation for excellence—have a history dating backwards to the year 1685. The traditional story is that at that time Governor Simon Van der Stell, who devoted much attention to agriculture, resolved to find out the soil most suitable to the cultivation of the vine, and had specimens from Rondebosch, Boscheuvel, Tygerberg, and Constantia forwarded to Holland, to undergo analysis and comparison with the soils of France and the Rhine. The result was so decidedly in favour of the soil from Constantia, that he availed himself of the presence of the

Dutch Company's Commissioner, Baron Van Rheede Van Drakenstein (after whom the district of Drakenstein has derived its name), to obtain a formal grant of lands, comprising the whole of what are now known as the estates of Great and Little Constantia, Witteboom, Bergvleit, and other properties. He spared no trouble to procure vines of the choicest qualities, which he planted, and the first vintage from the blue muscadel or Catalonia grape as it was called established the character of Constantia wines, which soon obtained great repute abroad. Van der Stell, the elder, in 1699, handed over the cares of Government to his son, and retired to this place to enjoy his *otium cum dignitate* until his death. But the political troubles which arose in 1700, from the arbitrary system of taxation, and other restrictions put upon the colonists, led to the younger Van der Stell's recall, and the issue of an order from Holland in October, 1706, that the lands of both father and son should be disposed of, and that civil functionaries should in future be disqualified from carrying on farming operations. This circumstance led to the sale of the Constantia estate in 1715,—the property on which Van der Stell had planted his vineyards and erected a princely mansion, retaining the original title deeds and name of Great and Hope Constantia. Great Constantia first fell into the possession of a Mr. Oloff Bergh; then into that of a Mr. J. Serrurier, and in the year 1778 into that of Mr. H. Cloete, in whose family it still continues. Hope Constantia again became the property of the family Colyn, now extinct, and is at present owned by Mr. Harwood. But the early proprietors of Great Constantia had, in common with the other colonists of those days, to submit to the tithes and restrictions imposed by the Dutch East India Company, who rigidly required an annual quantity of wine to be delivered, at what they considered "a

reasonable price,"\* and which they forwarded to their public sales at Amsterdam, from whence every court on the Continent was supplied. A similar practice was continued even after the cession of the Colony to England—the Government laying claim to what was termed the rights and privileges of the old Company, and a functionary known as the "Fiscal," and some members of the Court of Justice, used yearly to repair to Constantia to taste and select the wines, some of which, it is said, were sent away as presents, "to soften the temper of Ministers, and to sweeten the lips of Royalty itself." But after 1826, when the Imperial Commissioners of Inquiry visited the Colony, and investigation was made into the matter, the system was discontinued. Prior to this time, an intelligent and enterprising colonist, Mr. Sebastian Van Reenen, obtained possession of Witteboom, adjoining Constantia; and convinced by reflection that the boundary which divided the two estates had not altered the nature of the soil or the climate, he planted extensive vineyards, which have been continued in the family, and are now equally as well known as the original Constantia.

These magnificent estates are a prominent attraction to passengers spending a few days at Cape Town. Situate about twelve miles from the city, and three or four from the Wynberg railway terminus, they are easily accessible, and in the course of each year are visited by many persons from every quarter of the globe, who all receive a courteous and hospitable welcome. Mr. Van Reenen's property, which is maintained in a high state of culture and perfect order, is nearest to Cape Town, and more generally

\* While the public price of the Constantia wines was 80 rix-dollars per legger, the Company gave a "reasonable price" of only 25 rix-dollars per legger.

visited ; but the senior establishment of Mr. Cloete, Great Constantia, retains its famous wine producing reputation, and has in addition the charms of old historic associations, with its quaint Dutch mansion, grand avenues, and vineclad hills, all bearing evidence of the munificent taste of its original founder.

There are no less than seven descriptions of Constantia wines produced there. The grapes from which the genuine sweet Constantias are made are the frontignac, red and white muscadels, and the pontac, or tenturer of France. The vineyards are situate on a slope of the Table Mountain facing south-east, where, from elevation and exposure to the sea breeze, the temperature is cooler in summer and milder in winter than other parts of the Cape peninsula. The vines are planted in rows four feet apart. The ground around them is dug from May to July and August—trenches, 13 inches deep and 9 inches broad, being made in each alternate row, and bone manure, in the proportion of 1 lb. to every vine, laid at the bottom, with farmyard manure, in the proportion of one bushel for eight vines, spread over it. The vines are pruned in August. About the 15th of February the leaves surrounding the grapes on those vines intended for sweet Constantia are stripped off, so as to expose each bunch to the sun to ensure their equal ripeness ; the gathering, indeed, is commonly done twice, to secure as nearly as possible the uniform maturity of all the fruit. The vintage generally extends from the 1st to the 20th March. The grapes are first slightly tramped in a double pressing tub, the inner one being perforated with holes, through which the juice flows ; they are then sifted or sorted on a platform or mat, and the husks separated from the stalks, the husks being again tramped until all are crushed. The husks and juice are afterwards put in a fermenting vat together, and when the first fermentation subsides, which is known

by the crust formed on the top cracking and also breaking loose from the sides of the vat, the juice or "must" is racked off from the bottom and put into casks of about 150 gallons, filled up three or four times a day, and allowed to ferment ten days. About twenty gallons of this must is taken off and put into clean casks, and sulphured and shaken, and then the former quantity (130 gallons) is added to it, which has the effect of checking fermentation. The wines so prepared remain sweet, but are always kept for four years before being exported. Their natural strength seldom exceeds 24 per cent. of spirit—the crucial test of genuine sweet Constantia. The dry white Constantia is made from the fruit of the vines known as the small Steen and ruyhaar Steen, in equal proportions, the grapes used being thoroughly, but not over-ripe. To this wine 2 per cent. of spirit is added, and it is sold when three years old. The dry red Constantia is prepared in the same way, but from the pontac grape. The hock is made from the Steen grape, and from the pure juice alone. Mr. Cloete has of late added a new wine to the productions of his Estate. This is a Constantia Lafitte, manufactured from grapes raised from vines imported from the Lafitte vineyards of France. This wine still retains the Lafitte bouquet and flavour modified by the Constantia; but whereas the genuine Lafitte wines contain only 13 to 15 per cent. of spirit, the produce of the grape from the Constantia soil gives 22 per cent. As the per centage of spirit in the genuine Constantia wine, above given, is from the mean of several years' experience, it can easily be ascertained by analysis whether spirits have been added to the qualities sold as "real Constantias."

By most of the wine-growers a quantity of raisins are annually produced. They are chiefly made in

the districts beyond the first range of mountains,—Worcester, Robertson, and Montagu,—the vintage seasons there being hot and dry. The large fleshy haanepoot grape is generally used for manufacture—being prepared either by cutting the stalk of the bunches half through when nearly ripe, and leaving them suspended on the vine till the watery part is evaporated and the sun dries and candies them; or when fully ripe, they are gathered in baskets, and dipped in a lye prepared from the “ganna” ash (common to the country), and then laid out in single bunches, on cane mats, or stones, to dry in the sun. Currants are made from the small-berried Corinth vine, which grows well, although it is much neglected, as it does not bear so plentifully as others; yet its produce is much more valued. The currants, too, require less trouble in making, no boiled lye being used, as for raisins. The bunches, when properly ripe, are gathered, and placed on mats, where they are exposed for two or three days to the heat of the sun, and during the night are either covered over with mats or brought inside; they are afterwards shaken from the bunches, and packed in boxes, jars, or bags. Raisin-making does not require the large capital in fustage and cellars necessary to wine making, and if care is taken to use the right kind of grape, and to produce the best qualities, remunerative prices are readily procurable. The Malaga and stoneless Sultana grape should be more extensively cultivated for the purpose. The latter was introduced from Greece about ten years ago by Mr. M’Gibbon, of the Botanic Gardens, who says, “they succeed well in our vineyards, and bear moderately. The bunches are large, the berries oval; when ripe, of a beautiful amber colour, and about the size of a water haanepoot; the flavour, a combination of the frontignac and haanepoot, and very delicious; and the raisins from them realise a high price.” Sun-dried dessert raisins of these varie-

ties, with the bloom upon the berries, will always be in good demand.\*

The preparation of other dried fruits also gives occupation to those farmers who have extensive orchards. Apricots, peaches, pears, figs, plums, apples, walnuts, almonds—indeed every kind of fruit—is available in any quantity for this purpose. The preserves of the Cape—gooseberry, nartje, orange, lime, guava, quince, melon, citron, peach, fig, apricot, and other varieties—surpass any of the English manufactured fruits. Many of these colonial preserved fruits, as well as vegetables, are now being made and put up in hermetically-sealed tin cans for wholesale exportation. This industry has been started within the past year by Mr. John Merriman, in Cape Town. The process of preserving is conducted by skilled workmen, who have been trained in the English establishments, and the articles produced are beautiful in appearance and to the taste far purer than any imported, while their cost is much less.

Tobacco is in cultivation in several of the coast districts—Heidelberg, Riversdale, and Oudtshoorn, as well as parts of Kaffraria, producing a large quantity. There is a considerable home consumption for this product, some of it, under the name of “Boer’s,” being

\* In California, raisin-making is now an established and promising industry. In making raisins they wait until the grape is fully ripe, and then carefully cut off the branches, and lay them either on a hard clay floor, formed in the open air, or on brown paper laid between the vine rows. The bunches require from 18 to 24 days of exposure in the sun to be cured. During that time they are gently turned from time to time, and such as are earliest cured are at once removed to a raisin house. This is fitted with shelves, on which the raisins are laid about a foot thick, and here they are allowed to sweat a little. If they sweat too much, the sugar candies on the outside, and this deteriorates the quality of the raisin. It is an object to keep the bloom on the berries. They are kept in the raisin house, I was told, 5 or 6 weeks, when they are ready to box.—*Vide* “Nordhoff’s California,” &c.

used for smoking; the general demand, however, is for sheep-washing purposes. The soil in many parts seems well adapted to the plant; but in the process of curing and preparing the leaf for export there is room for much improvement.

