

PRACTICAL GOLD MINING

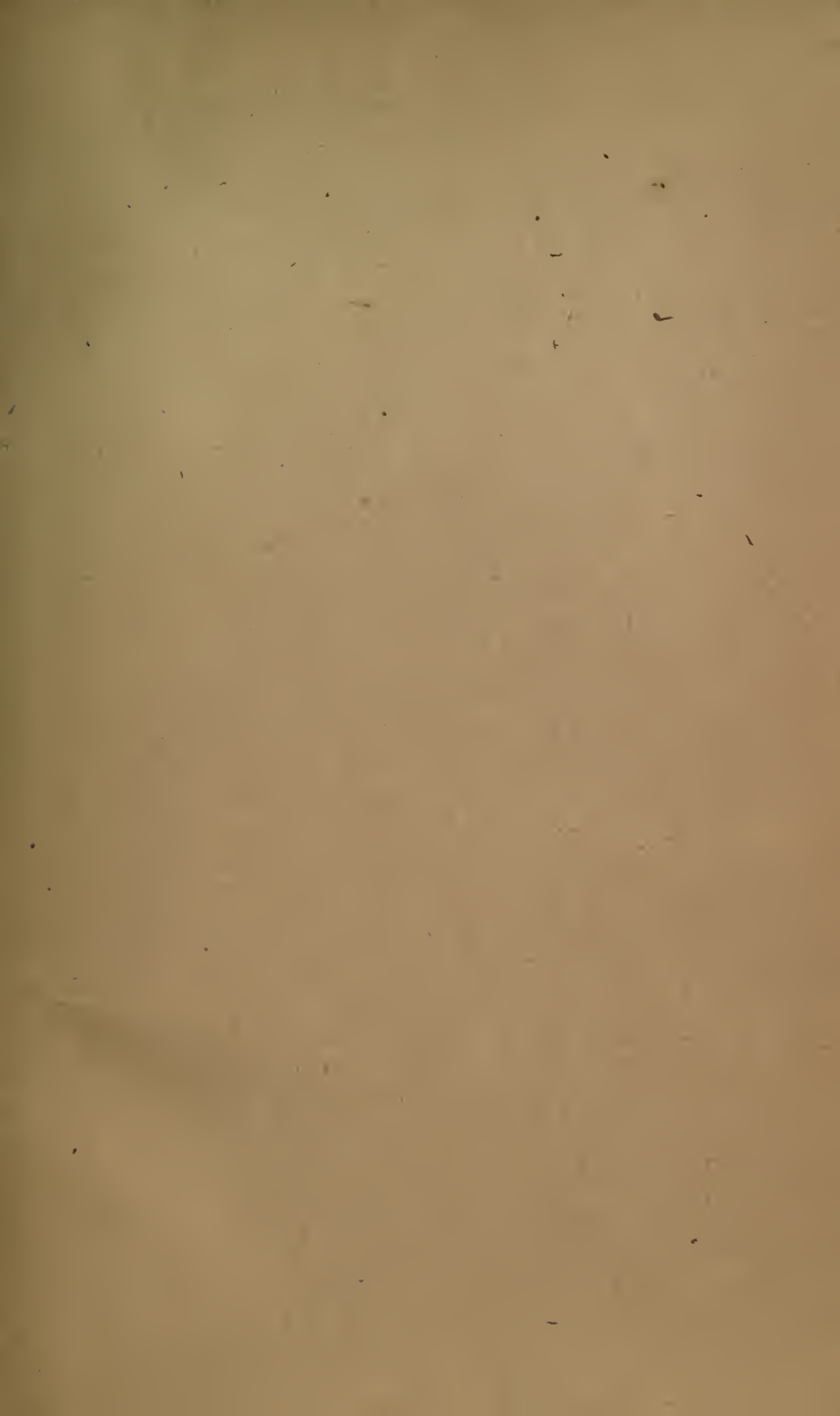
ITS COMMERCIAL ASPECTS.

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GENERAL



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PRACTICAL GOLD-MINING

ITS COMMERCIAL ASPECTS

*A COLLECTION OF STATISTICS AND DATA
RELATING TO GOLD-MINING AND GOLD-
MINING FINANCE COMPANIES*

BY

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GENERAL

PREFACE.

THE last ten years has been notable for the large number of Gold-Mining Propositions which have been placed before the public, a great portion of which appear to have been purely speculative, and the present collection of statistics and data relating to gold-mining companies has been formed and arranged with the view to assist those who may be inclined to invest in gold-mining to discriminate between purely speculative propositions and those which present the elements of commercial success.

The nominal capital of the companies interested in gold-mining appears to be over four hundred and fifty million pounds sterling, and the success or failure of a business of this magnitude cannot but be of considerable importance to the public generally.

WILLIAM S. WELTON.

London, 1902.



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INTRODUCTION.

GOLD-MINING appears to have been carried on in very early times, and we find that the most savage races have held gold in great esteem for ornamenting their bodies, and for making images of their gods. Probably no other industry has suffered so much from oppression in ancient times, and even to the present day it does not always bear a good name, and frequently has to pay dearer for capital than most other industries. Yet if we look back to what may be termed the revival of this industry in 1848-49 we shall find that the great progress which has been made by England and America in inventions, manufactures and commerce bears a remarkable relation to the increased output of gold which took place after its discovery in California and Australia.

Gold mines in former times were generally held to be the property of the ruler of the country in which they were found, hence the private individual had very little interest in their discovery. Mining was carried out by criminals and slaves, or forced labour of some kind, and it was not uncommon for the ruler of the country to demand an annual contribution in gold from the governors of provinces where gold was known to exist, and its collection appears to have generally been carried out, after the manner in which taxes are sometimes collected in Eastern lands, without much regard to the convenience of the subject, the governor knowing that no questions would be asked as to the methods of collection, as long as the specified amount could be forwarded to head-quarters, getting, at the same time, as much more as he could for himself. Under these circumstances gold could then only have been looked upon by the lower classes as a species of curse, entailing upon them endless hardships and labour, with no compensation of any sort, and we may very well suppose that the people would have endeavoured to put every possible difficulty in the way of the discovery or the working of gold mines.

From the great value of gold, the fact that it is easily recognizable, and that it is found in a marketable state in river and other sands, there is probably no other industry in which so many incompetent persons have engaged as in searching for and attempting to get gold. Most of these people had never done any manual labour, neither had they capital or experience, and it is not surprising under these circumstances that there were more blanks than prizes. It is generally admitted, however, that men who were accustomed to hard work made their expenses, and many of these made comparatively large fortunes.

If we add to the actual cost of extraction of the gold the cost of unsuccessful miners and money lost in unfruitful prospecting and other unprofitable investments, it has been estimated that the gold won in modern times has cost its market value, if not more, a result which would occur in any other business under similar conditions. The result to the country in which gold was found was a large increase in population from abroad, bringing in capital and retaining much of the gold won; and even if any of the would-be miners lost their money at mining, they not unfrequently turned their attention to other business more suited to their abilities and prospered. Gold-mining, however individuals might fail, was not discontinued; the output of gold steadily increased as men gained experience, and larger capitals were invested, and the increased efforts to mine gold can only be attributable to the business having been found a profitable one when conducted by competent men. It is not, however, to be supposed that companies with considerable capital at command should always be successful in any business, and the following data have been collected with the object of enabling a review to be taken in the most impartial manner and founded upon the widest possible basis of statistics of the commercial aspects of gold-mining by companies.

The most reliable works upon the subject of gold-mining and gold-mining companies (a list of which has been inserted) have been consulted. The statistics and data relate principally to companies owning mines in the English colonies, and others, the shares of which are dealt with in London. It has not been possible to obtain data for dealing in the same manner with the gold-mining companies of the United States of America. It is hoped that the data collected and arranged will be found to possess considerable value for those who invest in gold-mining properties, and that this compilation may also be useful to engineers and others engaged in gold-mining.



PRACTICAL GOLD-MINING

ITS COMMERCIAL ASPECTS



CHAPTER I.

GOLD-MINING IN ANCIENT TIMES.

ACCORDING to tradition, the production of gold in remote ages must have been considerable, a large portion of which naturally would have been derived from alluvial deposits. From the great number of ancient workings upon veins which have been discovered in India, Africa, and other parts of the world, there can be no doubt that vein mining also added greatly to the stock of gold in those times. The vein mines, however, appear to have been abandoned after the workings had reached a depth of about 300 feet, and it is not uncommon to attribute this to the deposits having become poor, or exhausted; although, as to this, we do not appear to have any positive data, and, if we consider that the present prosperous Indian mines of the Kolar Gold Field are continuations in depth of ancient mines, upon which much work had been done, from the surface down to about 320 feet, we may not unreasonably infer that many other ancient mines, which have been worked to a considerable depth, may also yield profitable results on continuing the works to a greater depth; and we must look for some other motive than poverty of yield to account for the abandonment

of so many vein mines at what is now considered to be an inconsiderable depth. Then, if we note the depth to which payable ore has been found in a large proportion of the veins which have been worked in modern times, it seems highly improbable that the mines opened by the ancients should only have contained superficial deposits.

Without doubt the old workers could have reached considerable depths, on veins which could be worked by adits, or where no subterranean waters were met with; but in the case of almost perpendicular veins, or where there was any considerable quantity of water to contend with, these difficulties would have obliged them to discontinue their works.

According to Roman law, minerals belonged to the owner of the soil, but, generally, they were subject to a royalty of a tenth of the gross produce, to be paid to the State. Previous to the year 1520 Spanish mining laws were not quite definite on the subject of mining rights. One law required permission from the king for the working of every class of metalliferous mines; a second law required permission of the owner of the surface, and the payment of two-thirds of the gross produce to the State; a third law declared that mines of gold, silver and quicksilver, belonged to the king. In 1526 the "Recopilacion de Indias" was promulgated, allowing Spaniards and Indians to discover and work mines, under a registered title, upon payment of a royalty of a fifth part of the gross produce to the State. Certain lands were given with the mines for farming purposes, and the right was granted to impress a certain number of Indians for working the mines and raising the necessary crops for the maintenance of the labourers, and, also, to recruit a further number of Indians to make good the loss of men by death or desertion. In consequence of the above system, the mines generally appear to have been worked by military captains, possibly as a reward for their services, and on account of the hostility of the natives.

In consequence of the severity of the work, and the treatment the Indians received from their masters, it appears that numbers died or were killed in the works, and the fear of this kind of

life appears to have been so great that the women made a practice of killing all their male children rather than that they should grow up to be slaves, and the free Indians remaining in more remote districts continually attacked the mines, with a view to block them up and so prevent them being worked. Solórzano¹ mentions that the Vice-Regent of Peru, Don Francisco de Toledo, in the year 1575, assigned 95,000 Indians for working the mines of Potosi, ordering these to be taken from seventeen districts; and he also decreed that a number of Indians, equal to a seventh part of the first number, should be recruited annually, to make up for deaths, &c. Nevertheless, so many died of their hardships, that in 1633 there remained 25,000 only, and in 1678 this number had become reduced to 1674 Indians.

In the year 1548 so many Indians had been killed off in South America that it was found necessary to import negroes from Africa for continuing work at the mines, and so few Indians remained in 1729 that a law was made prohibiting their employment in mines.

South America freed itself from the rule of Spain about the year 1810, but the negroes continued as slaves until about 1851, having been liberated gradually, during some years, without indemnity being paid to their owners.

The silver mines of San Sebastian de la Plata, in Colombia, said to have been as abundant as the Potosi mines, were attacked by the Pijao Indians on several occasions, and finally 20,000 Indians surrounded the town and killed the entire population, about 1585, after which they set fire to the buildings and filled up the workings. No work has since been done at these mines, but signs of the ditches and caved-in works remain. The same Indians caused the gold mines of Miraflores, near the town of Ibaque, Colombia, to be abandoned.²

Generally, where mining was carried on by the Spanish,

¹ Solórzano, "Politica Indiana," Edicion de 1736, vol. i., p. 148-149.

² "Estudios sobre Minas de Oro y Plata de Colombia," por Don Vicente Restrepo. Bogota, 1888.

it was necessary to erect a fort for the defence of the mines.

With respect to the South American Indians, they do not appear to have been hostile to the Spanish when they arrived on their coasts. They only appear to have become hostile when they were attacked, and killed, for the gold ornaments they wore. The Indians appear to have valued gold principally as an ornament, and we find on exploring their cemeteries that their dead were buried with their ornaments and implements. The author was informed by Dr. Pereira Gamba, of Bogota, Colombia, that he had taken gold ornaments of the value of £500 from the embalmed body of an Indian chief found in the State of Cauca, Colombia.

We have no reason to conclude that gold-mining was carried on in very remote times with more consideration for the workers than that shown by the Spanish in South America, and we may very well suppose that this work should have been distasteful to the people under such conditions, and that this should have prevented the discovery of new deposits and placed difficulties in the way of working the known sources of gold.

CHAPTER II.

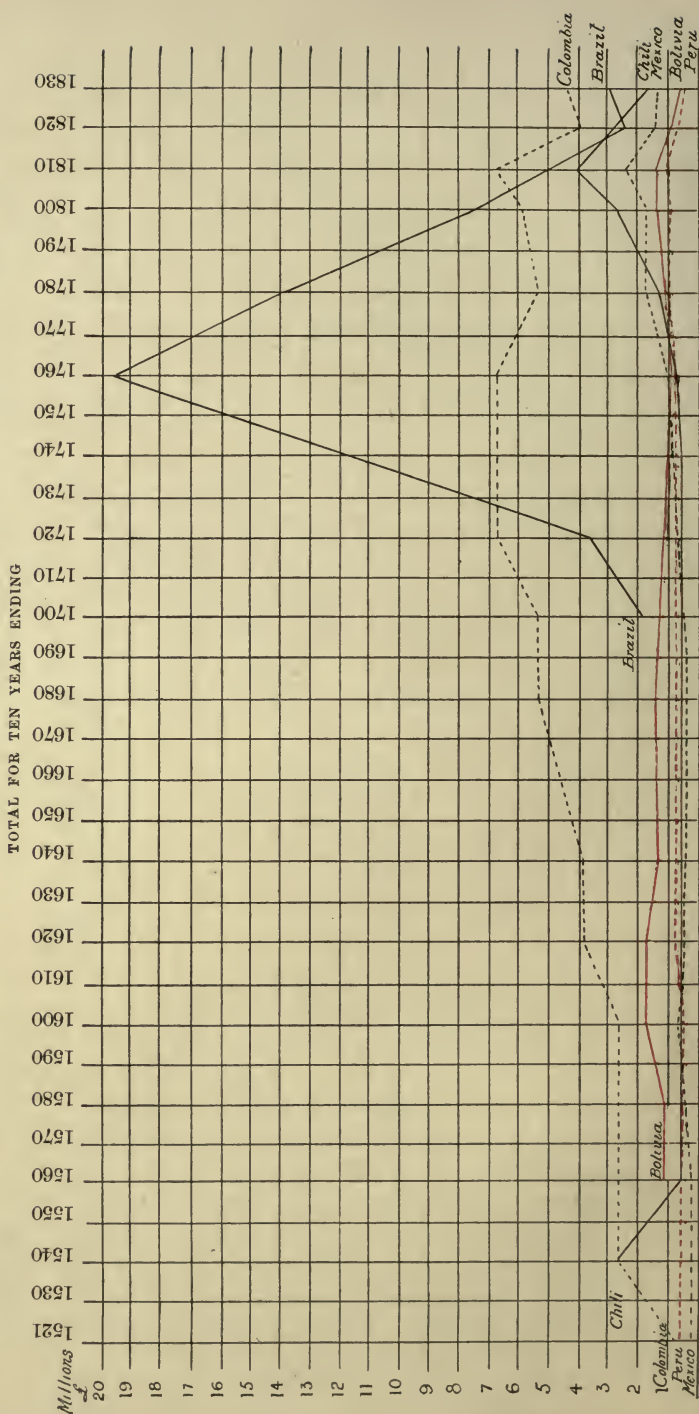
RISE AND DEVELOPMENT OF GOLD-MINING IN MODERN TIMES.