Cotton-growing has been tried with some success on the coast lands of Albany, Peddie, and East London, and if the natives can only be induced to engage in its cultivation it may become a valuable export in course of time.\*

The average yield of the crops raised is estimated at about 240 lb. of clean or ginned cotton per acre. Mr Wright, of Bathurst, has obtained a return of from 500 lb. to 900 lb. per acre in seed, Sea Island sample; and some lands have yielded as high as 1,200 lb. Mr. Young, lately of Peddie, who has grown New Orleans, reckons the average yield to be about 500 lb. to 600 lb. of seed cotton per acre. But this, in the present state of our labour market, and with ginned cotton at 8d. per lb. in the English market, does not pay. The expenses to England are about 3d. per lb., leaving the grower only 5d. The export of cotton from the Colony in 1873 amounted to 49,376 lb., valued at £2,055; and in 1874, was only 15,117 lb., valued at £257.

Coffee is grown along the Buffalo River, as well as at the Kowie. Mr. Dredge, of East London district, has produced not only enough to supply his own table, but has had some little to sell, his crop last year being about 300 lb. Below Graham's Town, in the sheltered valleys of the Zuurberg, and in various other places about the country, coffee trees bear abundantly. There are also some tea plants, which, it is said, will stand the winds and the frosts even better than the coffee.

\* Messrs. Cawood Brothers, of Graham's Town, have lately imported some table and sheeting, manufactured to their order from Cape-grown cotton.

There are numbers of other undeveloped products and resources in the Colony offering a profitable field to persons competent to enter upon them; although at present the ordinary occupations are sufficiently remunerative to most people without trying new openings. Sericulture has been mooted for years, and Dr. Hiddingh, of Newlands, and Mr. Kennelly, of Graham's Town, and others, have endeavoured to set the industry a foot, but there has been no continued effort on the part of the public to maintain it. Olive cultivation, which was first tried by one of the early Dutch Governors, has been strongly recommended, and European plants have been introduced, but few of the farmers have made any experiment with them. Yet in the Botanic Gardens there are rows of olives in full growth and bearing, showing that this valuable tree would answer, if planted on what are at present mere waste lands. Linseed also will do well, the yield of both seed and fibre being excellent. Mr. M. J. Louw, of Cape Town, who has erected machinery for manufacturing the oil and the oilcake, is prepared to take any quantity that may be raised; and if produced largely, the article would be invaluable for the feeding of stock. Lands that can be irrigated in summer, like those of Worcester, answer best for a crop, as by being sown late, say in September or October, it escapes the caterpillar, the chief enemy it has to contend with. The cultivation of chicory, of the sunflower, and of numerous other products, might also be undertaken. In fact, there is scarcely a valuable plant but can be grown here, except just such as are specially tropical, and even these are not altogether beyond our reach. There are localities in the Colony where anything will grow, if it gets plenty of *water*; and with water we may grow anything if we have *labour*. These are the great requirements of the country.

The ordinary labourers are for the most part natives,

—either Hottentot, Kafir, or Basuto, or some other of the aborigines or of the tribes immediately beyond us. They make careful herds, and pretty good ploughmen, and quickly master the long wagon whip of the “kurveyor,” and so get employed on the roads as leaders and drivers of wagons. There is, however, a very scanty supply of field labourers; not but that there are plenty of men in the country, but the larger part of them being raw savages do not care to work, for their wants are few and easily supplied. In the Western districts permanent agricultural labourers of the coloured class receive about 15s. to 20s. per month, with food and quarters, and garden lands to cultivate all the year round; and occasional labourers, during the harvest and vintage season, get as high as 3s. 6d. a day, besides an allowance of wine. In the Eastern districts the wages to natives at the harvest time is from 1s. to 2s. a day, with rations. European servants are much better paid, generally occupying the places of overseers; and in most instances, if they are steady, active, and prudent men, they speedily rise to the position of masters and employers of labour.

New-comers will find that there are continually farms to be sold by private owners, at from 5s. to 20s. per acre, and in some parts of the Colony large landowners let out lands on “halves” — if pastoral, stocking them and charging a rent, and dividing the increase and yield; if arable, finding the land, and perhaps the seed and some parts of the necessary teams, the tenant supplying the labour, and the crops raised being equally divided. Many colonists who began the world in this manner have done very well, and have now good farms of their own. The plan may suit men coming into the country possessed of little capital, but with a will to work—for here, as elsewhere all over the world, industry, pluck, and perseverance are the keys to success.



## COMMERCIAL AND INDUSTRIAL PROGRESS.

Governor Sir Henry Barkly, in one of his recent despatches to the Secretary of State for the Colonies, remarks that "it would scarcely be much exaggeration to say that the rapidity of the progress of South Africa during the last three or four years is paralleled only by that of Australia after the discovery of gold."

No doubt the opening up of the diamond-producing country on the northern border, in Griqualand West, with the consequent influx and migration of population there, deriving their chief supplies from the coast, largely stimulated trade transactions and also diffused a great deal of wealth, which has been applied to the development of new resources and industries. But, independently of these adventitious circumstances, the commerce of the Cape Colony and the yield of its staple productions have of late years been advancing in so marked a degree as to give every assurance of continued and permanent prosperity.

The retrospect of mercantile transactions shown in the annexed tables of imports and exports, prepared from returns furnished by the Hon. R. Graham, the Collector of Customs, proves the remarkable expansion of business in every direction,—and this, too, notwithstanding the drawbacks of drought at one time, of floods at another, of uncertain and inadequate labour, and of insufficient means of transport. Ten years ago the colonial produce raised and exported was valued at £2,395,673. Last year the produce shipped was considerably over £4,138,000, after supplying the colonial markets, a largely-increased population, and numerous vessels. The period of great mercantile activity

may, however, be said to date from 1870, and the progress since will be seen from the following comparison of the imports and exports for the last four years:—

IMPORTS.				
	1871.	1872.	1873.	1874.
	£	£	£	£
Specie.....	522,540	1,800,515	321,862	167,197
Merchandise .....	2,585,298	1,888,728	5,130,065	5,558,215
Total .....	£3,107,838	£6,189,243	£5,451,927	£5,725,412

EXPORTS.				
	1871,	1872.	1873.	1874.
	£	£	£	£
Specie.....	54,387	72,095	103,416	235,186
Produce .....	3,531,609	4,757,494	3,907,911	4,138,838
Total .....	£3,585,996	£4,829,589	£4,011,327	£4,374,024

These returns of produce exported include but an infinitesimal portion of the value of diamonds sent away, inasmuch as they were forwarded chiefly by registered letter through the Post-office, or by private hand, and not declared through the Customs. The official statement only accounted, in 1871, for £403,349; in 1872, for £306,041; in 1873, for £25,285; and in 1874, for £8,148; while there is good reason for believing that during these four years at least £4,000,000 worth of diamonds, in addition to the above, were sent away. If this estimate be correct, the discrepancy between the amount of imports and exports is approximately accounted for—a small difference always occurring, from the geographical position of the Colony as a place of call for shipping, and the supply of the military and naval establishments.

It is worthy of note, too, that the total imports of specie from 1871 to 1874 amounted to £2,812,114; while the exports of specie for the same period was only £465,084, leaving a balance of over two millions and a quarter in the Colony.

The most gratifying feature, however, is the satisfactory progress indicated by the multiplication of colonial articles exported—some of which, of course, include the produce of the Free State, Griqualand West, and part of the Interior. The following items show a great increase over the maximum of three or four years ago:—

	£		£
Copper has advanced from	160,000	in 1871 to	321,424 in 1874.
Ostrich feathers	87,000	„ 1870 „	205,640 „
Hair (Angora)	43,000	„ 1871 „	107,139 „
Fish, cured	18,837	„ 1871 „	34,339 „
Hides	29,000	„ 1871 „	49,425 „
Ivory	13,000	„ 1870 „	26,667 „
Skins (goat)	172,000	„ 1871 „	194,324 „
Skins (sheep)	87,000	„ 1870 „	144,538 „
Wool,	1,669,518	„ 1870 „	2,948,571

During the present year gold will be added to the list of exports—the first shipment of South African gold officially entered\* having already been made at Port Elizabeth, consisting of gold dust, £5,735, and quartz and nuggets £880; total, £6,615—a small item, but one of important signification in regard to the future of this country.

The greater part of the Colonial productions, it will be seen consists of raw materials, which are sent to the home markets for manufacture; but there are many of them which in their preparation, or in their conversion into articles of domestic consumption, employ a great deal of local capital and labour. In Cape Town and its suburbs the manipulation of wines, the distilling of brandy, and the brewing of beer are industries of large proportions. There are also many extensive steam milling establishments for

\* The exports of gold, as of diamonds, cannot be accurately ascertained, as it is not required to be entered as regular cargo, and is, therefore, never declared, although carried by passengers in their luggage or on their person.

converting wheat into flour of several descriptions, and for the manufacture of biscuits of first-class quality. The workshops of the harbour and railway departments are capable of executing any mechanical requirements. Boat building, foundries, and smiths' works are also carried on by private individuals. Coachbuilding and wagon making give continual occupation to many workmen; and besides these, there are the ordinary trades of cabinet making, building, plumbing, watchmaking, printing, bookbinding, saddlery and harness making, painting, shoemaking, tailoring, &c.

Leather manufacture has been in operation for some years, and there are several large tanneries, both in Cape Town, Port Elizabeth, and Graham's Town. The raw staple and the very best materials for preparing it are to be had in any quantity; yet the import tables show there is a colonial demand for the article far beyond anything hitherto supplied. The Cape goatskin is unsurpassed for conversion into the first quality of leather, and the Cape sheepskin supplies very superior kid gloves. There are numbers of indigenous plants which yield tannin, and some of them such as kreuppelboom, wagenboom, kliphout, wild plum,\* assegai, and saffran as well as the mimosa and oak, are unequalled for tanning purposes. Fellmongering has lately been commenced, and many skins, formerly little valued, are bought up here, and by this process have the wool upon them

\* The leaves of the wild plum, when ground and properly prepared, are quite equal to the Sicilian shumac, and used chiefly for tanning buck and sheep skins. The shrub from which they are gathered is locally known as the *wild pruimen* or *t'kaamabesjes*, and is found in many places in the Cape district,—such as Hout's Bay, Muizenberg, and Zandvleit, as well as at Saldanha Bay, and also in some of the Eastern Districts, and in Kafirland. The article might be made a considerable and valuable export. It is collected, in the green state, for about £6 per ton, and can be ground to powder for an additional £1; while the Sicilian costs fully double as much.

turned to account, as well as the felt preserved. Soap making has also been established, and the colonial article is supplanting the imported one.

Woollen manufactures have not hitherto been tried, although a beginning is now being made by a colonial benefactor (W. W. Dickson, Esq.), who is constructing a large establishment on the Breede River, Mitchell's Pass, Tulbagh district, for wool washing and fell-mongering, and where also, ere long, blankets and broad-cloths from our principal staple may be supplied.

Wool-washing, however, is an extensive business, carried on all over the country. From Cape Town, where Messrs. Marquard and Co. have their steam manufactory, on to Mr. Tudhope's, at Aliwal North, nearly every division has one or more at work. But the chief centre of this industry is on the Zwartkops River, at Uitenhage, and the extent to which it has been developed, as well as the contrast between the process of wool washing now and in former times, merits a brief description.

Twelve years ago, there were only three wool-washers on the Zwartkops River, and their manner of washing was of the most primitive character. The dirty wool was put into tubs of water, and stirred about with forked sticks or poles, till a great deal of dirt was separated from it, although it was very many shades darker than the present "Uitenhage snow white," so eagerly sought after by home buyers. A long stride towards perfection was made when square tanks, with bottoms of perforated zinc, were introduced. The clean water was made to flow into these tanks from sluices in a wooden water "shoot," and the dirty water escaped through the perforated bottoms of the tanks. In each of these tanks two Kafirs, men or women, stood, and kicked the wool about with their feet until it was sufficiently

clean. This was called "cold water foot-washing," although the wool was soaked in hot water previous to its being thrown into the tanks; it was then carried into the drying grounds, where it was tossed about with forked sticks, and spread out in the sun, over a floor of river pebbles, until sufficiently dried and bleached. This process raised the reputation of Uitenhage washing considerably; and it was by it that the first "snow whites" were produced. But this was soon to give way to cheaper, more perfect, and more expeditious steam washing, and foot-washing is no longer employed.

The machinery employed at these establishments vary in some minor particulars, but the general principle adopted is the same in all; and although visitors with a taste for machinery would find something fresh to interest them at each establishment, a general description of one establishment will serve for the present purpose. The establishment we select for description is that of Messrs. F. and P. Lange. A well-designed and substantially-built building, 150 feet long by 60 feet wide, contains the washing machinery. In the centre of this building is an engine of 25-horse power, which drives a shaft 145 feet long, setting in motion all the machinery, *i.e.*, "devils," "washers," "hydro-extractors," packing machines, pressing machines, centrifugal pumps, turning lathes, circular saws, &c. The first process to which the wool is submitted is "devilling." The "devil" is a closed circular box of about six feet diameter, inside of which revolve, with great rapidity, a spindle, from which radiate long metal teeth. The wool is so shaken and loosened by this process that a great deal of the dirt is thus extracted. This dirt falls through the bottom part of the "devil," which is made of perforated zinc. The wool is next put into tanks of hot water, varying in temperature from 100° to 170°,

according to the quality of the wool. It is next passed into the "washers," which work in cemented tanks 35 feet long, 6 feet wide, and 3 feet deep. There are six of these washers and tanks at Messrs. Lange's establishment. Each of the tanks is the channel for a powerful stream of cold water, which is admitted at the front of the tank through a sluice in an underground culvert, which runs the whole length of the building. The wool, as it passes through the machine, is worked up by the machinery against the current, and, as all the dirt is driven to the lower end of the stream, the progress of the wool is into purer water. When the wool is thrown into the washer from the soaking tank, it is first drawn into a box, or drum, similar in construction to the "devil" already described, the difference being that this works in the water, and, by a spiral arrangement of the teeth in the spindle, the wool is thrown out when sufficiently whirled about. It is then raked forward by a series of forks against the stream, and deposited in a second drum, from which it is taken by a second series of forks, and ultimately raised out of the further end of the tank by a beautiful mechanical contrivance called the "Belgian lift," and deposited on a perforated platform, where it drains, until placed on small wagons, which run on a tramway to what are called the "hydro-extractors," where nearly all the water is taken out of it by centrifugal force. It is then taken to the drying grounds, where it is bleached and dried. The packing and pressing is also performed by steam, and immensely powerful racks and cog-wheels are employed in that process. The bag is placed in a strong square box the size of a bale; the sides of this box all open on hinges at the bottom, and when the bag is being filled with wool they are closed with strong iron catches. Above this box is a square wooden tube about 10 feet long, corresponding in its

other dimensions with the wool bale in the box beneath. Into this tube the wool is thrown from the warehouse above, and tramped down by a Kafir. When the whole, box and tube, are as full as the Kafir can tread them, the rack is applied, and squeezes the mass of wool into a nearly solid block the size of the bag, which is then sown up, branded, and rolled out ready for loading. The various plans employed for hoisting the bales on to the wagons are ingenious, but would make our description too long. The quantity of wool washed in the 24 hours at this establishment is 100 bales, and the quantity of water required for that number 500,000 gallons.

It would be unjust to conclude this notice of the Uitenhage establishments without making mention of that of Mr. Niven, which is as large, if not larger, than that we have described, and where many most ingenious contrivances are used for accomplishing by machinery what at other places is done by hand. Mr. Niven may be called the father of wool-washing by machinery, as he was the first to employ machinery; and all the processes now in use are more or less modifications of his inventions.

The woods of the Colony comprise upwards of a hundred different kinds; and many of them are extensively used for economic purposes, such as house building, wagon making, furniture, and cabinet work. The forests, however, are chiefly along the coast line, and the expense of transporting timber to the more inland parts is great. But there is no district where trees cannot be grown if irrigated and fenced in for the first few years. Some private individuals have found it to be very profitable to lay out young plantations of quick-growing timber like the blue gum and blackwood; and the same course might be profitably followed by Government with a good deal of the waste lands. Dr. Brown, the late Colonial Botanist,

strongly urged this matter upon public attention. His counsel was, plant any tree—any kind of tree which will grow, or any kind of tree for which there may be a fancy—oak, fir, poplar, blue gum, beef-wood, blackwood—anything. Every tree that grows tends to prepare the climate for the growth of others, and we have yet to learn where is a district in which it would be vain to try the experiment. While during their growth they would contribute to increase the humidity of the climate, the revenue obtained from the sale of them, when fit to be cut as timber, would supply means of still more extensively carrying out the enterprise.

The mineral resources of the Colony are being more and more developed every year. Copper is the most important mining industry, and at present there appears no limit to the production—the old mines of Namaqualand yielding handsomely, and the new ones, near the Orange River, promising to be still richer in quantity and quality of ore. Coal, equal to some of the English varieties as a source of heat, exists over a large area in the Border districts, and may be found in other parts, as the country becomes more occupied. Diamonds have been picked up on the surface of the country, at various places along the basin of the Orange River, and there is a probability that spots may yet be hit upon containing marvellous treasures corresponding to the Kimberley mine. Besides diamonds, in the category of ornamental stones may also be included various coloured agates, garnets, amethysts, rose quartz, fibrous quartz, tourmaline, chalcedony, heliotrope or bloodstone, red and yellow jasper, steatite, &c., found along the north-western border from Hope Town to the Great Waterfall. Lead ore, manganese, hæmatite, and other iron ore, and similar valuable products likewise occur in many different localities. Building stone is abundant all over the country, and

also beds of clay, some of which could be used for the finest pottery. There are several qualities of freestone, some being suitable for mill and grinding stones, as well as for architectural purposes. Marbles of different colours are found in many places—in Namaqualand, Clanwilliam, Tulbagh, Worcester, Oudtshoorn; and limestones of various ages occur along most of the coast districts, and on the Orange River below Hope Town. Numerous other substances of economic value may still be discovered, if a systematic examination of the country is made—for it is true of the Colony, as of Africa generally, that it is always rewarding search with something new.