We have no very reliable statistics of the gold production of the different countries of the world previous to the year 1847, with the exception of those relating to the Spanish and Portuguese colonies of South America and Mexico, North America, Russia, and Austria-Hungary. Apparently the largest portion of the gold which reached Europe came from South America and Mexico, as will appear from the following note obtained from data supplied in "The Mineral Industry," vol. i., New York, 1893:—

Dates.	Production of Gold.	Value. £
1792 to 1847	United States	4,907,354
1493 ,,	Austria-Hungary	3,039,275
1521 ,,	Mexico	28,504,561
1822 ,,	Russia	33,007,665
1545 ,,	Bolivia	34,851,624
1691 ,,	Brazil	130,115,172
1545 ,,	Chili	33,362,920
1537 ,,	Colombia	148,446,656
1533 ,,	Peru	20,239,008

England only became interested in gold-mining to any extent about fifty years ago. The United States was first in the field; but, even in that country, the production of gold for the forty-three years ending in 1834 only averaged £65,116 per annum, and the output in 1847 had only reached £177,817. If we neglect Japan, China, India, and Africa, as to which countries no data are obtainable, previous to the discovery of gold in California in 1848, so far as we have accounts, the world's annual production of gold appears to have been little over £5,000,000 the greater portion of which came from Mexico and South America. In 1848 there was an increase of

PRODUCTION OF GOLD IN MEXICO, COLOMBIA, BRAZIL, PERU, CHILI, AND BOLIVIA FROM 1521 TO 1830.



about £2,000,000, and Russia had increased its annual output from £35,000 in 1814 to £3,826,011 in 1847, whilst Mexico and South America had fallen off in production.

GOLD PRODUCTION IN 1848.

	£
United States	2,000,000
Austria-Hungary	25,919
Mexico	265,042
Russia	3,668,156
Bolivia	132,920
Brazil	318,980
Chili	132,920
Colombia	451,928
Peru	79,752
	<hr/>
	£7,075,617

In 1899 the world's annual production of gold had increased in value to £62,175,213, of which the English Colonies and dependencies produced 59·61 %, and the United States 22·56 % ; together £51,083,970, and other countries 17·83 %, £11,091,243.

The relative productions of the different countries in 1889 appear to have been as follows:—

	% of Total.		% of Total.
Australasia	25·333	Central America	·169
All Africa	24·055	Malay Peninsula	·109
United States	22·563	Borneo	·074
Russia	7·708	Madagascar	·072
Canada	6·771	Bolivia	·040
Mexico	2·984	Ecuador	·040
British India	2·698	Italy	·025
China	1·817	Germany	·024
Colombia	·740	Sweden	·024
British Guiana	·719	Argentina	·024
Brazil	·716	England	·020
Austria Hungary	·655	Newfoundland	·015
French Guiana	·531	Uruguay	·013
Korea	·471	Spain	}
Japan	·359	Turkey	} ·142
Venezuela	·327	France, Portugal	}
Chili	·306		
Peru	·276		
Dutch Guiana	·180		<hr/>
			100·000

It will be noted from the following diagram, that whilst there has been a rapid and permanent rise in the gold production of the countries under British and American rule, there has been small progress in the gold production of other countries.

PRACTICAL GOLD-MINING

PRODUCTION OF GOLD PER ANNUM IN UNITED STATES, AUSTRALASIA, ALL AFRICA, INDIA, CANADA, BRITISH GUIANA, RUSSIA, AND OTHER COUNTRIES, FROM 1848 TO 1900.



AUSTRALASIA.—According to the Australian Handbook for 1901, the male population of Australasia, in 1896, was 2,304,666, and 3·86 % of this total were engaged in gold-mining. The total production of gold to December, 1900, was £428,338,398, and appears to have been derived in the following proportions:—

	Per cent.
Victoria	59·32
New Zealand	13·06
New South Wales	11·09
Queensland	11·05
Western Australia	3·94
Tasmania	1·00
South Australia	0·54
	100·00
	100·00

VICTORIA.—The average yield per ton of quartz milled, for all the mines, during 1899 was 9 dwts. 13 grs. fine gold. Some of the workings exceeded 3424 feet in depth. Seven mines had shafts of over 3000 feet in depth, and fourteen of over 2500 feet in depth.

NEW SOUTH WALES.—The average yield per ton of quartz milled, for all the mines, during 1899 was 12 dwts. 2 grs. of fine gold. The quartz veins proved, numbered 1256, and 8787 square miles of alluvium had been staked out.

QUEENSLAND.—The average yield per ton of quartz milled, for all the mines, was 13 dwts. 4 grs. fine gold.

WESTERN AUSTRALIA.—The average yield per ton of quartz milled, for all the mines, during 1899 was 1 oz. 6 dwts. 5 grs.

NEW ZEALAND.—The working of auriferous gravels in this district has, latterly, become a very important branch of mining, as about 100 dredges are at work, and an equal number are being constructed, for working river beds.

A great portion of the machinery required for working the Australian gold mines is now made in the country, and Australia may now be said to be almost independent of Europe for mining materials and men for working the gold mines.

CANADA.—The increase in the gold output of late years has been derived from the Yukon district, which provided four-fifths of the total for 1900.

INDIA.—In 1882 the Kolar Gold Field commenced to produce, and from that time forward the returns have increased yearly. The total value of gold extracted by ten companies, to December, 1899, was £10,636,687. At the end of 1898 the total amount of capital invested was £2,526,632, and the dividends paid in that year amounted to £739,114, or $29\frac{1}{4}\%$ upon the above capital. Four companies up to December, 1899, had paid £4,590,360 9s. 6d. in dividends, and these companies made a profit of £844,502 in 1900.

AFRICA.—The principal output of gold appears to have been derived from the Witwatersrand, from about twenty-six mines in the immediate neighbourhood of Johannesburg. To December, 1899, the total product from these mines was £79,758,149, obtained in the twelve years from 1887. The Rhodesian mines had produced in two years, 1898 and 1899, gold valued at £291,857.

The production of gold from the Transvaal for the four years from 1893 to the end of 1896 appears to have been derived in the following proportions:—

	% of total.
Witwatersrand	90·78
De Kaap	3·915
Lydenburg	2·32
Clerksdorph and Potchefstroom	2·61
Zoutpansburg	·34
Various	·035
	100·000

WEST AFRICAN MINES.—Gold-mining operations commenced here about the same time as in the Transvaal, and the Taquah and Abosso Gold Mining Company was registered in 1888; as yet, however, the gold production from this district has not been of importance.

BRITISH GUIANA.—Since the year 1887 there has been a small production of gold from this district, mostly obtained from alluvial washings.

Having sketched the rise and development of gold-mining in recent times, it may not be out of place here to make some reference to our knowledge of metalliferous mining, and the

importance of this branch of mining in England, previous to the discovery of gold in California. And probably no better idea can be gained of this subject than by a perusal of the "Records of Mining," Part 1, edited by Mr. John Taylor, F.R.S., F.G.S., 1829. In the preface of this work, Mr. Taylor observes:—"France has long had its *Annals des Mines*, and though that country is not rich in mineral treasures, not only has a periodical publication been supported, but the nation has its establishments for mining education; while England, so rich in metals, possesses neither writers on the subject, nor a school of the art, nor of the sciences immediately connected with it. In the different States of Germany, mining is supported by the influence and funds of the Government; academies are endowed for instruction, and numerous publications constantly advance the practice of the art. All countries must acknowledge themselves more or less indebted to the Germans as their teachers in its earliest stages, though the time perhaps is come when those who have received may, in their turn, have knowledge to communicate."¹

Mr. Taylor goes on to state that "the value of the soft metals now produced in these Kingdoms is probably about as follows (per annum):—

Copper	£ 1,000,000
Lead	800,000
Tin	400,000
	<hr/>
	£2,200,000
	<hr/>

According to the *Engineering and Mining Journal*, the produce of the soft metals in Great Britain, for the year 1900, was—

Copper	£ 33,740
Lead	296,785
Tin	440,509
	<hr/>
	£771,034
	<hr/>

or considerably less in value than in 1829.

¹ A School of Mines was established at Freiberg, Saxony, in 1702. *Vide* "The Mineral Industry," vol. i. 1892. A School of Mines was established in Mexico in 1792. The American Institute of Mining Engineers about 1871. *Vide* *The Engineering and Mining Journal*, November 30, 1901.

The only gold mines worked by the English in the year 1825 appear to have been a very limited number situated in South America, and it is remarkable that two gold mines—the Marmato Gold Mines, re-opened by the Colombian Mining Association in 1825, and the St. John del Rey Gold Mines, opened in Brazil in 1830—are still working and making profits. In those days gold-mining was entered into as a business in which to invest money, and considerable care appears to have been taken by those who proposed working mines abroad to get the best scientific advice: for instance, the great engineer, Mr. Robert Stephenson, was sent out to examine and report upon the mines of the Colombian Mining Association in 1825. Baron Humboldt was also consulted, and M. Bossingault, of the Royal School of Mines of France, was sent out to experiment and determine the best methods of treatment for the ores.

The increase in the importance of metalliferous mining as an investment, and the progress made in mining, and the education of miners in other countries, gradually led those interested in the industry in this country to understand the importance of more scientific methods. Probably the necessity for this was made more apparent by the frequent losses incurred by those who followed the advice of the common miner, or “rough diamond,” as he was then sometimes styled; but many years elapsed before much was done in this direction. Of scientific societies, we had the Royal Society, founded in 1660, the Society of Arts, founded in 1754, and the Institution of Civil Engineers, founded in 1818; but not until the year 1851 did we have the Mining Engineers, and in 1876 the Geological Society. Since then a number of mining institutions seem to have been established in England, dedicated more especially to local coal-mining; and latterly, in 1892, the Institution of Mining and Metallurgy was established in London, devoted more particularly to metalliferous mining. When we consider that during the year 1899 over £37,000,000 in value of gold was produced by our Colonies, or an increase in the output of over 525 per cent. in the last fifteen years (the total output for

the year 1886 having been £5,923,008), and that in 1900 there were 2978 public companies engaged in gold-mining alone, with a nominal share capital of £453,208,186, registered in England, it may well be said that we have been somewhat slow in taking measures to provide competent persons for managing a business of such considerable magnitude. The owners of coal mines, however, appear to have been more alive to this necessity, although, from their getting a direct product, their class of mining may be considered of a nature much more simple than that of metalliferous mining, entailing intricate processes to produce a marketable product. Hence, if many have made losses in gold-mining, it may not be so much attributable to the fickleness of gold-mining itself as to the negligence in taking advantage of the vast accumulation of knowledge of metalliferous ore deposits, and of the metallurgical treatment of ores, which has been gathered together from all parts of the world during the last fifty years by geologists, chemists, and mining engineers of varied experience abroad and in this country.

Before the discovery of gold in California, in 1848, the operations of mining, and the concentration of metalliferous ores, were conducted in a very primitive manner. The machinery employed was either made at the mine itself, or designed by those in charge of the mines, and ordered to be made at a foundry or by a millwright. With the discovery of gold, and the opening of numerous auriferous quartz veins, a great demand arose for mining machinery, and numerous engineering works commenced to make this class of machinery a speciality, with the result that, to-day, the manufacturers of mining requisites know almost as much about the matter as the miners themselves, and will supply an entire plant adapted to the treatment of any special class of ores and designed for use in any country. Without doubt, the extension of gold-mining has led to great improvements in mining methods and machinery for mines, and, if we note that America has been foremost in these matters, it must be attributed greatly to that country being less bound to old methods, by that sentiment of

respect for ancient usages which we may note in England; hence their greater readiness to turn to account, without delay, any results of scientific discovery.

To England gold-mining is of much greater importance than it is to any other country, as not only does the Empire contribute the largest proportion of the world's gold output, but the value of the gold production of the United Empire in 1899 amounted to no less than 25·32% of its total home production of minerals, including coal, iron, clays, stone, and metalliferous products; whereas the gold production of the United States, in the same year, only amounted to 6·07% of its mineral productions. It is, therefore, of considerable importance that the most improved methods of working gold mines should be adopted, and that the assistance of those who study the art of metalliferous mining should be availed of, when possible, as the success of mining enterprises demands the exercise of the same care in the selection of and payment for properties, and in the adoption of economical and judicious methods of working, as any other commercial or manufacturing business.

GOLD PRODUCTION OF THE WORLD FROM 1848 TO 1900.

	Year. 1848.	5 Years. 1849-53.	5 Years. 1854-58.	5 Years. 1859-63.	5 Years. 1864-68.	5 Years. 1869-73.	5 Years. 1874-78.
United States .	£ 2,000,000	£ 54,000,000 (1851)	£ 55,000,000	£ 43,640,000	£ 50,510,000	£ 43,000,000	£ 40,980,000
Australasia . .	—	1,282,974 (1852-53)	53,773,073	52,242,549	48,318,544	42,968,592	38,779,218
Russia	3,668,154	23,876,839	15,992,518	18,171,376	16,126,428	17,406,522	23,788,680
All Africa . .	—	—	—	—	—	—	—
Canada	—	—	(1858) 141,000	2,698,903	3,410,863	1,885,072	2,044,893
British India .	—	—	—	—	—	—	—
British Guiana .	—	—	—	—	—	—	—
Other Countries .	1,407,463	6,638,271	6,187,667	5,960,662	5,866,347	6,322,322	7,197,755
Totals .	7,075,617	101,790,002	133,273,116	120,668,542	125,512,276	117,964,666	113,283,734

	5 Years. 1879-83.	5 Years. 1884-88.	5 Years. 1889-93.	5 Years. 1894-98.	2 Years. 1899-1900.	Totals.	Years.
United States .	£ 34,420,180	£ 32,755,000	£ 33,557,996	£ 52,754,168	£ 29,651,139	£ 472,268,483	53
Australasia . .	28,937,343	26,830,353	32,520,259	48,364,158	30,444,496	428,338,398	50
Russia	25,053,165	21,824,869	25,350,979	27,341,295	9,410,776	228,416,630	53
All Africa . .	—	1,971,520	16,783,299	52,312,132	16,970,724	88,037,675	17
Canada	1,311,969	1,147,328	1,054,307	5,135,253	9,793,296	28,622,894	43
British India .	—	286,463	2,516,940	5,892,209	3,550,930	12,246,542	17
British Guiana .	—	108,995	1,691,488	2,275,862	904,992	4,981,337	14
Other Countries .	7,100,297	(1887-8) ¹ 20,752,340	20,711,339	30,336,996	12,545,490	131,026,949	53
Totals .	96,822,954	105,676,868	134,186,607	224,412,073	113,271,843	1,393,938,898	

¹ From 1884 to 1900 twenty-four new countries are included, giving about £13,000,000 for five years.

CHAPTER III.