Those who have followed us in this review of the industrial and productive capabilities of the Cape may be surprised that, with such natural resources, it has hitherto attracted so little attention as a field for immigration. Some of the causes may be briefly referred to. When Great Britain took over the Colony from the Batavian Republic, the districts beyond the range of mountains near the coast were almost shut out from communication with the world—rugged kloofs and rocky terraces presented obstacles which seemed too difficult to be encountered—and the inhabitants of those isolated parts were forced to a life of inaction. The Government made little effort to improve this condition of things, and for many years afterwards appeared quite contented with holding the extremity of the Cape peninsula and the south-eastern littoral line. Their experiment of planting the settlers of 1820 in the Albany district, where for a time they had to encounter a barbarous foe as well as the difficulties of a new and strange country, did not seem satisfactory enough to be repeated,—although in later years the results proved eminently successful. A barren promontory, a sterile desert, and a sparse population

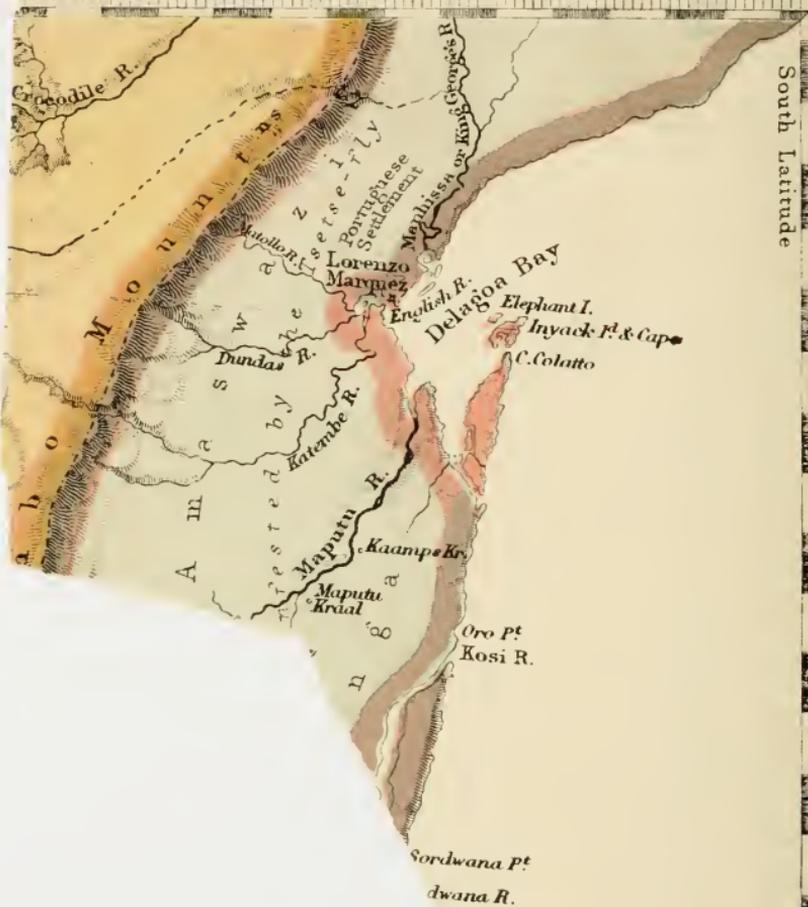
surrounded by savages, and subject to recurring Kafir wars, then formed and until a very recent period, the ordinary English conception of South Africa. Even Lord (now Earl) Russell, in his instructions to the Land and Emigration Commissioners when they were first appointed, after dwelling on the advantages of other colonies, like Canada and Australia, passed over the Cape of Good Hope, with the remark that little land offered itself there; and yet, at that time, more than now, millions of acres were available, but unsurveyed and uncared for. The resources of the Colony were thus sealed up and lying dormant, and its comparatively thinly-scattered inhabitants idle spectators, during the great movements of labour and capital from the Old World to the New.

In course of time, however, efforts were made within the country itself to promote its advancement and prosperity. The construction of main lines of communication, devised and inaugurated by the late Mr. Montagu and Colonel Mitchell, removed the chief internal barriers to progress and civilisation. The "desert wilds" were opened up, and utilised by a progressive population. Towns and villages were multiplied, and there was increased production and industry. The people, under the influence of education, diffused by means of churches, schools, and a free press, and, trained in some degree by experience in the management of their own local affairs, acquired habits of self-help, self-reliance, and self-government. In 1854, the privileges of an elective Parliament were granted to them, and an era of unruffled peace and active progress entered upon. Public works were undertaken with an energy unknown before. Roads and bridges were constructed, harbours were improved, railways and telegraphs were introduced, the public lands were thrown open to public competition, and immigration en-

couraged. In a few years the action of the Legislature did more for the Colony than it would have been possible for the old Government to have accomplished in fifty. There have been temporary checks occasionally felt, arising from seasons of drought and low markets; but the spirit of progress and improvement has not slackened since. The past year, again, has witnessed the sanction by Parliament of several important undertakings—including the construction of lines of railway in various directions, extending in the aggregate over nearly 800 miles, and involving an eventual outlay of about five millions sterling. This large expenditure is fully justified by the flourishing condition of the revenue—now approaching to a million and a half sterling per annum—and by the consideration that such works will necessarily augment the value of public and private property, will materially diminish the burdens entailed on all classes by the present tedious and expensive mode of transport, and will also greatly contribute, by the introduction of European skill and labour, to the better occupation and development of the country.

Sir Henry Barkly, in the despatches already alluded to, truly observes: "It would be idle, of course, to attempt to predict the future destinies of the Colony; but nothing assuredly can be more apparently promising than its prospects at this moment. With unbounded stores of mineral wealth, and with a range of climate that fits it for the growth of most of the agricultural productions of the tropical as well as temperate zone, the natural resources of South Africa can hardly be surpassed by those of any other portion of the globe."





## THE CENSUS OF 1875.

The first Census of the Cape Colony was taken in 1865, and the statistical information deduced therefrom has been embodied in the preceding pages. A second Census was taken at the end of the decennial period, in March of the present year 1875, and although the full details will not be published until the compilation of all the voluminous and complicated returns is completed by the Government statistician, we are enabled to give the principal results, as summarised from the reports of the official enumerators of each Division.

As compared with the previous Census, the population, property, and realised wealth of the colonists have made a considerable advance. The time at which the Census was taken, however, was most unfavourable for a representation of its agricultural and pastoral resources. The drought of 1873-4 in some parts, and the heavy floods at the close of 1874 in others, caused a diminution of produce as well as a reduction of stock. The returns therefore do not present in any way an exaggerated view of the industry of the people.

The Divisions are here arranged under the several "Provinces" into which the Colony is now divided by the Constitution Ordinance Amendment Act 18 of 1874, for the election of Members of the Legislative Council. The stock and produce embrace the principal articles contributing to our colonial productions; but for some of the Divisions these are omitted, as the results are as yet imperfectly ascertained. The population shows the number of inhabitants in the towns and villages, and in the rural parts of each District. The total population of the Colony now is 720,000, being an increase of 24 per cent. on the returns of 1865.

## 1. WESTERN PROVINCE.

*Cape Town.*—Population, Municipality, 32,907 ; *Greenpoint.*—1,426 ; *Robben Island*, 552. Total 34,885.

*Cape Division.*—Papendorp, Liesbeek, Rondebosch, Newlands, Wynberg, and Constantia, 12,076 ; Simon's Town, 2,554 ; Durban, 871 ; Other Rural Wards, 7,358. Total, 22,859. Wheat, 75,330 bushels ; Barley, 24,838 bushels ; Oats, 17,896 ; Vine Stocks, 3,204,645 ; Wine, 1,853 leggers ; Brandy, 288 leggers.

*Stellenbosch and Somerset West.*—Population, Urban 4,017 ; Rural 6,524.

Horses, 1,394 ; Mules and Asses, 692 ; Draught Oxen, 1,757 ; Other Cattle, 3,337 ; Wooled Sheep, 17,669 ; Other Sheep, 758 ; Angora Goats, 4,333 ; Common Goats, 3,942 ; Ostriches, 205 ; Wool, 40,422 lbs. ; Wheat, 17,868 bushels ; Barley, 8,806 bushels ; Oats, 12,461 bushels ; Vines, 15,887,610 ; Wine, 10,048 leggers ; Brandy, 1,017 leggers.

*Paarl and Wellington.*—Population, Urban 7,989 ; Rural 10,125.

Horses, 2,654 ; Mules and Asses, 1,628 ; Draught Oxen, 3,043 ; Other Cattle, 5,027 ; Wooled Sheep, 26,753 ; Other Sheep, 1,630 ; Angora Goats, 1,991 ; Common Goats, 10,491 ; Ostriches, 502 ; Wool, 28,896 lbs. ; Wheat, 49,830 bushels ; Barley, 13,766 bushels ; Oats, 66,812 bushels ; Vines, 25,548,175 ; Wine, 16,853 leggers ; Brandy, 1,362 leggers.

## 2. NORTH WESTERN PROVINCE.

*Malmesbury.*—Population, Urban 4,302 ; Rural 13,912.

Horses, 8,977 ; Mules and Asses, 3,649 ; Draught Oxen, 8,547 ; Other Cattle, 21,170 ; Wooled Sheep, 162,117 ; Other Sheep, 15,670 ; Angora Goats, 1,305 ; Common Goats, 44,536 ; Ostriches 111 ; Wool, 182,228 lbs. ; Vines, 1,896,000. Agricultural returns imperfect.

*Piquetberg.*—Population, Urban 1,500 ; Rural 6,718.

Horses, 3,312 ; Mules and Asses, 774 ; Draught Oxen, 5,125 ; Other Cattle, 11,277 ; Wooled Sheep, 56,467 ; Other Sheep, 11,797 ; Angora Goats, 80 ; Common Goats, 40,564 ; Ostriches, 230.

*Worcester.*—Population, Urban 3,863 ; Rural 5,938.

Horses, 2,950 ; Mules and Asses, 856 ; Draught Oxen, 4,858 ; Other Cattle, 9,237 ; Wooled Sheep, 115,150 ; Other Sheep, 25,894 ;

Angora Goats, 3,557 ; Common Goats, 37,944 ; Ostriches, 390 ; Wool, 631,444 lbs. ; Wheat, 20,923 bushels ; Barley, 26,137 bushels ; oats, 2,473 bushels ; Vine stocks, 5,414,526 ; Wine, 1,380 leggers ; Brandy, 1,155 leggers.

*Tulbagh.*—Population, Urban 3,589 ; Rural 6,354.

Horses, 3,794 ; Mules and Asses, 1,033 ; Draught Oxen, 3,797 ; Other Cattle, 7,913 ; Woolled Sheep, 103,808 ; Other Sheep, 8,184 ; Angora Goats, 3,142 ; Common Goats, 28,378 ; Ostriches, 117.

*Clanwilliam.*—Population, Urban 1,607 ; Rural 6,797.

Horses, 3,193 ; Mules and Asses, 656 ; Draught Oxen, 5,313 ; Other Cattle, 11,662 ; Woolled Sheep, 28,196 ; Other Sheep, 42,018 ; Angora Goats, 675 ; Common Goats, 60,775 ; Ostriches, 358.

*Calvinia.*—Population, Urban 439 ; Rural 7,013.

Horses, 3,681 ; Mules and Asses, 942 ; Draught Oxen, 4,302 ; Other Cattle, 9,443 ; Woolled Sheep, 79,972 ; Other Sheep, 167,066 ; Angora Goats, 303 ; Common Goats, 66,765 ; Ostriches, 1,148 ; Wool, 227,377 lbs.

*Namaqualand.*—Population, Urban 5,703 ; Rural 6,648.

Horses, 3,507 ; Mules and Asses, 799 ; Draught Oxen, 5,539 ; Other Cattle, 8,323 ; Woolled Sheep, 4,546 ; Other Sheep, 111,458 ; Angora Goats, 956 ; Common Goats, 81,210 ; Ostriches, 73.

### 3. SOUTH WESTERN PROVINCE.

*Caledon.*—Population, Urban 1,362 ; Rural 9,941.

Horses, 3,522 ; Mules and Asses, 910 ; Draught Oxen, 4,974 ; Other Cattle, 3,264 ; Woolled Sheep, 259,621 ; Other Sheep, 1,002 ; Angora Goats, 510 ; Common Goats, 10,107 ; Ostriches, 310 ; Wool, 539,951 lbs. ; Wheat, 102,058 bushels ; Barley, 25,183 bushels ; Oats, 67,188 bushels ; Wine, 1,149 leggers ; Brandy, 144 leggers.

*Bredasdorp.*—Population, Urban 2,184 ; Rural 2,101.

Horses, 1,526 ; Mules and Asses, 343 ; Draught Oxen, 783 ; Other Cattle, 649 ; Woolled Sheep, 127,090 ; Other Sheep, 436 ; Angora Goats, 1,058 ; Common Goats, 6,171 ; Ostriches, 86 ; Wool, 321,000 lbs. ; Wheat, 14,851 bushels ; Barley, 13,262 bushels ; Oats, 5,974 bushels.

*Swellendam.*—Population, Urban 3,521 ; Rural 6,484.

Horses, 4,100 ; Mules and Asses, 511 ; Draught Oxen, 5,456 ; Other Cattle, 7,332 ; Woolled Sheep, 214,557 ; Other Sheep, 3,615 ; Angora Goats, 10,751 ; Common Goats, 44,410 ; Ostriches, 820 ; Wool, 484,413 lbs. ; Wheat, 26,301 bushels ; Barley, 28,000 bushels ; Oats, 37,876 bushels ; Wine, 78 leggers ; Brandy, 34 leggers.

*Robertson.*—Population, Urban 2,601 ; Rural 5,385.

Horses, 1,843 ; Mules and Asses, 1,048 ; Draught Oxen, 2,764 ; Other Cattle, 5,138 ; Woolled Sheep, 26,697 ; Other Sheep, 2,502 ; Angora Goats, 3,270 ; Common Goats, 53,885 ; Ostriches, 133 ; Wool, 56,000 lbs. ; wheat, 29,674 bushels ; barley, 35,997 bushels ; Oats, 2,547 bushels ; Vine stocks, 4,527,603 ; Wine, 1,173 leggers ; Brandy, 721 leggers.

*Riversdale.*—Population, Urban, 2,896 ; Rural, 9,829.

Horses, 4,004 ; Mules and Asses, 804 ; Draught Oxen, 7,707 ; Other Cattle, 14,766 ; Woolled Sheep, 105,859 ; Other Sheep, 4,177 ; Angora Goats, 6,415 ; Common Goats, 86,221 ; Ostriches, 2,892 ; Wool, 159,117 lbs. ; Wheat, 35,898 bushels ; Barley, 21,491 bushels ; Oats, 1,477 bushels ; Wine, 189 leggers ; Brandy, 655 leggers.

*Oudtshoorn.*—Population, Urban, 1,780 ; Rural, 13,349 ;

Horses, 2,881 ; Mules and Asses, 1,726 ; Draught Oxen, 10,226 ; Other Cattle, 6,227 ; Woolled Sheep, 11,078 ; Other Sheep, 5,905 ; Angora Goats, 4,699 ; Common Goats, 84,082 ; Ostriches, 2,519 ; Wool, 20,760 lbs. ; Wheat, 100,721 bushels ; Barley, 16,420 bushels ; Oats, 5,900 bushels ; Vine stocks, 6,042,174 ; Wine, 418 leggers ; Brandy, 1,237 leggers.

*George.*—Population, Urban, 1,915 ; Rural, 9,851.

Horses, 3,141 ; Mules and Asses, 690 ; Draught Oxen, 9,816 ; Other Cattle, 9,050 ; Woolled Sheep, 96,139 ; Other Sheep, 5,640 ; Angora Goats, 14,867 ; Common Goats, 44,217 ; Ostriches, 1,802 ; Wool, 214,000 lbs. ; Wheat, 57,864 bushels ; Barley, 24,418 bushels ; Oats, 19,937 bushels ; Wine, 23 leggers ; Brandy, 64 leggers.

*Mossel Bay.*—Population, Urban, 1,352 ; Rural, 3,707.

Horses, 1,442 ; Mules and Asses, 154 ; Draught Oxen, 3,599 ; Other Cattle, 4,538 ; Woolled Sheep, 88,762 ; Other Sheep, 56 ; Angora Goats, 3,471 ; Common Goats, 14,267 ; Ostriches, 1,015 ; Wool, 154,487 lbs. ; Wheat, 16,975 bushels ; Barley, 12,456 bushels ; Oats, 649 bushels.

*Knysna*.—Population, Urban, 529 ; Rural, 2,659.

Horses, 495 ; Mules and Asses, 38 ; Draught Oxen, 2,683 ; Other Cattle, 3,157 ; Woolled Sheep, 18,802 ; Other Sheep, 23 ; Angora Goats, 1,411 ; Common Goats, 1,245 ; Ostriches, 158.

#### 4. MIDLAND PROVINCE.

*Beaufort West*.—Population, Urban, 1,575 ; Rural, 6,739.

Horses, 3,744 ; Mules and Asses, 1,264 ; Draught Oxen, 3,502 ; Other Cattle, 4,715 ; Woolled Sheep, 482,607 ; Other Sheep, 18,632 ; Angora Goats, 15,290 ; Common Goats, 102,995 ; Ostriches, 477 ; Clip of Wool, 1,629,799 lbs.

*Prince Albert*.—Population, Urban, 907 ; Rural, 5,035.

*Willowmore*.—Population, 245.

Horses, 1,637 ; Mules and Asses, 686 ; Draught Oxen, 3,405 ; Other Cattle, 2,782 ; Woolled Sheep, 163,420 ; Other Sheep, 12,434 ; Angora Goats, 10,601 ; Common Goats, 69,671 ; Ostriches, 1,053 ; Wool, 144,256 lbs. ; Wheat, 17,036 bushels ; Barley, 10,691 bushels ; Oats, 1,659 bushels ; Vine stocks, 911,603 ; Wine, 244 leggers ; Brandy, 298 leggers.

*Victoria West*.—Population, Urban, 1,445 ; Rural, 11,806.

Horses, 6,829 ; Mules and Asses, 1,792 ; Draught Oxen, 6,778 ; Other Cattle, 8,588 ; Woolled Sheep, 874,635 ; Other Sheep, 89,284 ; Angora Goats, 15,629 ; Common Goats, 118,762 ; Ostriches, 339 ; Clip of Wool, 2,095 164 lbs.

*Fraserburg*.—Population, Urban, 873 ; Rural, 8,123.

Horses, 5,087 ; Mules and Asses, 966 ; Draught Oxen, 4,357 ; Other Cattle, 9,125 ; Woolled Sheep, 349,563 ; Other Sheep, 213,719 ; Angora Goats, 4,633 ; Common Goats, 121,177 ; Ostriches 598, Wool, 1,057,722 lbs.