STATISTICS AND DATA RELATING TO COMPANIES WORKING GOLD MINES FOR A PROFIT, AND FINANCIAL COMPANIES DEALING IN GOLD-MINING PROPERTIES OR SHARES, AND FINANCING OR PROMOTING GOLD-MINING COMPANIES, BROUGHT UP TO MAY, 1900.

Compiled and Arranged from Data given in Mr. Walter R. Skinner's "Mining Manual."

THE great extension of mining for gold during the period 1880—1900 appears to call for some general survey, which shall be adapted to place in a clear light its salient features and its varying fortunes.

The Companies registered in three great divisions appear to have been as follows:—

DIVIDEND PAYING.

	MINING.			FINANCE.	
	No.	No.	Nom. Cap.	No.	Nom. Cap.
			£		£
African	986	57	25,233,705	42	24,051,400
Australasian	1232	53	12,670,000	21	4,766,100
Indian and other	761	43	10,814,250	28	7,438,840
Totals	2979	153	48,717,955	91	36,256,340

NON-DIVIDEND PAYING.

	MINING.		FINANCE.	
	No.	Nom. Cap.	No.	Nom. Cap.
		£		£
African	507	104,740,427	380	51,675,757
Australasian	828	104,493,345	330	29,991,907
Indian and other	325	45,464,437	365	32,078,018
Totals	1660	254,698,209	1075	113,745,682

STATISTICS AND DATA

It therefore appears that those which have paid dividends raised only 19 per cent. of the total capital, thus:—

DIVIDEND PAYING COMPANIES.

Mining	153	£ 48,717,955	£
Finance	91	36,256,340	
			84,974,295	

NON-DIVIDEND PAYING COMPANIES.

Mining	1660	£ 254,698,209	
Finance	1075	113,745,682	
			368,443,891	
			453,418,186	

As might be expected, there have been re-constructions and total failures, thus:—

RE-CONSTRUCTED.

	MINING.		FINANCE.	
	No.	Nom. Cap.	No.	Nom. Cap.
African	92	£ 16,020,250	28	£ 6,084,000
Australasian	313	43,054,925	42	7,371,000
Indian and other	62	8,380,587	16	2,530,000
Totals	467	67,455,762	86	15,985,000

DEFUNCT.

	MINING.		FINANCE.	
	No.	Nom. Cap.	No.	Nom. Cap.
African	145	£ 22,302,000	129	£ 10,313,957
Australasian	420	49,469,020	229	14,308,412
Indian and other	120	18,624,073	105	8,325,719
Totals	685	90,395,093	463	32,948,088

There have also been increases of capital in the "Indian and Miscellaneous" class, amounting to £1,167,942.

It should be mentioned that whilst the record of African enterprises starts from 1880, the Australasian list contains two companies of earlier origin, and the third list 14 companies, dating before 1880. In the third list the "re-constructed" and "defunct" are only shown as from May, 1897 to 1900, and this list is imperfect in other respects.

Having thus summarized the whole mass of companies, we will next consider the proportion of capital available for working, out of total capital, in certain cases:—

	NUMBER OF MINES.		PERCENTAGE FOR WORKING.	
	Dividend Paying.	Non-Div. Paying.	Dividend Paying.	Non-Div. Paying.
African—1880 to 1894	£ 30.	£ 32	£ 46·9	& 27·6
„ 1895 „ 1897	10	93	43·1	26·1
„ 1898 „ 1900	—	60	—	39·9
Australasian	38	543	33·8	26·3

From the limited number of examples, it may be gathered that the successful mines have the largest ratios of capital available for working. The high proportion of working capital shown for the sixty non-dividend paying African mines launched in 1897 and later is due to the obvious necessity of ample capital for working deep-level mines, many of which were then brought out.

The following table summarizes the history of the fifty-seven African mining companies which paid dividends:—

DIVIDEND PAYING MINES.

Date of Registration.	No. of Co's.	NOMINAL CAPITAL.		In May, 1900.	Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
		When Registered.					Total.	Average rate per annum from date of Registration.
1885	1	£ 120,000		£ 120,000	—	—	£ 21,000	£ .577
1886	6	317,000		1,963,083	—	814,680	2,405,665	19.891
1887	14	1,136,000		11,459,636	675,000	1,413,972	9,251,872	28.509
1888	6	935,000		1,265,000	60,000	585,800	3,938,067	22.104
1889	3	923,000		1,357,500	340,000	315,500	370,925	1.876
1890	2	128,000		534,591	18,000	499,106	305,111	5.678
1891	1	15,000		540,000	54,000	46,200	195,650	22.212
1892	2	380,000		460,000	—	500,000	369,000	5.889
1893	1	300,000		300,000	112,000	171,449	345,000	12.293
1894	6	1,970,000		2,773,895	100,000	1,572,166	1,125,654	6.379
Totals . .	42	6,226,000		20,773,705	1,359,000	5,918,873	18,327,944	Av. 14.249
1895	9	2,350,000		2,990,000	216,050	750,866	685,428	4.106
1896	1	350,000		350,000	—	100,000	71,437	4.277
1897	5	1,120,000		1,120,000	41,000	110,436	171,049	2.963
Totals . . .	15	3,820,000		4,460,000	257,050	961,302	927,914	Av. 3.850
Grand Total	57	10,046,000		25,233,705	1,616,050	6,880,175	19,255,858	Av. 11.031

The finance companies have been divided into two classes—No. I. including companies mainly for investment and banking; No. II. being intimately associated with the actual working of mines.

The following tables relate to the dividend-paying ones:—

CLASS I.

Date of Registration.	No. of Co's.	NOMINAL CAPITAL.		Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	Average rate per annum from date of Registration.
		In May, 1897.	In May, 1900.				
1888	1	£ 400,000	£ 400,000	£ —	£ 168,750	£ 60,000	£ 1·415
1889	2	3,450,300	3,450,300	—	1,027,000	1,603,139	7·866
1892	1	2,700,000	3,250,000	500,000	—	2,466,900	14·156
1894	3	1,200,000	2,900,000	229,000	—	472,758	5·671
Totals . .	7	7,750,300	10,000,300	729,000	1,195,750	4,602,797	Av. 9·319
1895	5	5,120,000	5,170,000	200,000	346,906	1,106,795	4·920
1896	1	1,215,000	1,215,000	—	—	240,000	5·929
1897	1	1,015,000	1,015,000	—	—	195,572	7·536
Totals . .	7	7,350,000	7,400,000	200,000	346,906	1,542,357	Av. 5·434
Grand Total	14	15,100,300	17,400,300	929,000	1,542,656	6,145,164	Av. 7·279

CLASS II.

Date of Registration.	No. of Co's.	NOMINAL CAPITAL.		Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
		In May, 1897.	In May, 1900.			Total.	Average rate per annum from date of Registration.
1888	3	£ 190,100	£ 190,100	—	£ —	£ 180,989	11·712
1889	2	330,000	330,000	—	8,625	228,420	11·553
1890	1	250,000	250,000	—	—	25,815	3·377
1891	2	265,000	400,000	—	47,551	165,000	5·546
1892	2	355,000	355,000	23,600	38,300	295,795	10·534
1893	2	450,000	540,000	1,000,000	20,000	608,900	21·537
1894	5	1,111,000	1,111,000	230,000	37,500	1,043,500	15·563
Totals . .	17	2,951,100	3,176,100	1,253,600	151,976	2,548,419	Av. 13·697
1895	11	3,475,000	3,475,000	73,000	— 12,500	461,392	Av. 3·432
Grand Total	28	6,426,100	6,651,100	1,326,600	164,476	3,009,811	Av. 8·468

PRACTICAL GOLD-MINING

The Australasian dividend-paying mines appear to have produced a higher average rate than those in Africa. Thus:—

Date of Registration.	NO. OF COMPANIES.		NOMINAL CAPITAL.		Raised on Debentures.	Premiums rec'vd on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
	When Reg'd.	In May, 1900.	When Registered.	In May, 1900.			Total.	Av. rate per annum from date of Regist' n.
1845	1	1	400,000	400,000	—	—	£ 66,163	£ .890
1881	1	1	50,000	50,000	—	—	290,625	38.176
1886	3	3	1,510,000	2,020,000	—	—	6,470,396	33.966
1887	3	3	670,000	920,000	—	30,000	922,750	9.351
1888	2	2	154,000	2.0,000	—	—	279,126	11.791
1889	2	2	372,000	372,000	—	—	723,600	20.435
1890	1	1	100,000	100,000	—	—	33,200	3.758
1891	2	2	148,000	148,000	—	—	90,550	7.524
1892	5	2	580,000	200,000	—	—	187,916	12.583
1893	2	1	280,000	30,000	—	—	12,500	7.260
1894	8	4	1,100,500	940,000	—	792,400	1,710,375	33.600
Totals . .	30	22	5,364,500	5,460,000	—	822,400	10,787,201	24.216
1895	18	15	2,429,000	2,533,000	18,150	68,901	559,040	4.076
1896	9	8	1,835,000	1,260,000	—	—	1,240,575	26.139
1897	4	4	1,445,000	1,495,000	—	—	514,983	11.896
Totals . .	31	27	5,709,000	5,288,000	—	68,901	2,314,598	11.913
1898	2	2	372,000	372,000	—	—	94,800	12.741
1899	2	2	1,550,000	1,550,000	—	—	300,983	232.419
Totals . .	4	4	1,922,000	1,922,000	—	—	395,783	69.468
Grand Total	65	53	12,995,500	12,670,000	18,150	891,301	13,497,582	20.183

The Australasian dividend-paying financial companies do not exhibit nearly so good a result; their progress is shown as follows:—

Date of Registration.	NO. OF COMPANIES.		NOMINAL CAPITAL.		Raised on Debentures.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
	When Registered.	In May, 1900.	At date of Registration.	In May, 1900.		Total.	Average rate per annum from date of Registration.
1860	1	—	£ 50,000	£ —	—	£ —	—
1892	2	1	380,000	180,000	—	19,875	1·562
1894	14	5	515,550	401,100	—	338,733	17·782
Totals . .	17	6	945,550	581,100	—	358,608	12·369
1895	16	5	2,287,300	880,000	—	76,051	7·162
1896	9	6	1,120,000	795,000	50,000	60,412	3·579
1897	3	3	2,260,000	2,260,000	—	512,594	16·270
Totals . .	28	14	5,667,300	3,935,000	50,000	649,057	11·943
1898	1	1	250,000	250,000	—	6,050	3·235
Grand Total	46	21	6,862,850	4,766,100	50,000	1,013,725	11·671

As regards the remaining dividend-paying companies (Indian and miscellaneous), their fortunes seem to have been very unequal, but the average rate of profit comes out a little better than the African average. The Indian, &c., Finance companies belonging to this category, on the other hand, do not reach the African level. First, as respects mining companies:—

PRACTICAL GOLD-MINING

Date of Registration.	No. of Co's.	NOMINAL CAPITAL.			Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
		When Registered.	In May, 1900.	Total.			Average rate per annum from date of Registration.	
		£	£	£	£	£	£	£
1856	1	252,000	600,000	158,360	—	104,807	—	—
1864	1	141,730	140,000	—	—	266,437	—	—
1867	1	87,218	18,000	—	—	5,266	—	—
1870	1	526,250	526,250	—	—	981,671	—	—
1871	1	270,000	270,000	—	—	896,400	—	—
1872	1	75,000	75,000	4,000	—	33,375	—	—
1874	1	67,500	67,500	—	—	3,050	—	—
1879	1	75,000	75,000	—	—	96,562	—	—
1880	2	380,000	515,000	—	—	2,166,708	—	—
1882	2	35,000	45,000	400	—	18,834	—	—
1883	1	30,000	30,000	—	—	560	—	—
1889	2	452,500	472,500	2,950	—	1,163,415	—	—
1890	1	1,000,000	1,000,000	—	—	685,000	—	—
1891	2	500,000	525,000	—	—	510,000	—	—
1892	3	980,000	995,000	—	—	219,093	—	—
1893	4	572,000	654,000	35,000	—	664,250	—	—
Totals . .	25	5,444,198	6,008,250	200,710	360,069	7,815,428	10.010	—
1895	1	100,000	100,000	—	39,600	47,153	—	—
1896	3	300,000	385,000	—	—	190,165	—	—
1897	5	570,000	770,000	—	25,000	31,589	—	—
Totals . .	9	970,000	1,255,000	—	64,600	268,907	6.502	—
1898	5	1,685,000	1,685,000	4,666	—	149,531	—	—
1899	4	1,866,000	1,866,000	—	—	465,647	—	—
Totals . .	9	3,551,000	3,551,000	4,666	—	615,178	15.291	—
Grand Total	43	9,965,198	10,814,250	205,376	424,669	8,699,513	11.487	—

The following table shows the same facts for the Finance companies:—

Date of Registration.	No. of Co's.	NOMINAL CAPITAL.		Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.	
		When Registered.	In May, 1900.			Total.	Average rate per annum from date of Registration.
1864	1	£ 250,000	£ 102,340	—	—	£ 25,442	—
1888	1	25,000	201,250	—	—	70,155	—
1892	1	10,000	30,000	—	—	12,250	—
1894	2	401,000	401,000	—	—	44,330	—
Totals . .	5	686,000	734,590	—	—	152,177	4.409
1895	11	2,315,000	2,700,000	—	—	115,983	—
1896	3	1,510,000	1,530,000	—	300,000	640,629	—
1897	7	2,364,250	2,364,250	—	—	286,335	—
Totals . .	21	6,189,250	6,594,250	—	300,000	1,042,947	6.621
1898	1	60,000	60,000	—	—	3,000	—
1899	1	50,000	50,000	—	—	5,000	—
Totals . .	2	110,000	110,000	—	—	8,000	8.843
Grand Total	28	6,985,250	7,438,840	—	300,000	1,203,124	6.483

Briefly summarized the following results are shown:—

	IN MAY, 1900.		Nominal Capital.	Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900, PAID IN CASH.
	No. of Companies.	£				
African Mines	57	25,233,705	1,616,050	6,880,175	19,255,858	
Finance	42	24,051,400	2,255,600	1,707,132	9,154,975	
Australian Mines	53	12,670,000	18,150	891,301	13,497,582	
Finance	21	4,766,100	50,000	—	1,013,725	
Indian, &c., Mines	43	10,814,250	205,376	424,669	8,699,513	
Finance	28	7,438,840	—	300,000	1,203,124	
Totals	244	84,974,295	4,145,176	10,203,277	52,824,777	

	Total Paid-up Capital, May, 1900.	Portion raised by Premiums on Shares.	Equal to % of Total Paid-up Capital.	Average Paid-up Capital from date of Registration.	Average Dividends from date of Registration.	Average rate per annum from date of Registration.
	£	£	£	£	£	%
African Mines	21,755,047	6,880,175	31.625	15,898,118	1,753,788	11.031
Finance	22,590,573	1,707,132	7.556	17,422,884	1,331,070	7.639
Australian Mines	10,821,328	891,301	8.236	9,583,731	1,934,376	20.183
Finance	2,263,595	—	—	2,254,542	263,143	11.671
Indian, &c., Mines	10,759,023	424,669	3.947	10,167,721	1,167,998	11.487
Finance	4,659,385	300,000	6.438	4,647,385	301,324	6.483
Totals	72,848,951	10,203,277		59,974,381	6,751,699	Av. 11.257

TOTALS.	Nos. of Companies.	Average Paid-up Capital.	Average Dividends.	Average %.
		£	£	%
Mines	153	35,649,570	4,856,162	13.621
Finance	91	24,324,811	1,895,537	7.792

Having due regard to the risks of mining adventure, it cannot be said that the holders of shares in dividend-paying mines and allied finance companies have, on an average, been remarkably fortunate. There have, however, been some signal successes, which have appealed to the public mind, and have, as we see, rendered possible the flotation of a very large number of companies which have not yet paid any dividends, and a portion of which are defunct, carrying with them a larger capital than that which has earned dividends. How much of this nominal capital represents paper granted to vendors, and how much actual money subscribed, does not appear; but even the "paper" has doubtless to a very large extent passed to new owners for hard value, prior to the failure of the respective companies.

Without venturing to predict the fate of the majority of those companies which up to May, 1900, had not paid dividends, it is proposed to pass in review the statistics as to their formation, as an introduction to the deductions which follow at the conclusion of this work.

The following table shows that of the 507 African mining companies which have not paid dividends, no more than 128, with about one-fifth of the total capital, were registered prior to 1895. Less than three-tenths of these are extinct; so that, it would seem, hope remains in many cases. Of those registered in 1895, nearly two-fifths became extinct in the course of so short a time as five years.

AFRICAN MINING COMPANIES.

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		Raised on Debentures.	Premiums received on Shares.	EXTINCT IN 1900.	
	No.	Nominal Capital in 1897.	No.	Nominal Capital.			No.	Nominal Capital.
1882	1	£ 100,000	1	£ 260,000	120,000	10,000	—	—
1884	1	240,000	1	240,000	—	—	—	—
1886	1	65,000	1	250,000	—	20,000	—	—
1887	8	1,322,000	4	397,000	—	—	4	925,000
1888	13	2,185,000	11	2,166,000	—	—	2	165,000
1889	30	4,826,750	25	4,161,750	6,000	263,425	5	585,000
1890	3	300,000	2	200,000	—	—	1	100,000
1891	4	873,500	3	663,500	200,000	—	1	160,000
1892	13	2,581,250	8	1,626,250	150,000	52,500	5	1,080,000
1893	19	3,231,000	10	1,409,000	231,660	135,258	9	1,875,000
1894	35	6,185,000	26	5,620,000	333,350	179,552	9	930,000
Totals . . .	128	21,912,500	92	16,993,500	1,041,010	660,735	36	5,820,000
1895	218	42,870,000	136	31,862,625	3,131,659	1,056,674	82	12,815,000
1896	59	12,044,000	35	8,697,000	405,828	142,500	24	3,382,000
1897	21	2,820,000	19	2,635,000	195,000	117,796	2	185,000
Totals . . .	298	57,734,000	190	43,194,625	3,732,487	1,316,970	108	16,382,000
1898	24	6,676,927	23	6,576,927	300,000	681,885	1	100,000
1899	54	17,717,000	54	17,717,000	—	1,955,874	—	—
May, 1900	3	700,000	3	700,000	—	—	—	—
Totals . . .	81	25,093,927	80	24,993,927	300,000	2,637,759	1	100,000
Grand Totals	507	104,740,427	362	85,182,052	5,073,497	4,615,464	145	22,302,000

The "Premiums received on Shares" for the purpose of increasing the working capital, illustrate the warm hopes with which several of these companies were started; possibly, at the termination of the war, some of these will have a brilliant fulfilment.

The African Financial Companies founded in 1893 to 1896 have shown a high proportion of failures, as appears by the next table:—

CLASS I.

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		Raised on Debentures.	Premiums received on Shares.	EXTINCT IN 1900.	
	No.	Nominal Capital, May, 1897.	No.	Nominal Capital, May, 1900.			No.	Nominal Capital.
1880	1	£ 750,000	—	£ —	£ —	£ 750,000	1	£ 750,000
1889	3	5,700,000	2	8,000,000	—	4,437,500	1	200,000
1892	1	500,000	1	1,000,000	—	—	—	—
1893	1	750,000	1	870,000	500,000	10,000	—	—
Totals . . .	6	7,700,000	4	9,870,000	500,000	4,447,500	2	950,000
1895	9	4,800,000	7	4,393,000	—	42,001	2	650,000
1896	1	1,500,000	1	1,500,000	—	—	—	—
Totals . . .	10	6,300,000	8	5,893,000	—	42,001	2	650,000
Grand Totals .	16	14,000,000	12	15,763,000	500,000	4,489,501	4	1,600,000

PRACTICAL GOLD-MINING

CLASS II.

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		Raised on Debentures.	Premiums received on Shares.	EXTINCT IN 1900.	
	No.	Nominal Capital, May, 1897.	No.	Nominal Capital, May, 1900.			No.	Nominal Capital.
1887	1	£ 4,000	1	£ 4,000	—	—	—	—
1888	3	600,000	2	550,000	—	40,000	1	50,000
1889	9	1,640,350	7	1,512,850	30,000	—	2	30,000
1890	3	165,000	2	150,000	6,000	—	1	50,000
1891	5	210,000	3	275,500	10,000	—	2	56,000
1892	5	299,000	2	180,000	—	—	3	119,000
1893	9	910,100	4	266,000	—	—	5	694,000
1894	20	3,531,190	10	2,991,000	90,000	—	10	664,190
Totals . . .	55	7,359,640	31	5,929,350	136,000	45,645	24	1,563,190
1895	116	8,826,350	53	5,359,050	8,000	30,070	63	4,077,300
1896	51	5,756,617	23	2,877,500	—	—	28	2,924,117
1897	30	2,792,350	22	2,854,500	111,474	4,812	8	137,850
Totals . . .	197	17,375,317	98	11,091,050	119,474	34,882	99	7,139,267
1898	22	3,635,000	22	3,685,000	—	7,500	—	—
1899	64	6,124,200	62	6,112,700	—	15,000	2	11,500
1900 (May)	26	3,181,600	26	3,181,600	63,780	278,066	—	—
Totals . . .	112	12,940,800	110	12,979,300	63,780	300,566	2	11,500
Grand Totals .	364	37,675,757	239	29,999,700	319,254	381,093	125	8,713,937

Passing to the Australasian Mining Companies which had paid no dividend in 1900, we have the following table:—

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		EXTINCT IN 1900.		
	No.	Nom. Cap. at date of Registration. £	No.	Nominal Capital May, 1900. £	Premiums received on Shares. £	No.	Nominal Capital. £
1886	1	50,000	—	—	—	1	50,000
1887	2	260,000	1	160,000	—	1	100,000
1888	2	260,000	—	—	—	2	260,000
1890	1	60,000	—	—	—	1	60,000
1891	3	235,000	1	100,000	—	2	175,000
1892	5	775,000	2	200,000	—	3	535,000
1893	9	856,720	2	350,000	—	7	506,720
1894	28	3,350,500	6	630,500	—	22	2,785,000
Totals . . .	51	5,847,220	12	1,440,500	—	39	4,471,720
1895	218	24,519,000	48	6,140,000	88,904	170	18,844,000
1896	253	34,302,500	87	12,648,500	33,896	166	21,912,500
1897	104	13,231,000	68	6,782,500	11,894	36	2,920,500
Totals . . .	575	72,052,500	203	25,571,000	134,694	372	43,677,000
1898	88	11,754,625	82	10,859,625	11,070	6	895,000
1899	101	13,162,000	98	12,737,700	10,495	3	425,300
1900 (May)	13	1,677,000	13	1,677,000	—	—	—
Totals . . .	202	26,593,625	193	25,274,325	21,565	9	1,320,300
Grand Total .	828	104,493,345	408	52,285,825	156,259	420	49,469,020

This table shows an alarming proportion of failures, both prior to 1895, and as respects companies registered in 1895-97. How far this is of evil omen for the more recent ventures time will show. The same observation applies to Australasian Mining Finance Companies, as shown in the next table:—

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		EXTINCT IN 1900.	
	No.	Nominal Capital at date of Registration. £	No.	Nominal Capital, May, 1900. £	No.	Nominal Capital. £
1860	1	50,000	—	—	1	50,000
1887	2	13,500	—	—	2	13,500
1888	1	80,000	—	—	1	80,000
1890	1	250,000	—	68,449	1	250,000
1891	1	25,000	—	—	1	25,000
1892	1	200,000	—	—	1	200,000
1893	1	5,000	—	—	1	5,000
1894	18	838,950	4	290,000	14	548,950
Totals	26	1,462,450	4	290,000	22	1,172,450
1895	89	8,220,567	27	3,856,900	62	4,463,667
1896	146	9,751,587	20	2,150,000	126	7,550,587
1897	35	4,095,582	19	3,012,375	16	1,085,707
Totals	270	22,067,736	66	9,019,275	204	13,099,961
1898	13	1,801,501	11	1,790,500	2	11,001
1899	16	938,220	15	913,220	1	25,000
1900 (May)	5	3,722,000	5	3,722,000	—	—
Totals	34	6,461,721	31	6,425,720	3	36,001
Grand Totals	330	29,991,907	101	15,734,995	229	14,308,412

The "Indian and Miscellaneous" section gives a result, better indeed than the Australasian, but by no means equal to the African. Forty per cent. of the capital on registration of 325 mining companies falls under the heading "Extinct," and one fourth of such capital in the case of 365 financial companies is also shown under that heading.

First, as respects mining companies:—

STATISTICS AND DATA

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		Raised on Debentures.	Premiums received on Shares.	EXTINCT IN 1900.	
	No.	Nominal Capital in 1900.	No.	Nominal Capital in 1900.			No.	Nominal Capital.
1867	1	£ 276,573	—	—	—	—	1	£ 276,573
1868	1	30,000	—	—	—	—	1	30,000
1870	1	1,288,000	—	—	—	—	1	1,288,000
1872	1	525,000	1	75,000	—	—	—	—
1876	1	25,000	—	—	—	—	1	25,000
1880	1	200,000	—	—	—	—	1	200,000
1885	1	100,000	—	—	—	—	1	100,000
1886	5	770,000	2	250,000	29,450	—	3	520,000
1887	3	505,000	—	—	—	—	3	505,000
1888	9	2,075,000	2	150,000	—	—	7	1,925,000
1889	4	820,000	1	250,000	—	—	3	570,000
1890	2	306,000	—	—	—	—	2	306,000
1891	3	325,000	1	100,000	2,000	—	2	225,000
1892	7	712,500	1	70,000	12,000	—	6	652,500
1893	16	2,162,500	7	702,500	29,150	—	9	1,460,000
1894	18	1,857,107	7	895,107	64,906	—	11	1,012,000
Totals	74	11,977,680	22	2,492,607	137,506	—	52	9,095,073
1895	33	3,162,000	14	1,707,000	193,200	—	19	1,800,000
1896	62	10,102,000	23	3,755,000	156,140	12,500	39	6,713,000
1897	41	4,631,000	33	4,000,000	21,045	—	8	631,000
Totals	136	17,895,000	70	9,462,000	370,385	12,500	66	9,144,000
1898	50	7,564,000	49	7,503,000	46,310	—	1	375,000
1899	58	6,987,757	57	6,822,757	6,425	—	1	10,000
1900 (May)	7	1,340,000	7	1,340,000	—	—	—	—
Totals	115	15,591,757	113	15,665,757	52,735	—	2	385,000
Grand Totals . .	325	45,464,437	205	27,620,364	560,626	12,500	120	18,624,073

These figures, down to 1896, are not reasuring. Nor are those for the Finance companies, shown in the next table.

Date of Registration.	COMPANIES REGISTERED.		REMAINING IN 1900.		EXTINCT IN 1900.	
	No.	Nominal Capital in 1897. £	No.	Nominal Capital in 1900. £	No.	Nominal Capital. £
1880	1	115,000	—	—	—	—
1886	1	5,000	—	—	1	115,000
1887	2	192,280	—	—	1	5,000
1888	2	500,100	1	250,100	2	192,280
1889	4	745,000	4	745,000	1	250,000
1892	1	175,000	—	—	—	—
1894	4	457,500	3	310,000	1	175,000
Totals	15	2,189,880	8	1,305,100	7	937,280
1895	45	3,990,400	15	1,422,200	30	2,243,200
1896	87	8,090,457	41	4,344,300	46	3,804,157
1897	63	6,776,009	51	6,317,000	12	998,082
Totals	195	18,856,866	107	12,083,500	88	7,045,439
1898	49	4,457,670	40	4,418,640	9	333,000
1899	87	4,315,002	86	4,317,502	1	10,000
1900	19	2,258,600	19	2,258,600	—	—
Totals	155	11,031,272	145	10,994,742	10	343,000
Grand Totals	365	32,078,018	260	24,383,342	105	8,325,719

Summarizing once again the non-dividend paying companies, under the three periods down to 1894, from 1895 to 1897, and later, we have the following particulars:—

	COMPANIES REGISTERED.			REMAINING IN 1900.			EXTINCT IN 1900.		
	No.	Nominal Capital. £		No.	Nominal Capital. £	Raised on Debentures. £	Premiums recvd. on Shares. £	No.	Nominal Capital. £
African Mining	128	21,912,500		92	16,993,500	1,041,010	660,735	36	5,820,000
" Finance, I.	6	7,700,000		4	9,870,000	500,000	4,447,500	2	950,000
" " Finance, II.	55	7,359,640		31	5,929,350	136,000	45,645	24	1,563,190
Australasian Mining	51	5,847,220		12	1,440,500	—	—	39	4,471,720
" Finance	26	1,462,450		4	290,000	71,449	—	22	1,172,450
Indian, &c., Mining	74	11,977,680		22	2,492,607	137,506	—	52	9,095,073
" Finance	15	2,189,880		8	1,305,100	169,750	—	7	937,280
Totals to end of 1894	355	58,449,370		173	38,321,057	2,055,715	5,153,880	182	24,009,713
African Mining	298	57,734,000		190	43,194,625	3,732,487	1,316,970	108	16,382,000
" Finance, I.	10	6,300,000		8	5,893,000	—	42,001	2	650,000
" " Finance, II.	197	17,375,317		98	11,091,050	119,474	34,882	99	7,139,267
Australasian Mining	575	72,052,500		203	25,571,000	134,694	133,352	372	43,677,000
" Finance	270	22,067,736		66	9,019,275	88,220	—	204	13,099,961
Indian, &c., Mining	136	17,895,000		70	9,462,000	370,385	12,500	66	9,144,000
" Finance	195	18,856,866		107	12,083,500	14,100	—	88	7,045,439
Totals 1895 to 1897	1681	212,281,419		742	116,314,450	4,459,360	1,539,705	939	97,137,667
African Mining	81	23,093,927		80	24,793,927	300,000	2,637,759	1	100,000
" Finance, I.	—	—		—	—	—	—	—	—
" " Finance, II.	112	12,940,800		110	12,979,300	63,780	300,566	2	11,500
Australasian Mining	202	26,593,625		193	25,274,325	21,565	—	9	1,320,300
" Finance	34	6,461,721		31	6,425,720	—	—	3	36,001
Indian, &c., Mining	115	15,591,757		113	15,665,757	52,735	—	2	385,000
" Finance	155	11,031,272		145	10,994,742	—	—	10	343,000
Totals since 1897	699	97,713,102		672	96,133,771	438,080	2,938,325	27	2,195,801
Grand Totals	2735	368,443,891		1587	250,769,278	6,953,155	9,631,910	1148	123,343,181

It will be of some interest to the general reader to show here the summary facts respecting (1) those companies of the 246 dividend-paying ones which averaged more than 25 per cent. per annum dividends, and (2) those companies which have not paid any dividend, but whose nominal capital is large, say, fully $\frac{1}{2}$ or million sterling. For the other very numerous companies statistics are appended which can be referred to by means of an index.