*Richmond*.—Population, Urban, 990 ; Rural, 6,617.

Horses, 5,092 ; Mules and Asses, 915 ; Draught Oxen, 3,555 ; Other Cattle, 5,110 ; Woolled Sheep, 473,166 ; Other Sheep, 56,498 ; Angora Goats, 11,494 ; Common Goats, 58,443 ; Ostriches, 439 ; Wool, 1,823 128 lbs. ; Wheat, 17,018 bushels.

*Hope Town*.—Population, Urban, 491 ; Rural, 5,653.

Horses, 4,348 ; Mules and Asses, 186 ; Draught Oxen, 5,080 ; Other Cattle, 8,400 ; Woolled Sheep, 345,290 ; Other Sheep, 15,641 ; Angora Goats, 10,790 ; Common Goats, 36,386 ; Ostriches, 30 ; Wool, 1,065,000 lbs.

*Murraysburg*.—Population, Urban, 699 ; Rural, 3,079.

Horses, 2,567 ; Mules and Asses, 699 ; Draught Oxen, 1,568 ; Other Cattle, 4,258 ; Woolled Sheep, 148,526 ; Other Sheep, 21,398 ; Angora Goats, 28,142 ; Common Goats, 20,392 ; Ostriches, 438 ; Wool 605,779 lbs. ; Wheat, 10,689 bushels ; Barley, 8,138 bushels.

*Graaff-Reinet*.—Population, Urban, 5,322 ; Rural, 11,452.

Horses, 5,629 ; Mules and Asses, 841 ; Draught Oxen, 13,795 ; Other Cattle, 14,116 ; Woolled Sheep, 399,715 ; Other Sheep, 13,680 ; Angora Goats, 150,251 ; Common Goats, 78,975 ; Ostriches, 1,032.

## 5. SOUTH EASTERN PROVINCE.

*Graham's Town*.—Population, Urban, 6,912.

*Albany*.—Population, Rural, 9,529.

Horses, 2,408 ; Mules and Asses, 92 ; Draught Oxen, 17,489 ; Other Cattle, 17,189 ; Woolled Sheep, 151,394 ; Other Sheep, 1,889 ; Angora Goats, 33,596 ; Common Goats, 22,881 ; Ostriches, 637 ; Wool, 411,073 lbs. ; Wheat, 5,619 bushels ; Barley, 1,916 bushels ; Oats, 966 bushels.

*Bathurst*.—Population, Urban, 1,411 ; Rural, 4,392.

Horses, 365 ; Mules and Asses, 13 ; Draught Oxen, 8,780 ; Other Cattle, 7,482 ; Woolled Sheep, 2,660 ; Other Sheep, 27 ; Angora Goats, 80 ; Common Goats, 1,721 ; Wool, 18,250 lbs. ; Wheat, 16,090 bushels ; Barley, 7,267 bushels ; Oats, 46,601 bushels.

*Fort Elizabeth*.—Population, Urban, 12,974 ; Rural, 1,476.

Horses, 818 ; Mules and Asses, 111 ; Draught Oxen, 2,291 ; Other Cattle, 2,051 ; Woolled Sheep, 1,559 ; Other Sheep, 3,068 ; Angora Goats, 206 ; Common Goats, 432 ; Ostriches, 10.

*Uitenhage*.—Population, Urban, 4,102 ; Rural, 17,365.

Horses, 3,500 ; Mules and Asses, 580 ; Draught Oxen, 24,657 ; Other Cattle, 25,202 ; Woolled Sheep, 249,683 ; Other Sheep, 6,930 ; Angora Goats, 59,808 ; Common Goats, 260,709 ; Ostriches, 976 ; Wool, 625,040 lbs. ; Wheat, 17,464 bushels ; Vines, 344,684.

*Humansdorp*.—Population, Urban, 377 ; Rural, 6,921.

Horses, 1,434 ; Mules and Asses, 181 ; Draught Oxen, 5,778 ; Other Cattle, 9,672 ; Woolled Sheep, 121,946 ; Other Sheep, 1,241 ; Angora Goats, 663 ; Common Goats, 12,721 ; Ostriches,

196 ; Wool, 264,670 lbs. : Wheat, 30,243 bushels ; Barley, 10,481 bushels ; Oats, 1,258 bushels.

*Alexandria*.—Population, Urban, 351 ; Rural, 5,669.

Horses, 772 ; Mules and Asses, 9 ; Draught Oxen, 13,440 ; Other Cattle, 11,079 ; Woolled Sheep, 13,823 ; Other Sheep, 2,479 ; Angora Goats, 946 ; Common Goats, 3,776 ; Wool, 31 426 lbs. ; Wheat, 38 998 bushels ; Barley, 10,872 bushels ; Oats, 15,925 bushels ; Ostriches, 81.

*Victoria East*.—Population, Urban, 1,284 ; Rural, 6,686.

Horses, 869 ; Mules and Asses, nil ; Draught Oxen, 6,989 ; Other Cattle, 10,039 ; Woolled Sheep, 52,421 ; Other Sheep, nil ; Angora Goats, 12,330 ; Common Goats, nil ; Ostriches, nil ; Wool, 201,578 lbs.

*Peddie*.—Population, Urban, 516 ; Rural, 16,022.

Horses, 573 ; Mules and Asses, 10 ; Draught Oxen, 11,885 ; Other Cattle, 24,283 ; Woolled Sheep, 25,413 ; Other Sheep, 839 ; Angora Goats, 2,228 ; Common Goats, 17,936.

## 6. NORTH EASTERN PROVINCE.

*Fort Beaufort*.—Population, Urban, 3,936 ; Rural, 11,721.

Horses, 1,827 ; Mules and Asses, 14 ; Draught Oxen, 9,158 ; Other Cattle, 15,507 ; Woolled Sheep, 151,102 ; Other Sheep, 811 ; Angora Goats, 17,574 ; Common Goats, 19,012 ; Ostriches, 13 ; Wool, 430,244 lbs. ; Wheat, 23,587 bushels ; Barley, 2,025 bushels ; Oats, 1,190 bushels.

*Stoekentrom*.—Population, Urban, 232 ; Rural, 6,267.

Horses, 772 ; Mules and Asses, 24 ; Draught Oxen, 5,528 ; Other Cattle, 4,229 ; Woolled Sheep, 63,713 ; Other Sheep, 5 ; Angora Goats, 8,861 ; Common Goats, 8,512 ; Wool, 147,675 lbs. ; Wheat, 11,000 bushels.

*Somerset East*.—Population, Urban, 2,444 ; Rural, 8,414.

Horses, 3,591 ; Mules and Asses, 121 ; Draught Oxen, 9,433 ; Other Cattle, 10,513 ; Woolled Sheep, 315,762 ; Other Sheep, 4,926 ; Angora Goats, 131,500 ; Common Goats, 66,596 ; Ostriches, 219 ; Wool, 688,342 lbs. ; Wheat, 7,842 bushels ; Barley, 6,391 bushels ; Oats, 27,726 bushels.

*Bedford*.—Population, Urban, 814 ; Rural, 7,822.

Horses, 2,135 ; Mules and Asses, 34 ; Draught Oxen, 7,321 ; Other Cattle, 11,739 ; Woolled Sheep, 217,765 ; Other Sheep, 1,071 ; Angora Goats, 59,229 ; Common Goats, 14,586 ; Ostriches, 169 ; Wool, 747,829 lbs. ; Wheat, 21,140 bushels.

*Cradock.*—Population, Urban, 1,696 ; Rural, 9,617.

Horses, 9,617 ; Mules and Asses, 520 ; Draught Oxen, 9,467 ; Other Cattle, 19,316 ; Woolled Sheep, 475,399 ; Other Sheep, 16,204 ; Angora Goats, 95,783 ; Common Goats, 36,648 ; Ostriches, 1,045 ; Wool, 1,141,560 lbs. ; Wheat, 28,311 bushels ; Barley, 6,067 bushels ; Oats, 1,238 bushels.

*Albert.*—Population, Urban, 1,526 ; Rural, 9,996.

Horses, 14,356 ; Mules and Asses, 297 ; Draught Oxen, 9,267 ; Other Cattle, 30,745 ; Woolled Sheep, 468,482 ; Other Sheep, 26,072 ; Angora Goats, 25,186 ; Common Goats, 33,016 ; Ostriches, 49.

*Middleburg.*—Population, Urban, 1,135 ; Rural, 4,803.

Horses, 5,158 ; Mules and Asses, 170 ; Draught Oxen, 4,258 ; Other Cattle, 9,752 ; Woolled Sheep, 223,388 ; Other Sheep, 6,917 ; Angora Goats, 11,487 ; Common Goats, 23,299 ; Ostriches, 339 ; Wool, 679,588 lbs. ; Wheat, 17,505 bushels ; Barley, 5,046 bushels ; Oats, 1,386 bushels.

*Colesberg.*—Population, Urban, 2,240 ; Rural, 7,947.

Horses, 9,308 ; Mules and Asses, 506 ; Draught Oxen, 6,624 ; Other Cattle, 16,593 ; Woolled Sheep, 496,141 ; Other Sheep, 15,063 ; Angora Goats, 20,600 ; Common Goats, 42,387 ; Ostriches, 893 ; Wool, 2,372,366 lbs. ; Wheat, 32,114 bushels ; Barley, 5,270 ; Oats, 4,591 bushels.

## 7. EASTERN PROVINCE.

*East London.*—Population, Urban, 2,818 ; Rural, 12,648.