	NAME.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	DIVIDENDS TO MAY, 1900.	
					Total.	Per cent. Per annum.
	AFRICAN.	£	£	£	£	%
1886	Johannesburg					
	Pioneer . . .	21,000	—	—	439,950	156·000
	Jubilee . . .	50,000	—	72,354	320,475	30·406
	Wemmer . . .	80,000	—	65,256	452,940	30·652
	City & Suburban . . .	1,360,000	—	194,748	817,000	30·178
1887	Ferreira . . .	90,000	—	103,932	1,267,350	68·318
	New Heriot . . .	114,864	—	49,581	536,749	35·527
	New Primrose . . .	300,000	—	202,906	741,446	30·274
	Robinson . . .	2,750,000	—	—	2,850,937	185·097
1888	Crown Reef . . .	120,000	—	116,187	1,157,900	42·915
	Durban Roodepoort . . .	125,000	—	33,662	672,583	38·208
1894	Bonanza . . .	200,000	—	—	460,000	38·333
	*New African Co. . .	400,000	—	—	395,000	32·816
	*S.African Gold Trust	500,000	230,000	—	752,500	25·083
	AUSTRALIAN.					
1881	Victory Charters Towers . . .	50,000	—	—	290,625	38·176
1886	Brilliant Gold . . .	520,000	—	—	603,083	70·126
	Mount Morgan . . .	1,000,000	—	—	5,370,833	43·843
1887	Waihi Gold . . .	320,000	—	30,000	644,500	26·632
1889	Brilliant & St. George . . .	72,000	—	—	438,600	67·126
1894	Great Boulder Proprietary . . .	175,000	—	172,500	866,250	70·858
	Hannans Brownhill . . .	225,000	—	30,000	441,375	61·903
	Hauraki Gold . . .	40,000	—	—	144,000	60·000
1895	Queensland Menzies . . .	33,000	—	—	52,800	32·979
1896	Lake View Consols . . .	250,000	—	—	1,125,000	112·500
1898	Kelly's Queen Block . . .	72,000	—	—	64,800	45·000
1899	Golden Horse Shoe Estates . . .	1,500,000	—	—	300,000	30·000
1894	*British Westralia . . .	80,000	—	—	136,000	28·332
	*Coolgardie Gold Syndicate . . .	50,000	—	—	112,309	37·500
1896	*Australian Search . . .	5,000	—	—	1,321	31·250

* Financial companies.

NAME.					DIVIDENDS TO MAY, 1900.	
INDIAN AND OTHER.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	Total.	Per cent. per annum.	
	£	£	£	£	%	
1889 Champion Reef . .	220,000	—	66,370	1,142,500	43·201	
1899 Stratton's Independence . .	1,100,000	—	—	440,000	40·000	
1894 *London Mining Investment Corporation . .	1,000	—	—	1,380	38·333	
1897 *Union Financial Syndicate . .	30,000	—	—	22,498	58·700	
1899 *Gold Mines Trust and Finance . .	50,000	—	—	5,000	47·619	

* Finance companies.

It will be seen how very few of these successful enterprises were launched after 1894, whilst the next table will present a view of the largest companies which as yet have given no earnest of success, and it will be seen how many of them were registered after 1894. Let us hope that in a considerable number of cases the capital was not fully subscribed, and that the vendors' shares were not always purchased by the public before the companies became known in an unfavourable sense.

NAME.					SHARES.	
AFRICAN MINES.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	Nominal.	List Price, May, 1900.	
	£	£	£	£		
1888 New Modderfontein	1,000,000	100,000	258,344	4	10 $\frac{7}{8}$ — 11	
1889 Buffelsdoorn . .	550,000	—	175,000	—	$\frac{3}{4}$ — $\frac{7}{8}$	
1894 Violet Consolidated	600,000	60,000	—	—	8/- — 10/-	
1895 Block A. Randfontein . .	600,000	—	—	—	1 $\frac{1}{8}$ — 1 $\frac{3}{8}$	
„ Boksburg . .	650,000	—	—	—	1 $\frac{5}{8}$ — 1 $\frac{7}{8}$	
„ Cinderella (Deep) .	500,000	—	11,250	—	—	
„ French Rand . .	660,000	350,000	86,250	—	1 $\frac{9}{16}$ — 1 $\frac{11}{16}$	
„ Jupiter (Deep) . .	600,000	400,000	—	—	3 $\frac{1}{8}$ — 3 $\frac{3}{8}$	
„ Klerksdorp Proprietary . .	600,000	—	100,000	—	$\frac{7}{8}$ — $\frac{9}{8}$	

	NAME.				SHARES.	
		Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	Nominal.	List Price, May, 1900.
	AFRICAN MINES (continued).	£	£	£	£	
1895	Knight Central (D'p)	525,000	3,000	—	—	2 $\frac{3}{4}$ — 2 $\frac{7}{8}$
"	Knight's (Deep)	550,000	400,000	—	—	3 $\frac{1}{4}$ — 4
"	Langlaagte (Deep)	750,000	500,000	100,000	—	2 $\frac{1}{8}$ — 2 $\frac{3}{8}$
"	Mynspacht Randfontein	750,000	—	—	—	3 $\frac{1}{4}$ — 1
"	Oceana Minerals	500,000	—	—	—	2 $\frac{1}{2}$ — 1 $\frac{1}{2}$
"	Rand Victoria (D'p)	750,000	—	200,739	—	3 $\frac{1}{4}$ — 3 $\frac{3}{8}$
"	Robinson Randfontein	600,000	—	9,375	—	1 $\frac{3}{8}$ — 1 $\frac{1}{2}$
"	Simmer and Jack East (Deep)	700,000	500,000	50,000	—	3 $\frac{1}{2}$ — 3 $\frac{5}{8}$
"	S. Afri'n Territories	500,000	100,000	—	—	4 $\frac{6}{8}$ — 5 $\frac{6}{8}$
"	Sub Nigel	700,000	—	—	—	— — 1 $\frac{1}{10}$
"	Tati Concessions	500,000	100,000	—	—	1 $\frac{5}{10}$ — 1 $\frac{7}{10}$
1896	Angelo (Deep)	500,000	—	67,500	—	2 $\frac{5}{8}$ — 2 $\frac{7}{8}$
"	Barberton Consolidated	500,000	18,825	—	—	—
"	Consolidated Main Reef	800,000	240,000	75,000	—	2 $\frac{3}{10}$ — 2 $\frac{5}{10}$
"	Lindum	500,000	—	—	—	—
"	South African Co.	500,000	—	—	—	—
"	South Rand Gold	1,000,000	10,000	—	—	—
"	Robinson Central (Deep)	500,000	—	100,000	—	3 $\frac{5}{8}$ — 3 $\frac{7}{8}$
"	South Rose (Deep)	600,000	300,000	42,500	—	3 $\frac{1}{2}$ — 3 $\frac{1}{4}$
1898	Ferreira (Deep)	910,000	—	360,000	—	6 $\frac{3}{8}$ — 6 $\frac{5}{8}$
1899	City (Deep)	600,000	—	140,000	—	—
"	Driefontein (Deep)	500,000	—	125,000	—	1 $\frac{7}{8}$ — 2 $\frac{1}{8}$
"	East Randfontein	550,000	—	—	—	—
"	Fergusson Randfontein	550,000	—	—	—	—
"	Ibo and Nyassa	525,000	—	—	—	—
"	Johnstone Randfontein	550,000	—	—	—	—
"	Klip (Deep)	500,000	—	75,000	—	—
"	Rand Mines (Deep)	1,000,000	—	150,000	—	3 — 3 $\frac{1}{8}$
"	Rand Victoria East	500,000	—	102,000	—	2 — 2 $\frac{1}{4}$
"	Rand Victoria	750,000	—	200,739	—	3 $\frac{1}{4}$ — 3 $\frac{3}{8}$
"	South City	600,000	—	130,113	—	—
"	South Nourse	600,000	—	349,272	—	—
"	South Village (D'p)	750,000	—	100,000	—	—
"	South Wolhuter	600,000	—	105,000	—	—
"	Stubbs Randfontein	550,000	—	—	—	—
"	Suburban (Deep)	500,000	—	55,000	—	—
"	Van Hulsteyn Randfontein	550,000	—	—	—	—
"	West Randfontein	550,000	—	—	—	—
"	Wolhuter (Deep)	520,000	—	138,750	—	—
1900	Carson Gold	500,000	—	230,000	—	—

	NAME.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	SHARES.	
					Nominal.	List Price, May, 1900.
	AFRICAN FINANCE I.	£	£	£	£	
1889	British S. Africa .	5,000,000	—	3,437,500	—	3 $\frac{1}{8}$ — 3 $\frac{5}{8}$
"	Randfontein Estates Gold .	3,000,000	—	1,000,000	—	3 $\frac{1}{4}$ — 3 $\frac{5}{10}$
1892	S.-W. Africa Co. .	1,000,000	—	—	—	27/3 — 27/9
1893	East Rand Proprietary . .	870,000	500,000	10,000	—	7 $\frac{3}{8}$ — 7 $\frac{1}{2}$
1895	Barnato Consoli'ted	1,250,000	—	11,251	—	2 $\frac{1}{10}$ — 2 $\frac{1}{8}$
"	Charterland Goldfields . .	500,000	—	—	—	$\frac{3}{4}$ — $\frac{7}{8}$
"	General Mining and Finance . .	1,250,000	—	—	—	—
"	Rhodesia Limited .	600,000	—	30,750	—	1 $\frac{1}{8}$ — 1 $\frac{1}{4}$
"	Rhodesian Mining and Finance .	500,000	—	—	—	$\frac{3}{4}$ — $\frac{7}{8}$
1896	Oceana Consoli'ded	1,500,000	—	—	—	1 $\frac{1}{10}$ — 2
	AFRICAN FINANCE II.					
1889	Harmony Propri'ry	1,000,000	30,000	—	—	3/- — 3/6
1894	Mossamedes .	550,000	—	—	—	1 $\frac{1}{10}$ — 1 $\frac{3}{10}$
"	Shashi Macloutsie .	500,000	—	—	—	—
"	United Rhodesia .	750,000	—	—	—	$\frac{5}{8}$ — $\frac{3}{4}$
"	Willoughby's Consolidated . .	1,000,000	90,000	—	—	1 $\frac{5}{8}$ — 1 $\frac{3}{4}$
1895	French S. African Development .	600,000	—	—	—	—
"	United Exploration	500,000	—	—	—	—
1896	Rhodesian Gold Trust . .	1,000,000	—	—	—	4/6 — 5/6
"	White's Consoli'ted	500,000	—	—	—	$\frac{3}{4}$ — $\frac{7}{8}$
1897	Ibo Investm't Trust	500,000	111,474	—	—	—
"	Scottish Africa .	500,000	23,000	—	—	3/6 — 4/6
1898	Rhodesia Mines, Ld.	500,000	—	—	—	$\frac{7}{10}$ — $\frac{9}{10}$
1899	Ashanti Consols .	500,000	—	—	—	—
"	New Egyptian .	500,000	—	—	—	—
1900	Matabele G'ld Reefs	500,000	63,780	253,066	—	7 $\frac{7}{8}$ — 8 $\frac{1}{8}$
"	West African Gold Concessions .	500,000	—	—	—	—
	AUSTRALASIAN MINES.					
1896	Golden Link Consolidated . .	550,000	—	50,000	—	2 — 2 $\frac{1}{4}$
1897	Hannan's Gold Estates . .	750,000	10,867	—	—	1/- — 2/-
"	Auxiliary Associated Gold . .	500,000	—	—	—	$\frac{7}{10}$ — $\frac{9}{10}$
1898	Paringa Consoli'ted	500,000	—	—	—	8/- — 8/6
1899	Phoenix	750,000	—	—	—	1/9 — 2/3

	NAME.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	SHARES.	
					Nominal.	List Price, May, 1900.
AUSTRALASIAN FINANCE.						
		£	£	£	£	
1895	Cooper's Australia'n Smelting Company	500,000	—	—	—	—
1897	Conglomerate Gold- fields.	500,000	65,000	—	—	$\frac{3}{16}$ — $\frac{5}{16}$
„	Lond. & Continental Venture Corporat'n	500,000	—	—	—	1/6 — 2/6
1898	Standard Explorat'n	750,000	—	—	—	11/6 — 12/6
1900	Assoc. Financial Corporation	1,500,000	—	—	—	11/3 — 12/9
		3,000,000	—	—	—	Pref. 2/- — 2/6 Ord. 1/- — 1/6
INDIAN AND OTHER MINES.						
1898	Boston Consolid'ed Copper and Gold	500,000	—	—	—	$\frac{9}{16}$ — $\frac{11}{16}$
„	East Le Roi Mining Company	500,000	—	—	—	1¼ — 1½
„	Palmarejo and Mexican Gold	700,000	41,310	—	—	1/6 — 2/6
„	West Le Roi	500,000	—	—	—	—
1899	El Oro Mining and Railway	1,000,000	—	—	—	1½ — 1¼
1900	Le Roi, No. 2	600,000	—	—	—	—
INDIAN AND OTHER FINANCE.						
1896	British Empire Finance	500,000	—	—	—	—
„	Crown Exploration Company	1,000,000	—	—	—	—
„	Indian and Colonial Goldfields	500,000	—	—	—	—
1897	B. Columbia & New Find Goldfields.	500,000	—	—	—	—
„	California Explora- tion	500,000	—	—	—	—
„	Canadian Pacific Exploration	500,000	—	—	—	—
„	Estate Finance and Mines Corp'tion	685,000	—	—	—	$\frac{3}{8}$ — $\frac{1}{2}$
„	Goldfields of British Columbia	600,000	—	—	—	—
„	North China Gold Territories	875,000	—	—	—	—

	NAME.	Nominal Capital in May, 1900.	Raised on Debentures.	Premiums received on Shares.	SHARES.	
					Nominal.	List Price, May, 1900.
	INDIAN AND OTHER FINANCE—(continued)	£	£	£	£	
1897	Siam Company .	500,000	—	—	—	—
1898	Assoc. Gold Mines of B. Columbia.	500,000	—	—	—	—
„	Columbia & Kootenay Mining Co.	500,000	—	—	—	—
„	English Canadian Company .	600,000	—	—	—	—
1900	Klondyke Estates .	500,000	—	—	—	—
„	Siberian Goldfields Development .	1,000,000	—	—	—	—

The "list prices" are those shown in May, 1900, and are inserted where known, as giving a clue to the public feeling as to the probability of ultimate success. Such quotations, as is well known, cannot be depended upon either when buying or selling large numbers of shares.

CHAPTER IV.

GOLD-MINING RISKS.

MR. GOLDMANN, speaking of gold mines, other than those of the Rand, says that "commercial men the world over have regarded gold-mining as the very quintessence of speculative investment,"¹ and attributes this to what he terms the capricious nature of these deposits and their liability to suddenly disappear, or "pinch out," as the miners term it, without any reasonable warning being given to the shareholders. "Gold-mining, however, on the Witwatersrand, when honestly conducted, could, from the very nature of it, be regarded in the light of a settled and respectable industry, equally as much as that of coal-mining or the manufacture of an article, and for the successful investment of capital it was merely necessary that investors should regard it in this manner, displaying business-like intelligence in inquiring into the merits of the different undertakings. Failure in mining ventures of the Rand had been generally due to mismanagement or early vicious methods of finance, and has been the fault of man, but not of nature."²

Mr. Davies says³: "It is humiliating to have to confess that the majority of mining enterprises are commercial failures, and it is still more humiliating to have to admit that this confession applies with particular force to mining in the British Isles. A larger proportion of mines pay, as far as can be ascertained, for working in America and Germany." He goes on to say: "This is a serious state of things, and one that almost amounts to a national disgrace, and it behoves us seriously to consider whether

¹ "Goldmann's South African Mining and Finance," Introduction, p. xiv.

² *Ibid.*, p. v.

³ "A Treatise on Metalliferous Minerals and Mining," p. 479.

it arises from unavoidable difficulties, inherent in mining, or whether any part of the cause of failure may be removed."

Mr. Johnson considers¹ that mining is not more subject to unpreventable vicissitudes than farming, and suggests that we cannot too seriously consider how we may soonest make our mines successful, as it is now generally agreed that to the profitable development of mining, new countries, at all events, must look mainly for prosperity. He recommends a more practical system of working from the inception, and he considers it both justifiable and desirable that the State should take some oversight in mining matters, at all events in the case of public companies. It would be a salutary rule that the promoters of any mining undertaking should, before they are allowed to place it on the market, obtain and pay for the services of a competent Government Mining Inspector, who need not necessarily be a Government Officer, but might, like licensed surveyors, be granted a certificate of competency, either by a School of Mines or by some qualified Board of Examiners. The certificate of such inspector that the property was as represented should be given before the prospectus was issued. It is arguable whether even further oversight might not properly be taken by the State and the report of a qualified officer be compulsory that the property was reasonably worth the value placed upon it in the prospectus.

"A man may not sell a load of wood without the certificate from a licensed weighbridge, nor a loaf of bread without, if required, having to prove its weight, and we send those to gaol who practise on the credulity and cupidity of fools by means of the 'confidence trick'; why not, therefore, where interests which may be said to be national are involved, endeavour to ensure fair dealing?"

FAILURE OF GOLD-MINING COMPANIES.

Mr. Denny is of opinion² that a large number of failures are due to insufficient investigation of the nature and potentialities

¹ "Getting Gold," by J. C. F. Johnson, F.G.S.

² "Diamond Drilling for Gold and other Minerals," by Mr. G. A. Denny, M.E., London, 1900.

of the property before purchase. In a manufacturing business these matters are carefully gone into, and he thinks that such a course is much more necessary in gold-mining, where the factors are only ascertainable by actual experience in each case.

The above opinions, expressed by men of recognized standing in the profession, and who may be said to have devoted their lives to mining in Africa, Australia, and other parts of the world, serve to indicate the lines upon which opinions are generally expressed by others with regard to gold-mining in general. The only special risk attributable to mining itself appears to be the "pinching out" of the lodes. The other causes of failure mentioned may be taken to be those which would produce the same result in any business if not guarded against.

With reference to the "pinching out" of lodes, this could only happen in the case of lodes which had been worked upon to some extent, and there is no statement in any of the reports of the non-dividend companies of this having happened. There is, however, abundant evidence in the tables of yield from ore milled that, as a rule, the yield of gold decreases in depth until, in some instances, it has become too small to leave a profit, but this decrease has generally been gradual, and not sudden or without any reasonable warning. There are many instances of the veins having been found very much poorer than the directors of the companies were led to expect from the assays of samples, presumably taken from near the surface, and if we refer to the tables of yield from milling at the mines, it will be seen that the average yield of the vein stuff in depth is frequently 50% less than the values near the surface.

Mr. John Hays Hammond in his report on the mineral resources of Rhodesia says:—"Various theories have been advanced as to the causes of the discontinuance of mining upon the ancient workings. It has been asserted that the veins 'pinched out' in depth, and were in consequence abandoned by the ancients. It is undoubtedly true that in some instances the veins did 'pinch,' and that the ancients, ignorant of the fact

that such pinching was but temporary in occurrence, abandoned the workings. The tendency to 'pinch' and to 'open out' is a characteristic feature of fissure veins. The fact that levels have recently been driven upon many of the veins below the ancient workings, exposing well-defined and continuous veins, is a complete refutation of the theory that the abandonment of the ancient workings was due to the fact that the veins 'pinched out' in depth. Irrespective of the geological evidence upon this point controverting the theory of the 'pinching out' of the veins in depth, we have, then, the actual demonstration of the continuance of the veins below the ancient workings."

The causes of failure in gold-mining have been stated by various writers upon the subject to be the following:—

1st. Misrepresentation of the value of the properties from ignorance or design.

2nd. Over-capitalization and want of working capital.

3rd. Mismanagement and ignorance of mining.

These may be taken as impressions only, and are difficult of demonstration, as we have no positive data to go on, excepting in regard to the second proposition, which will be treated of under the head of "Mining Finance."

Mr. Johnson suggests State intervention as a means of lessening the risks of mining, but why in mining more than in the sale of any other property? In every case the business of a seller of property is to get the most he can for it by presenting its special points in the most favourable light, and if the purchaser will not be guided by the experience of those who are capable of valuing what is offered for sale, he may expect to pay an exorbitant price. As to the Government or a Board of Examiners or School of Mines certifying to the ability of a mining engineer, this is as much out of the question as a similar certificate would be with respect to a civil engineer, lawyer, or medical man. All that can be done is to certify that these men have passed an examination; we have no guarantee that they can apply their knowledge, or that they are of calm, judicious mind, and fearless in giving their opinions,

Most scientific institutions do their utmost to exclude from their membership persons of doubtful honesty, and take reasonable measures that the fact of being a member shall be, in a manner, a species of hall-mark by which the public may, to some extent, be guided in their selection of a fit person to give them advice ; but Schools of Mines and Mining Institutes can do no more than facilitate the acquirement of knowledge—the opportunities and capabilities of men vary, and we can only be guided in the selection of the man we require by his record or by the recommendation of persons of noted standing in the profession. Some men are of more hopeful or excitable dispositions than others, and, with respect to reports upon mining properties abroad, an examination of such data by an independent engineer at home may not be without considerable value.

In the purchase of mining properties a difficulty arises owing to the sales being effected by private treaty: the owner is generally obliged to get together several persons who engage to find the capital, with the result that the promoters and himself practically become one person, who sell and buy at the same time without the intervention of those who ultimately pay for the property. This inconvenience might be got over by the subscribers being allowed to name a person to inspect the property, at their own expense, before the conclusion of the purchase, or the paying out of any portion of the money subscribed. We will neglect the charge of dishonesty in mining matters, as this may have been induced, as in any other business, by leaving the door open, and pass in review the facts as they appear from a study of non-dividend-paying mining companies, leaving finance for separate consideration. By far the largest number of companies have failed to obtain results through endeavouring to work at a profit without due appreciation of the special difficulties to be encountered, and basing their calculations of probable results upon what is being done at other mines working under totally different conditions. Then, we are so accustomed to peace and security at home, and that most things may be carried out successfully with machinery and money, that we frequently minimize the difficulties to be

encountered abroad, and forget that most uncivilized races have a great objection to work, especially underground, and are not inspired with much ambition to earn money with a view to raising themselves in the social scale.

If we refer to the tables of yield from milling, we shall find that, under favourable conditions of working, as small a yield as from 2·332 to 2·65 dwts. of fine gold per ton of ore permits of the payment of an average dividend of 7% per annum, on a paid-up capital of £1,183,100, at the Alaska Mines, and that there are 27 mines paying dividends by working and treating ore of about 10 dwts. and under of gold per ton. At the same time there are a considerable number of mines milling ores yielding up to 50 dwts. of gold per ton, and not making profits. In these, however, the extraction appears to be small. The importance of an abundant supply of ore, even if comparatively poor in yield, may be noted in the table of mine crushings. With a yield of about 10 dwts. gold per ton, the Langlaagte Estate and New Primrose Mines have paid average dividends of 20·445% and 30·274% respectively, with ores of average yield, during 7 years, of 9·78 dwts. and 9·45 dwts. gold per ton of ore milled.

As an explanation of small returns, we are frequently told that it has been impossible to get labour; that labour is bad or too dear to permit of working at a profit; that the hostility of natives has prevented operations having been gone on with; that there was no means of transit, or that the expense of carriage was prohibitory; that there was no water; that the climate was deadly, or that the cold was so intense, that work could only be carried on for four months in the year, which means taking three years to carry out one year's work in an ordinary climate. We find, nevertheless, that companies continue to be formed to work mines under these conditions, and expecting to make a profit out of ores assaying probably less than an ounce of gold per ton, and, in prospectuses, the public are reminded that 10 dwts. yield of gold per ton of ore leaves a good profit. The vendor generally gets the usual two-thirds of the nominal capital under any circumstances, yet it must be

evident that a mine which cannot be worked can be of no value, however rich, and that nothing but failure can be expected from attempting to work it. It will also be perfectly clear that the ratio of the vendor's price to the nominal capital must vary in proportion to the difficulties to be encountered in working, with as much reason as in proportion to the abundance and richness of the ores. With rich ores and small output, the nominal capital and the price paid for the property must be small if profits are to be expected. With an abundance of ore of low grade the nominal capital must be large, and the proportion of working capital to the price paid for the property also large, to provide for the cost of extensive plant and allow of the necessary development of the mining works to ensure a constant and large supply of ore.

With difficulties of carriage, water, labour, climate, or hostile natives, we pass out of the region of business into that of pure speculation, however rich the mines may be said to be, and these properties may reasonably be left for treatment in the future.

Many companies have been formed merely on the chance of finding a mine on the property. Some of these have failed to obtain results from want of sufficient funds, and others have been total failures. From the large number of reconstructions it may be surmised that something has been found to induce the subscription of more capital; but again, owing to the magnitude of the nominal capital, it has frequently been found impossible to pay a sufficient rate of dividend to make the shares of any value.

With regard to the expenditure of working capital, Mr. A. G. Charleton makes the following observations¹: "The mine owner is generally anxious to hurry forward the erection of a mill too precipitately, because he knows that it is the requisite first step towards making profit at all, unless he can ship his ore or treat it elsewhere; but what is the result? In some cases it is found, after a large capital outlay has been thrown away, that no mine

¹ "Processes of Ore Treatment," by A. G. Charleton, M.E. ("Transactions of the Federated Institution of Mining Engineers").

worth speaking of as such, exists, and the glowing reports made by some so-called expert, on the faith of which the money was subscribed, turn out worthless. In others, the money which should have been invested, first in mining exploration and development, is expended on surface improvements, owing frequently to insufficient preliminary investigation and consideration, and the consequent failure to provide adequate working capital. An insufficient balance consequently being left to open-up what might have turned out a paying property, the result is that the shareholders, tired of calls without returns, refuse to subscribe more money. In many such cases, if the funds raised at first had been expended on the mine, the profit from the sale of the ore would have sufficed to erect the plant afterwards, and the investment would have been saved from failure, or at any rate there would be the satisfaction of knowing that the mine had been thoroughly tested as far as circumstances permitted, and found unable to pay, and in such cases a useless waste of capital would be avoided."

According to the table, page 17, from May, 1897, to May, 1900, 565 African and Australian and New Zealand gold-mining companies had been wound up or become defunct, and there had been 405 reconstructions. Some of the defunct properties had been sold or amalgamated to form other companies, and a larger number had been reconstructed. A portion of the reconstructions were also of properties which had failed to give results previous to 1897, but no precise data are to hand. We may, however, compare the percentages of reconstructions to defunct companies in the two districts:—

AFRICAN MINING COMPANIES.

	No. of Co's.	Nom. Cap.
Defunct	145	£22,302,000
Reconstructions	92 = 63½ %	Defunct Companies.
Balance Defunct	<u>53 = 36½ %</u>	„ „

No. of Co's.	RECONSTRUCTED.	Nom. Cap.
92		£16,020,250

PRACTICAL GOLD-MINING

AUSTRALIAN AND NEW ZEALAND COMPANIES.

	No. of Co's.	Nom. Cap.
Defunct	420	£49,469,020
Reconstructions	313 = 74·6 %	Defunct Companies.
Balance Defunct	<u>107 = 25·4 %</u>	„ „
No. of Co's.	RECONSTRUCTED.	Nom. Cap.
313		£43,054,925

From the above it will be seen that the success of mining like that of any other business, depends more on the manner in which a commencement is made than on any risks inherent to the special class of business proposed to be undertaken.

CHAPTER V.

WORKING CAPITAL.

THE amount required by a gold-mining company for working capital will depend upon the magnitude of the work to be carried out, or the estimated output capacity of the property, and the estimated time required to develop the vein sufficiently to warrant milling the ore on a scale to pay expenses. Development of the vein will require our first attention, as until this work has advanced to a considerable extent it will not be prudent to erect expensive machinery and buildings for treating the ore, neither may we be quite certain as to the capacity of the vein to give ore. From the time the company takes over the property there will be standing charges, over and above the actual expenditure required at the works, which must also be provided for.

A review of what has actually been spent on similar works in South Africa may assist in forming a comparative idea of the amount of capital required to place a mine in a state to give returns for a profit, as the amount may be modified to suit the country in which the mine may happen to be, taking into consideration the rate of wages, facilities for carriage, cost of materials, &c., in that particular country. It is considered that the estimate for working capital should rather be ample than the reverse, to cover contingencies, and to prevent disappointment of the shareholders, as a balance in hand at the termination of the work will be more satisfactory than having to raise fresh capital.

Upon this subject Mr. H. D. Haskold observes¹: "It will

¹ "Engineer's Valuing Assistant," p. 10.