Horses, 1,014 ; Mules and Asses, nil ; Draught Oxen, 14,539 ; Other Cattle, 22,442 ; Woolled Sheep, 80,607 ; Other Sheep, nil ; Angora Goats, 10,557.

*King William's Town.*—Population, Urban, 3,533 ; Rural, 104,508.

Horses, 9,984 ; Mules and Asses, 24 ; Draught Oxen, 33,975 ; Other Cattle, 102,626 ; Woolled Sheep, 441,714 ; Other Sheep, 323 ; Angora Goats, 9,739 ; Common Goats, 115,941 ; Ostriches, 57.

*Queen's Town.*—Population, Urban, 3,067 ; Rural, 47,644.

Horses, 14,789 ; Mules and Asses, 70 ; Draught Oxen, 28,670 ; Other Cattle, 52,749 ; Woolled Sheep, 698,154 ; Other Sheep, 2,145 ; Angora Goats, 41,810 ; Common Goats, 85,965 ; Ostriches, 161 ; Wool, 2,713,325 lbs. ; Wheat, 58,841 bushels ; Barley, 4,325 bushels ; Oats, 1,449 bushels.

*Aliwal North.*—Population, Urban, 1,237 ; Rural, 6,870.

Horses, 12,761 ; Mules and Asses, 87 ; Draught Oxen, 16,760 ; Other Cattle, 47,556 ; Woolled Sheep, 433,365 ; Other Sheep, 4,240 ; Angora Goats, 42,486 ; Common Goats, 23,903.

*Wodehouse.*—Population, Urban, 656 ; Rural, 7469 ; Tambookie Location, 18,445.

Horses, 15,971 ; Mules, 97 ; Draught Oxen, 16,834 ; Other Cattle, 42,621 ; Sheep, 569,332 ; Goats, 77,273.

*Herschel.*—Population, 22,664.

Horses, 6,747 ; Draught Oxen, 10,549 ; Other Cattle, 30,966 ; Sheep, 58,065 ; Goats, 28,709 ; Wheat, 16,436 bushels ; Maize, 48,000 bushels ; Wool, 151,212 lbs.

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COMPARISON of TOTAL STOCK in the COLONY  
in 1865 and 1875.

	1865.	1875.
Horses .. ..	228,465	207,318
Mules and Asses .. ..	24,267	29,517
Draught Oxen .. ..	249,291	398,825
Other Cattle .. ..	443,004	698,681
Woolled Sheep .. ..	8,426,619	10,064,289
Other Sheep .. ..	1,465,883	944,050
Angora Goats .. ..	121,432	972,733
Common Goats .. ..	2,147,807	2,122,808
Pigs .. ..	78,578	110,489
Ostriches .. ..	80	22,257



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# HOPE.—TRADE RETU

## LE I.—EXPORTS.

SHOWING the Municipal and other Articles, the Quantity and Value Exported in the

EXPORTS.—ARTICLES	Quantity and value the ten years ended December, 1871.	Quantity and value in 1872.
	Value.	Quantity.
Aloes ... ..	£9,481	lbs. 484,532
Argol (wine stone) ...	4,530	133,189
Copper Ore ... ..	160,956	tons 13,240
Corn, Grain, and Meal :		
Barley ... ..	4,317	lbs. 285,921
Beans and Peas ...	2,188	107,948
Bran ... ..	4,384	" 1,342,332
Flour ... ..	37,190	" 1,108,324
Maize ... ..	3,252	" 179,105
Oats ... ..	7,541	" 1,868,228
Wheat ... ..	29,006	" 4,422,651
Cotton .. ..	Nil	Nil
Diamonds ... ..	403,349	No. 45,830
Feathers (ostrich) ...	87,074	lbs. 26,695
Fish, cured ... ..	25,976	" 3,248,241
Fruit, dried ... ..	24,424	" 695,343
Hair, Angora ... ..	43,059	" 871,891
Hides, Ox and Cow ...	29,943	No. 72,937
Horns ... ..	2,198	" 136,775
Horses ... ..	7,450	" 109
Ivory ... ..	13,746	lbs. 87,389
Skins, Goat ... ..	172,055	No. 1,351,918
" Sheep ... ..	87,240	" 1,436,857
Spirits, Brandy ... ..	12,566	galls. 660
Wine, Constantia ...	1,693	" 371
" Ordinary ... ..	46,054	" 77,999
Wool ... ..	2,191,233	lbs. 48,822,562
Other Articles ... ..	(1870) 210 196	...

## CAPE OF GOOD HOPE.—TRADE RETURNS.

### TABLE I.—EXPORTS.

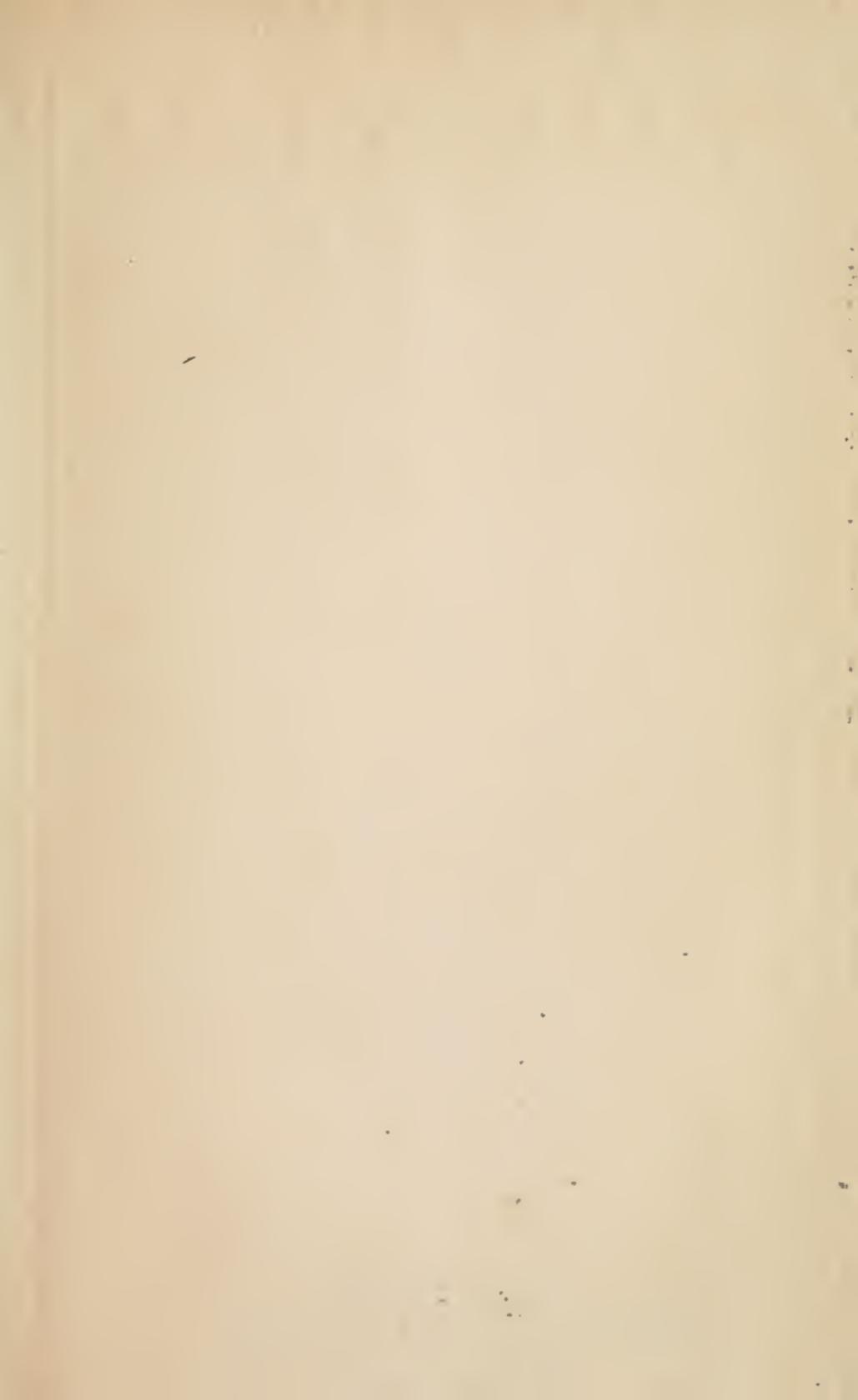
SHOWING the Minimum and Maximum Quantities and Values of the Principal and other Articles, the Produce of this Colony, Exported during the Ten Years ended 31st December, 1871, and also the Quantity and Value Exported in the Years 1872, 1873, and 1874.