NAME.	Property.	Machinery and Plant.	Buildings.	Water Rights, Reservoirs, Dams.	Stores and Material.	General Furniture, Live Stock, Carts, &c.
	£	£	£	£	£	£
Aurora West . . .	41,121	36,769	2,720	—	—	221
Block B. Langlaagte	450,000	69,509	13,702	—	1,463	1,110
City and Suburban	49,615	167,912	22,359	—	11,349	3,309
Crown Reef . . .	102,912	166,117	25,515	11,052	14,332	1,074
Durban Roodepoort	95,000	53,796	—	—	1,197	—
Ferreira	80,088	71,255	15,317	1,000	8,042	1,260
Geldenhuis Estate .	123,359	211,656	34,101	9,045	14,326	1,774
Geldenhuis Main Reef	120,400	17,917	2,172	1,139	1,309	293
George and May . .	72,375	17,169	3,595	5,806	1,305	237
George Goch . . .	62,668	57,894	5,449	2,701	1,247	419
Glencairn	153,000	124,723	—	267	9,747	—
Henry Nourse . . .	25,200	108,361	10,282	220	6,776	617
Johannesburg Pioneer	9,300	8,951	1,859	951	761	81
Jubilee	11,820	38,310	5,777	—	2,833	78
Jumpers	27,748	78,135	20,998	8,031	2,261	107
Langlaagte Estate .	366,000	157,000	18,000	—	9,319	1,100
Langlaagte Royal .	78,771	82,103	33,024	—	8,327	813
Main Reef	71,200	32,817	5,300	—	2,462	325
May Consolidated .	178,126	24,088	8,200	645	3,330	192
Meyer and Charlton	66,478	41,180	7,021	—	8,127	445
New Chimes	12,561	58,513	10,234	1,846	3,991	443
New Heriot	23,301	63,208	10,026	4,308	3,637	—
New Kleinfontein .	50,000	41,401	7,213	273	3,492	467
New Primrose . . .	179,811	112,526	17,245	4,440	10,845	—
New Rietfontein . .	125,475	40,650	10,764	5,022	2,036	2,205
Nigel	101,287	16,953	17,908	—	7,806	673
Orion	46,109	26,180	3,486	—	1,986	182
Princess Estate . .	45,766	32,242	5,190	3,200	1,846	210
Randfontein Estates	1,824,715	72,405	14,808	1,526	12,351 ¹	1,521
Robinson	56,253	106,855	24,864	—	14,228	2,707
Roodepoort United	56,000	56,923	11,346	—	2,305	345
Simmer and Jack . .	201,905	155,515	42,015	9,768	28,769	1,407
Wemmer	20,275	55,342	6,237	377	3,988	629
Wolhuter	72,596	40,328	7,458	640	—	—
Totals	5,001,235	2,444,703	424,185	72,257	205,793	24,244

	£	£	£	£	
Machinery and Plant	2,444,703	68·000	{ 57·898	0·7062	}=£1347 per head of Stamps erected.
Buildings	424,185				
Water Rights, &c. . .	72,257	1·713	1·713	0·0209	
Stores and Material .	205,793	4·878	4·878	0·0595	
General	24,244	0·575	0·575	0·0070	
Permanent Works . .	355,107	20·008	{ 8·417	0·1027	
Mine Development . .	489,044				
Cyanide Works . . .	203,618	4·826	4·826	0·0588	
		100·000	100·000	1·2197	
Total	4,218,951	=nearly £1·2197 per ton of ore milled.			
Property	5,001,235	= £1·4458 ,, ,, ,,			

¹ Including Tree Planting, £6910.

Permanent Works.	Mine Development.	Cyanide Works.	Capacity Ore Milled.	Tailings Treated.	Remarks.	Head of Stamps Erected.
£	£	£	Tons.	Tons.		
7,231	3,769	—	36,843	8,607	—	40
—	13,903	20,774	92,773	49,990	—	60
27,131	76,299	—	202,850	156,639	Dividend	130
—	24,261	—	209,993	158,917	„	120
—	36,967	—	109,735	71,090	„	70
32,387	—	—	120,772	86,649	„	60
12,533	—	—	178,439	112,173	„	80
6,977	—	3,301	35,018	22,020	„	30
3,028	3,165	—	45,960	40,152	—	30
9,343	16,652	—	125,012	107,909	—	60
—	—	—	96,520	59,749	—	70
22,658	50,393	—	92,103	62,776	Dividend	60
3,016	—	—	33,194	29,418	„	20
843	—	—	59,881	36,499	„	30
8,116	22,420	—	108,720	93,771	„	100
3,000	16,700	39,000	245,439	199,970	„	160
22,642	26,003	17,512	83,689	54,148	—	70
—	—	—	25,607	13,200	—	30
6,640	—	7,710	130,050	90,860	Dividend	50
11,050	19,382	10,396	101,407	21,145	„	50
6,924	9,258	—	42,451	27,276	—	40
8,900	26,820	—	92,799	62,535	Dividend	40
8,330	—	—	67,985	51,470	—	50
1,072	—	20,784	268,428	165,594	Dividend	160
15,253	—	—	11,945	10,150	—	50
2,314	14,479	—	27,449	19,984	—	30
—	2,028	3,519	54,185	27,665	—	40
9,408	7,873	5,753	42,289	10,310	Dividend	30
10,456	3,718	12,337	81,603	54,390	—	60
26,389	36,271	48,581	177,500	158,150	Dividend	70
7,865	—	—	87,226	56,848	„	50
52,287	26,506	—	156,930	128,800	—	100
18,289	23,800	6,850	74,945	53,125	Dividends	50
11,025	28,377	7,101	139,273	89,140	—	40
355,107	489,044	203,618	3,459,013	2,391,119	—	2,130

always be found as a rule, that to err on the side of excess of size of machinery is far better than defect. The allowance to be made must depend upon the requirements of the case and the judgment and capabilities of the engineer in charge of the execution of the works, but it is not unfrequently the case that the hands of a good man are completely tied by the control exercised by a Board of Directors, who, perhaps for the first time, may have engaged in mining. Such interference is most absurd, and occasionally proves very ruinous to the shareholders,

because a really good and efficient man could not work under such restrictions.

On pp. 52, 53 is a table of the cost of the plant, machinery, buildings, permanent works (shafts) and mine-development necessary, or actually adopted, at thirty-four of the principal South African mines producing gold. Data taken from the balance-sheets of the companies, published in Mr. Goldman's book on "South African Mining and Finance," 1895-96.

It will be noted that the average amount expended upon the necessary works, computed on tons of ore milled per annum, was as follows:—

Machinery and Plant, Cyanide Works, Buildings, Water	£
Rights, &c.	0·9091
Permanent Works (Shafts)	0·1027
Development	0·1414
Stores and Material on hand	0·0595
General Charges, Furniture, Livestock, Carts, &c.	0·0070
Total per ton of ore milled per annum	<u>£1·2197</u>

On pp. 56, 57 is a table made up from the same data, but of the dividend-paying mines only, nineteen in number, which shows more favourable conditions for these companies, although cyanide works are included in this statement.

Owing to the variation in methods adopted by the different companies in stating the accounts, in some instances buildings appear to be charged to "plant and machinery." The same happens with cyanide works, water rights, and stores and materials. In the mining department, "permanent works" are generally supposed to be shafts. These are, however, in some instances, apparently charged to "development account." In other instances, development appears to have been charged to "permanent works" account. None of these matters, however, affect to much extent the total results, namely, that each ton of ore milled per annum requires an amount of *permanent outlay* in plant, work on the surface and underground of from £1·2197 to £1·1330 when the tailings are treated by the cyanide process.

For the reasons above stated, it is impossible to apportion this amount in detail, but we may arrive at the relative cost of the principal departments, and they appear to be as follows:—

	% of Total.
Machinery and Plant, Cyanide Works and Buildings ¹	72·95
Permanent Works and Mine Development	20·37
Stores and Materials on Hand	4·49
Water Rights, Dams, &c.	1·65
General Charges	0·54
	<u>100·000</u>

“Mine Development Account” is the cost of opening up reserves of ore, and besides giving an idea of the probable returns to be expected, is a very necessary work of economy of extraction, as it assures a regular output. Taking an average of the custom at seven of the principal mines, the ore reserves amounted to about two years’ milling capacity, and the cost of “opening up” this ground averaged 2·52 shillings per ton of estimated product in ore for milling.

According to the data, to fully equip a mine dealing with 100,000 tons ore per annum, and to block out 200,000 tons ore in reserve, from £113,000 to £122,000 working capital would be required in South Africa. With reference to the comparative cost of similar work in other countries,² it may be mentioned that it does not appear that either in Australia or India a reduction could be made, but that in the United States, Mexico, and South America, a considerable reduction might be expected, which would vary according to the location of the property, and would require to be estimated for each mine. Again, with a considerably less output, the expenses would be higher in proportion to the number of tons milled, as the same amount of underground work might be necessary for the extraction of the smaller quantity of ore, and the standing charges, for management, &c., might probably be no less.

The above estimate has been given because in the formation of hundreds of mining companies there appears to have been nothing upon which to base a conception of the amount of working capital required to carry out the work proposed to be done by the companies, hence the large number of reconstructions of Australian companies, and the failure of many of these.

¹ From a comparison of the accounts in which cyanide plant is given, this appears to be about one-fifth of the total, 72·95 %.

² See chapter on Mining Costs.

NAME.	Property.	Machinery and Plant.	Buildings.	Water Rights, Reservoirs, Dams.
	£	£	£	£
City and Suburban	49,615	167,912	22,359	—
Crown Reef	102,912	166,117	25,515	11,052
Durban Roodepoort	95,000	53,796	—	—
Ferreira	80,088	71,255	15,317	1,000
Geldenhuis Estate	123,359	211,656	34,101	9,045
Geldenhuis Main Reef	120,400	17,917	2,172	1,139
Henry Nourse	25,200	108,361	10,282	220
Johannesburg Pioneer	9,300	8,951	1,859	951
Jubilee	11,820	38,310	5,777	—
Jumpers	27,748	78,135	20,998	8,031
Langlaagte Estate	366,000	157,000	18,000	—
May Consolidated	178,126	24,088	8,200	645
Meyer and Charlton	66,478	41,180	7,021	—
New Heriot	23,301	63,208	10,026	4,308
New Primrose	179,811	112,526	17,245	4,440
Princess Estate	45,766	32,242	5,190	3,200
Robinson	56,253	106,855	24,864	—
Roodepoort United	56,000	56,923	11,346	—
Wemmer	20,275	55,342	6,237	377
Totals	1,637,452	1,571,774	246,509	44,408

	£	£	%	%	£
Machinery and Plant	1,571,774	—	—	58·481	0·6626
Buildings	246,509	—	—	9·172	0·1039
Cyanide Works	142,375	—	72·95	5·297	0·0600
		1,960,658			
Permanent Works	206,274	—	—	7·675	0·0870
Mine Development	341,186	—	20·37	12·695	0·1438
		547,460			
Water Rights	—	44,408	1·65	1·650	0·0187
Stores and Material	—	120,811	4·49	4·490	0·0509
General	—	14,221	0·54	0·540	0·0061
		2,687,558	—		1·1330
			=	£1·133 per ton ore milled.	
		Property		£0·690	„ „

Stores and Material.	General Furniture, Livestock.	Permanent Works.	Mine Development.	Cyanide Works.	CAPACITY.	
					Ore Milled.	Tailings.
£	£	£	£	£	Tons.	Tons.
11,349	3,309	27,131	76,299	—	202,850	156,639
14,332	1,074	—	24,261	—	209,993	158,917
1,197	—	—	36,967	—	109,735	71,090
8,042	1,260	32,387	—	—	120,772	86,649
14,326	1,774	12,533	—	—	178,439	112,173
1,309	293	6,977	—	3,301	35,018	22,020
6,776	617	22,658	50,393	—	92,103	62,776
761	81	3,016	—	—	33,194	29,418
2,833	78	843	—	—	59,881	36,499
2,261	107	8,116	22,420	—	108,720	93,771
9,319	1,100	3,000	16,700	39,000	245,439	199,970
3,330	192	6,640	—	7,710	130,050	90,860
8,127	445	11,050	19,382	10,396	101,407	21,145
3,637	—	8,900	26,820	—	92,799	62,535
10,845	—	1,072	—	20,784	268,428	165,594
1,846	210	9,408	7,873	5,753	42,289	10,310
14,228	2,707	26,389	36,271	48,581	177,500	158,150
2,305	345	7,865	—	—	87,226	56,848
3,988	629	18,289	23,800	6,850	74,945	53,125
120,811	14,221	206,274	341,18 ;	142,375	2,370,788	1,648,489

	Averages.	
	19 Div.-paying Companies.	34 Companies.
	£	£
Machinery and Plant, Buildings, Water Rights, &c.	0·7852	0·8882
Cyanide Works	0·0600	0·0209
Permanent Works (Shafts)	0·0870	0·1027
Development	0·1438	0·1414
Stores and Material on hand	0·0509	0·0595
General Charges	0·0061	0·0070
Total per ton of ore milled per annum	1·1330	1·2197

CHAPTER VI.

MINING COSTS.

It will be seen by Table No. 23 (Appendix) that ores containing less than three dwts. of gold per ton of rock pay to work at some mines, and at others (Tables Nos. 14, 16, 18, 20, 22 (Appendix)) no dividends are paid with ores which are four or five times as rich. The cost of working is therefore a very important factor in the question of making profits, second only to abundance of ore. This subject, however, does not appear to occupy the minds of shareholders or directors of companies so much as the possibilities of improved machinery and processes whereby a greater percentage of extraction may be obtained; in other words, the practical is not unfrequently neglected for the theoretical.

With respect to the machinery for the reduction of the ores, unless we propose to stamp finer with the view of exposing the smaller particles of gold to the action of the cyanide or other process, very little may be expected in this direction. Fine stamping would mean extra plant or a less turn-out from the present machinery, and we should increase the percentage of slimes which are notably difficult to treat owing to their liability to form into a solid mass like clay.

Possibly by very careful and slow treatment or some improved method of treating refractory ores a larger yield may be obtained, but probably this would mean a much larger plant and expense, and makes it very doubtful if a larger percentage of yield will lead to increased profit on the working. On the other hand, a careful revision of the costs of production and selection of the ores would probably lead to less expenditure to

obtain the present yield, and the saving would be clear profit obtained without increased investment of capital.¹

Below will be found a collection of data taken from "Reports upon the Mineral Resources of the United States," by Special Commissioners J. Ross Browne and James W. Taylor, published by the United States Government, Washington, 1869, giving details of the working at forty-seven Californian gold quartz mines using Californian stamping mills, with stamps weighing from 400 lbs. to 700 lbs. weight, and, in two mills, up to 1000 lbs. weight, at which mines the gold was collected by amalgamated copper plates and arrastras, and the concentrates in some instances chlorinated, but there was no subsequent treatment of the tailings by the cyanide or any other process, and it is presumed that these data will be interesting as illustrating what was done in that time with what would now probably be considered primitive appliances. Wages at the time are stated to be as follows:—Miners, twelve to fourteen shillings, and labourers, eight to ten shillings per day.

The table which follows has been compiled from the data referred to, prepared by Professor W. Ashburner, Mining Engineer for the United States Government. The mines are arranged in order of the width of the lodes with the object of ascertaining what difference this makes in the cost of extraction.

It will be noted that the variations in the extraction cost are so great that apparently the width of the veins has very small influence on this. Professor Ashburner observes:—"In the Grass Valley district the lodes are narrow and rich, twelve to fourteen inches wide, encased in hard metamorphic rock. The cost of extraction varies very much, and is dependent upon the hardness of the quartz and country rock, the relation which the auriferous portion of the vein bears to that which is barren, the depth of the workings, and the amount of water in the mine when this has to be drained by pumping."

¹ "The costly experimenting with new processes and so-called improvements in machinery is another way in which an inexperienced manager is liable to be led astray. As a general rule, experiments of this nature can only be indulged in when the mine is paying well by the usual methods."—"A Treatise on Metalliferous Minerals and Mining" (Davies), p. 485.

CALIFORNIAN GOLD QUARTZ MINES.