EXPORTS.—ARTICLES.	Minimum quantity and value exported during the ten years ended 31st December, 1871.		Maximum quantity and value exported during the ten years ended 31st December, 1871.		Quantity and value exported in 1872.		Quantity and value exported in 1873.		Quantity and value exported in 1874.						
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.					
Aloes ... ..	lbs. (1862)	289,732	£3,318	(1865)	846,160	£9,481	lbs.	484,532	£3,221	lbs.	280,051	£1,023	lbs.	614,272	£5,526
Argol (wine stone) ... ..	tons (1868)	38,280	800	(1862)	128,464	4,530	tons	133,183	3,833	tons	58,408	1,866	tons	75,598	2,268
Copper Ore ... ..	tons	2,900	60,985	(1871)	7,351	160,956	tons	10,240	928,468	tons	11,570	312,221	tons	13,646	21,434
Corn, Grain, and Meal:															
Barley ... ..	lbs. (1862)	264,240	1,751	(1868)	1,553,679	4,317	lbs.	285,921	806	lbs.	88,960	287	lbs.	145,360	747
Beans and Peas ... ..	lbs. (1866)	16,320	112	(1870)	580,083	2,188	lbs.	107,948	563	lbs.	30,444	197	lbs.	70,443	469
Beans ... ..	lbs.	25,537	109	"	1,463,705	4,384	"	1,342,332	3,752	"	532,638	1,798	"	94,500	520
Flour ... ..	lbs. (1867)	358,730	3,379	"	1,299,724	37,190	"	1,108,324	9,760	"	285,337	2,930	"	303,837	3,292
Maize ... ..	lbs. (1865)	1,950	8	"	1,431,932	3,282	"	179,105	724	"	1,080	6	"	710,766	2,197
Oats ... ..	lbs. (1862)	378,829	2,584	(1871)	2,598,065	7,541	"	1,868,228	6,144	"	1,301,093	6,410	"	678,595	5,337
Wheat ... ..	lbs. (1867)	400	3	"	7,235,628	29,006	"	4,422,651	20,108	"	41,390	254	"	85,411	496
Cotton ... ..	lbs.	Nil	Nil	"	Nil	Nil	"	Nil	Nil	"	49,370	2,055	"	257	257
Diamonds ... ..	number.	Nil	Nil	"	35,169	403,349	No.	45,830	306,011	No.	15,450	25,285	No.	8,148	8,148
Feathers (ostrich) ... ..	lbs. (1862)	7,061	40,457	(1870)	28,768	87,074	lbs.	26,095	158,024	lbs.	31,581	159,877	lbs.	36,829	205,640
Fish, cured ... ..	lbs.	1,919,538	11,945	"	5,389,337	29,976	"	3,246,241	17,408	"	3,867,243	28,157	"	4,872,814	34,389
Fruit, dried ... ..	lbs. (1866)	324,837	0,960	(1868)	1,983,027	24,424	"	695,348	7,188	"	319,145	3,371	"	332,782	3,678
Hair, Angora ... ..	lbs.	"	"	(1871)	536,292	43,050	"	871,891	88,457	"	765,719	45,913	"	1,036,570	107,130
Hides, Ox and Cow ... ..	number.	14,036	9,724	"	45,934	29,943	No.	72,937	45,771	No.	51,075	42,624	No.	68,459	49,425
Horns ... ..	number.	59,186	821	(1865)	103,315	2,198	"	136,775	1,912	"	189,769	1,826	"	194,154	1,960
Horses ... ..	number.	25	770	(1868)	257	7,450	"	109	3,390	"	107	4,102	"	49	1,925
Ivory ... ..	lbs. (1864)	11,609	2,444	(1870)	52,945	13,746	lbs.	87,893	32,976	lbs.	90,879	32,330	lbs.	73,747	36,640
Skins, Goat ... ..	number.	450,747	55,716	(1871)	1,233,378	172,065	No.	1,851,918	191,503	No.	1,973,276	188,826	No.	1,478,761	194,423
" Sheep ... ..	number.	827,894	65,929	(1870)	1,484,078	87,240	"	1,426,887	140,011	"	1,481,635	143,643	"	1,462,367	144,536
Spirits, Brandy ... ..	casks (1870)	904	77	(1863)	42,451	12,566	galls.	680	137	galls.	1,945	228	galls.	718	245
" Ordinary ... ..	galls. (1871)	208	192	(1866)	3,201	1,693	"	371	248	"	577	657	"	1,855	1,272
" Extraordinary ... ..	galls. (1867)	61,689	10,742	(1863)	319,146	46,054	"	77,989	14,861	"	75,195	14,488	"	77,802	15,876
Wool ... ..	lbs. (1867)	25,088,218	1,276,542	(1871)	46,279,639	2,191,233	lbs.	48,822,562	3,275,150	lbs.	40,393,746	2,710,481	lbs.	42,620,481	2,948,571
Other Articles ... ..	value of	"	(1865)	24,988	"	(1870)	210,196	"	44,925	"	30,306	"	51,299	"	"

### TABLE II.—IMPORTS.

SHOWING the Minimum and Maximum Quantities and Values of the principal Articles of Merchandise imported into this Colony during the Ten Years ended 31st December, 1871; and also the Quantity and Value imported in the Years 1872, 1873, and 1874.

IMPORTS.—ARTICLES.	Minimum quantity or value imported during the ten years ended 31st December, 1871.	Maximum quantity or value imported during the ten years ended 31st December, 1874.	Quantity or value imported in 1872.	Quantity or value imported in 1873.	Quantity or value imported in 1874.					
Agricultural Implements ... ..	£ (1866)	5,807	£ (1871)	28,778	£	36,761	£	58,515	£	38,178
Ale and Beer ... ..	galls. (1863)	373,449	galls. (1865)	497,556	galls.	449,222	galls.	449,222	galls.	614,270
Apparel and Slops ... ..	£ (1866)	105,228	£ (1871)	162,695	£	812,616	£	346,937	£	292,036
Coffee ... ..	lbs. (1865)	3,035,312	lbs. (1866)	9,226,576	lbs.	7,854,616	lbs.	4,242,217	lbs.	7,969,473
Corn, Grain, Meal:—										
Barley ... ..	" (1870)	600	" (1863)	180,360	lbs.	nil	lbs.	1,250	"	8,388
Beans and Peas ... ..	" (1871)	128	" (1867)	37,620	"	nil	"	nil	"	3,360
Beans ... ..	" (1871)	308	" (1863)	1,066,882	"	40,399	"	40,399	"	210,515
Flour ... ..	" (1871)	28,697	" (1863)	19,324,228	"	2,302,455	"	8,862,234	"	19,159,264
Maize ... ..	" (1867)	2,909	" (1863)	3,855,240	"	56,539	"	140,309	"	1,086,251
Oats ... ..	" (1871)	nil	" (1865)	559,760	"	200	"	17,800	"	563,104
Wheat ... ..	" (1870 & 1871)	1,217	" (1863)	17,308,740	"	329,897	"	2,942,165	"	22,513,565
Cotton Manufactures ... ..	" (1869)	234,747	£ (1865)	489,874	£	656,509	£	596,087	£	605,791
Gunpowder ... ..	lbs. (1864)	176,793	lbs. (1865)	238,295	lbs.	370,310	lbs.	479,518	lbs.	496,654
Gunns ... ..	No. (1869)	3,292	No. (1871)	7,225	No.	36,480	No.	63,296	No.	33,777
Haberdashery and Millinery ... ..	£ (1863)	191,239	£ (1871)	284,686	£	471,325	£	631,041	£	574,438
Hardware and Ironmongery ... ..	" (1866)	65,773	" (1871)	174,900	"	806,475	"	428,764	"	353,135
Iron—Bars ... ..	" (1866)	6,904	" (1863)	16,506	"	21,275	"	40,215	"	50,993
Leather Manufactures ... ..	" (1866)	47,092	" (1871)	102,415	"	905,290	"	264,879	"	247,814
Linens ... ..	" (1863)	9,937	" (1871)	38,217	"	79,279	"	46,658	"	48,772
Rice ... ..	lbs. (1865)	4,777,960	lbs. (1867)	14,654,235	lbs.	9,814,995	lbs.	7,830,172	lbs.	13,677,343
Saddlery and Harness ... ..	£ (1865)	9,190	£ (1871)	24,132	£	52,030	£	80,133	£	87,126
Silk Manufactures ... ..	" (1866)	5,678	" (1874)	6,650	"	8,860	"	15,718	"	14,177
Spirits, all sorts ... ..	galls. (1865)	30,927	galls. (1865)	131,455	galls.	176,727	galls.	116,438	galls.	183,868
" refined ... ..	lbs. (1865)	16,940,496	lbs. (1870)	15,561,822	lbs.	16,419,948	lbs.	20,482,524	lbs.	21,820,145
" Molasses ... ..	" (1865)	361,324	" (1867)	723,502	"	1,101,867	"	674,166	"	285,063
" Tea ... ..	" (1864)	129,369	" (1864)	887,264	"	379,400	"	431,544	"	783,194
" Tobacco, not manufactured ... ..	" (1868)	137,540	" (1870)	889,186	"	878,651	"	968,462	"	918,816
" manufactured ... ..	" (1869)	36,510	" (1867)	373,875	"	83,241	"	41,726	"	1,271,711
" Cigars ... ..	" (1865)	34,055	" (1863)	644,893	"	194,123	"	314,951	"	277,987
" Cigars ... ..	No. (1868)	902,070	No. (1862)	5,217,450	No.	9,566,682	No.	7,578,276	No.	4,886,172
" Cigars ... ..	lbs. (1868)	352	lbs. (1862)	nil	lbs.	18,421	lbs.	16,873	lbs.	6,745
Wine ... ..	galls. (1867)	14,440	galls. (1862)	38,586	galls.	73,323	galls.	64,220	galls.	510,177
Wood, unmanufactured ... ..	c. ft. (1866)	92,788	c. ft. (1862)	1,064,801	c. ft.	517,837	c. ft.	546,325	c. ft.	1,131,254
Wollen Manufactures ... ..	£ (1866)	64,729	£ (1871)	162,284	£	304,860	£	816,827	£	295,680
Other Items ... ..	" (1865)	424,964	" (1862)	877,377	"	1,162,862	"	1,398,649	"	1,675,269



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