Average Width of Lode.		Average Yield per Ton.	COST PER TON.			
			Extraction.	Transport to Mill.	Treatment.	Total.
Ft.	Ins.	Oz.	£	£	£	£
0	2	9	12	· 05	1· 40	13· 45
0	6	2	2· 20	—	· 30	2· 50
0	10	—	· 40	· 12	· 30	· 82
1	0	· 30	· 60	· 20	· 30	1· 10
1	0	2	· 80	· 50	· 50	1· 80
1	0	1·875	· 80	· 40	· 40	1· 60
1	0	· 75	· 60	—	· 40	1·
1	0	2	· 90	—	· 35	1· 25
1	0	4	2	—	· 70	2· 70
1	0	1· 25	1· 90	· 10	· 70	2· 70
1	2	1·875	2· 80	· 25	· 60	3· 65
1	3	1·375	1· 60	—	· 75	2· 35
1	4	2	2· 60	· 25	1· 20	4· 05
1	6	1· 25	· 80	· 15	· 40	1· 35
1	6	1· 25	2· 40	· 60	· 80	3· 80
1	6	1·375	· 40	· 10	1· 20	1· 70
1	6	1· 50	· 60	—	· 40	1·
1	6	2·625	2· 40	—	· 90	3· 30
1	6	1· 25	· 55	—	· 30	· 85
1	6	2	1	—	· 80	1· 80
2	0	· 30	· 20	· 25	· 15	· 60
2	0	· 75	· 40	· 30	· 30	1·
2	0	· 40	· 20	· 05	· 35	· 60
2	0	· 60	· 70	· 10	· 40	1· 20
2	6	· 90	· 70	· 40	· 60	1· 70
2	6	1· 25	· 40	· 10	1· 20	1· 70
2	6	3	· 60	· 10	· 20	· 90
2	6	2	1	—	· 40	1· 40
3	0	· 70	· 80	· 20	· 40	1· 40
3	0	· 75	· 50	· 10	· 50	1· 10
3	6	· 50	· 40	—	· 40	· 80
3	6	· 45	· 40	· 12	· 50	1· 02
4	0	· 70	· 80	—	· 55	1· 35
4	0	· 40	· 40	· 05	· 50	· 95
4	0	· 85	· 60	· 18	· 20	· 98
4	0	1	· 20	·224	· 90	1·324
4	0	· 70	· 30	· 08	· 60	· 98
4	6	2	·875	· 10	· 55	1·525
5	6	· 75	· 60	· 15	· 40	1· 15
6	0	· 90	· 60	· 15	· 50	1· 25
6	6	1	· 80	—	· 30	1· 10
7	0	·875	· 80	· 10	1· 20	2· 10
8	0	· 40	· 40	—	· 30	· 70
8	0	2	· 20	—	· 40	· 60
9	0	· 30	· 40	· 05	· 35	· 80
15	0	· 75	· 10	· 10	· 30	· 50
25	0	· 50	· 30	—	· 20	· 50
No. of Co's.		Averages:—	1·085	·1197	·540	1·7447
47						

TABLE OF COSTS.

Cost of Mill and Amalgamation Plant per Head of Stamps.	Power used.	Class of Amalgamation Machinery.	Number of Stamps.
£			
53· 20	Water	Arrastra	3
175·	"	Copper Plates and Arrastra	4
80·	"	Copper Plates	10
80·	"	"	10
120·	"	"	5
250·	"	"	8
150·	Steam	"	8
440·	"	"	10
160·	"	"	5
200·	Water	Copper Plates and Arrastra	10
200·	"	"	3
200·	Steam	Copper Plates	20
—	No data	—	No data
240·	Steam	Copper Plates	5
100·	Water	"	6
—	No data	—	No data
280·	Water	Copper Plates	5
180·	Steam	Copper Plates and Arrastra	10
160·	"	Copper Plates	10
200·	Water	"	4
336·	Water and Steam	"	25
100·	Water	"	8
50·	"	"	8
220·	"	"	10
120·	"	"	5
120·	"	"	5
270·	"	"	10
80·	"	"	10
—	Steam	"	15
150·	Water	"	8
197·	"	"	15
200·	"	"	15
280·	"	"	20
130·	"	"	10
80·	"	Copper Plates and Arrastra	10
No data	—	—	—
120·	Water	Copper Plates and Arrastra	5
300·	Steam	"	10
100·	Water	Copper Plates	10
90·	Water and Steam	"	10
100·	Water	Copper Plates and Arrastra	12
No data	Water and Steam	—	—
No data	—	—	—
80·	Water	—	5
100·	"	Copper Plates	6
100·	"	"	4
80·	"	"	4
Av. per Head:			
162·71			

The average cost of extraction is much increased by the exceptional case of a vein two inches thick. Taking the veins from two feet to twenty-five feet in width, we get the following averages:—

	£	Shillings.
Average cost of Extraction per ton	0·5065	10·13
„ „ Transport „	0·1075	2·15
„ „ Treatment „	0·4685	9·37
Total	<u>1·0825</u>	<u>21·65</u>

NOTE.—It may be presumed that many of the above mines were either worked by individuals or small local companies, and that the management and standing charges would have been small.

The cost of treatment includes crushing, stamping, amalgamation, all handling after delivery of the quartz at the mill, and the loss of quicksilver.

The cost of the mill includes all the plant, machinery, and buildings used in the treatment of the ores until the bullion is collected and melted.

It will be noted from the above table, that with a comparatively high rate of wages, the work done in California thirty years ago was carried out with greater economy than at the present day, notwithstanding the absence of rock-drilling machinery.

If we refer to the cost of machinery and plant, the average cost at the

	Per Stamp.
Forty-seven mines was	£163
Highest rate at one mine only was	440
At six of the principal South African mines the average cost of the mill was	538
Highest cost	833

and these mills only represented 42·7 % of the total cost of buildings, machinery, and plant. Taking thirty-four of the Rand mines, the average cost of

	Per Stamp.
Machinery, buildings, and plant was	£1347
Which would represent mill	579
Other machinery and plant	768

Mr. A. J. Charleton, M.E., in his valuable paper on the "Processes of Ore Treatment,"¹ 1893, gives the approximate cost of mills as follows:—

¹ "Transactions of the Federated Institution of Mining Engineers."

	Per Stamp.
Wales	£212
Transvaal	454
United States	Av. 339
California	174
Queensland, Australia	Av. of 8 Mills 1112

The amount of ore crushed (in twenty-four hours) per stamp varies considerably in different districts, and appears to be about as follows:—

	Tons.
California	1.25
Queensland	1.50 to 2.0
Alaska	3.60
Transvaal	3.0 to 4.0

The following table of working costs has been compiled from data published by Mr. Goldmann in "South African Mining and Finance," and relates to Rand mines and those in the neighbourhood.

Considerable difficulty has arisen in attempting to arrive at an estimate of the average total cost per ton of ore mined and milled, owing to the want of uniformity in the methods of keeping accounts adopted by the different companies, especially in connection with the items "Mine Development Redemption" and "Depreciation," and the former charge varies in the different accounts from nothing to 9.025 shillings per ton of ore milled. Again, in the item "Cyanide Expenses." This cost sometimes figures as a charge of so much a ton on "Ore Milled," and at others, on the tons of tailings treated, the proportions of tailings or sand treated being about 70 per cent. of the ore milled. The profit or loss upon the operations in many instances may entirely depend upon the manner of treating the above items.

"Development Account" represents the cost of developing, or opening up for working, the reserves of ore, and this account should be debited with the development cost for the year, and credited with the proportion of cost corresponding to the tons milled during the year. At different mines the reserves differ greatly in amount, varying from a third of a year's milling capacity to five years' milling capacity, but taking an average of seven of the principal companies, the reserves amounted to two

NAME.	SHILLINGS PER					
	Mining.	Hauling and Pumping.	Transport of Ore at Surface.	Milling Concentrates and Free Yanners.	General Charges.	Maintenance of Plant.
Aurora Gold	{ 7·417	2·727	·667	5·875	2·000	·522
	{ 9·403	2·530	·804	3·595	2·057	·894
Aurora West	R.D. 12·393	1·999	·338	3·583	3·321	1·619
Block B. Langlaagte	8·233	1·668	·308	3·843	2·581	—
Div. City and Suburban	{ R.D. 14·848	—	—	4·872	2·256	—
	{ Av. 13·493	—	—	4·456	1·685	—
Div. Crown Reef	R.D. 16·375	—	·227	3·027	2·610	—
Div. Durban Roodepoort	R.D. 11·992	—	—	3·117	2·633	3·450
Div. Ferreira	R.D. 14·591	—	·392	5·747	—	—
Div. Geldenhuis Estate	R.D. 9·000	2·867	·706	4·842	1·155	—
Div. Geldenhuis Main Reef	9·549	1·108	1·425	2·575	1·082	1·359
George and May	7·264	—	1·543	4·094	3·518	·995
George Goch	R.D. 10·357	—	·378	4·147	2·405	2·148
Glencairn	R.D. 9·501	1·216	·400	4·002	2·421	—
Div. Henry Nourse	R.D. 27·108	—	1·693	5·614	—	—
Div. Johannesburg Pioneer	—	—	—	—	—	—
Div. Jubilee	R.D. 11·564	—	—	6·980	2·530	2·000
Div. Jumpers	R.D. 8·897	2·901	—	5·725	·819	—
Div. Langlaagte Estate	R.D. 8·163	—	·280	3·111	4·203	1·420
Main Reef	10·309	—	—	3·723	3·546	5·317
Div. May Consolidated	R.D. —	—	—	—	—	—
Div. Meyer and Charlton	11·168	—	·437	3·483	4·088	2·655
New Chimes	R.D. 13·392	—	·432	4·432	1·309	3·135
Div. New Heriot	R.D. 13·916	—	·250	3·684	2·374	·513
New Kleinfontein	R.D. 12·432	—	·382	3·867	2·249	·828
Div. New Primrose	R.D. 8·936	1·500	·744	3·044	·720	—
New Reitfontein	15·649	—	1·002	7·553	4·862	2·059
New Unified	5·933	2·367	1·132	2·575	1·289	·778
Nigel	—	—	—	—	—	—
Orion	8·750	—	·666	2·833	·062	—
Div. Princess Estate	19·066	—	—	3·608	2·375	2·500
Randfontein Estates	7·973	2·680	·505	5·770	4·521	—
Div. Robinson	R.D. 15·327	—	—	3·999	4·324	—
Div. Roodepoort United	R.D. 20·014	—	—	3·720	2·483	—
Simmer and Jack	R.D. —	—	—	—	—	—
Van Ryn	—	—	—	—	—	—
Village Main Reef	R.D. —	—	—	—	—	—
Div. Wemmer	R.D. 10·573	—	·625	6·062	1·425	—
Wolhuter	13·657	—	—	5·928	1·605	2·325
Worcester	6·908	—	·175	6·916	5·725	6·825
Rand Ore Reduction Works	—	—	—	—	—	—
Averages :—Shillings	11·887	2·142	·646	4·423	2·507	2·176

NOTE.—R.D., Rand Div. Mine.

TON ORE MILLED.

Mine Development Redemption.	Depreciation.	Cyanide Expenses per Ton Tailings.	Cyanide Maintenance.	Total per Ton Milled.	Remarks.	Total per Ton Milled with Cyaniding proportion of tailings 70 %.
2-375	—	Tailings not	—	21-583	—	—
1-500	—	treated	—	20-783	—	—
3-750	3-547	5-009	1-160	31-710	—	35-216
4-195	—	4-873	—	20-828	—	24-239
4-938	9-365	6-457	—	36-279	Without Depr'tion	40-799
5-000				24-634		29-156
1-252	1-116	4-075	—	24-607	—	27-459
3-908	5-542	5-100	—	30-642	—	34-212
8-000	8-358	7-849	—	37-008	—	43-582
6-144	—	4-057	—	24-714	—	27-554
3-308	3-500	4-919	—	23-906	—	27-349
2-000	—	2-604	No data	19-414	—	22-018
5-000	—	4-008	—	24-435	—	27-240
6-629	4-731	5-101	—	28-900	—	32-471
8-000	—	10-120	—	42-415	—	49-499
—	—	—	—	28-050	No details	28-050
5-534	4-147	No data	—	30-590	Av. 5½ years	30-590
5-624	—	4-203	—	33-467	—	33-467
2-546	—	4-203	—	23-966	—	26-908
5-349	—	—	—	19-723	—	22-665
—	—	5-702	—	28-244	—	—
2-980	1-057	5-768	—	20-989	—	24-980
3-000	—	3-692	—	25-868	—	29-905
7-000	—	6-048	Royalty { 4-620	25-700	—	28-284
4-000	—	4-408	{ 1-428	27-737	—	31-970
3-576	1-211	5-926	0-488	23-758	—	26-843
4-246	—	—	—	20-219	—	24-367
2-071	—	—	—	35-371	—	—
—	—	13-000	—	16-145	—	—
1-166	—	7-500	—	42-900	—	52-000
8-334	—	7-083	—	13-477	—	18-727
5-061	—	4-264	—	35-883	—	40-841
9-025	5-100	3-887	—	26-510	—	29-495
—	—	4-118	—	37-775	—	40-496
—	—	—	—	26-217	—	29-099
—	—	—	—	26-571	—	—
—	—	—	—	25-776	—	—
—	—	—	—	42-790	—	—
7-051	—	4-791	—	25-736	—	29-090
5-000	4-483	6-632	—	32-998	—	37-640
4-500	6-384	5-599	—	37-433	—	41-355
—	—	4-375	—	—	—	—
4-608	—	5-051	—	27-945	—	31-744

years' milling capacity, which may be considered an ample provision for contingencies. There should be no difficulty in arriving at the proper amount to charge in cost on this account.

From an average of thirty-three companies, the average amount charged per ton milled for "Development Redemption" was apparently 4.608 shillings. This, however, may be an excessive charge, as in the case of seven of the principal companies the average cost of development appears to be equal to 2.52 shillings per ton milled per annum. The apparent excess in the amount actually charged appears to be accounted for by the unwillingness of many of the companies to charge the full amount of development redemption cost until they were making profits.

The item "Depreciation" has been treated in detail in various ways by different companies, and it is evident that the percentage must vary in respect to live stock, buildings, machinery and plant, &c., &c., and even in respect to the mine itself. The following percentages have been specified as written off by some of the companies, viz. :—

	%	%	%	%
Mine and Property.—Nothing, unless in general amount charged as depreciation.				
Buildings, Plant, and Machinery	10½	33½	14	—
Development	26½	33½	34	30
Permanent Works Shafts	11½	10	25	—
Furniture and Live Stock	11½	20	—	—
Buildings only	11½	10	5	—
Cyanide Plant	10	—	—	—
Tramway	8	—	—	—
Battery of Stamps	4	—	—	—
Dam	50	—	—	—

We may now consider how to apportion the various working charges.

It will be noted from the table of working costs that the variation in the total cost at the different mines is not very great. There are a few mines at which the cost appears to be very low, but in these instances nothing has been charged for depreciation, and the development redemption charge is very low. At other mines where the total cost is high, the above two charges are also high, and considering these facts, it would seem fair to take an average

of the 38 companies as the nearest estimate, viz., 27·945 shillings per ton milled, and 5·051 shillings per ton tailings cyanided, and, as the proportion of tailings is about 70% of the tons milled, the total cost per ton milled would be :—

	Shillings.
Extraction and Milling	27·945
Cyaniding Tailings (70% of 5·051 shillings)	3·536
Average total	31·481

NOTE.—The above includes what appears to be a high rate for the charge “Mine Development Redemption.”

In the accounts of the companies, “Property” represents the price paid for the mine, lands, &c., and apparently no depreciation of this value has been charged.

When the lands are located in the immediate neighbourhood of a town, these may be of value even after the mine has been worked out; but this is not generally the case, and, for safety, the lands and mine may be considered as one, and the life of the mine or property may not unfairly be estimated at fifteen years for the purposes of charging depreciation, the more so as it will be noted that the yield of gold per ton of ore has decreased considerably from the outcrop of the reefs downwards. The total cost of treatment and extraction, made up as before, will then be as follows :—

	Per Ton Milled. Shillings.
Mining	11·887
Hauling and Pumping	2·142
Transport of Ore on Surface	·646
Milling, &c.	4·423
General Charges	2·507
Maintenance of Plant	2·176
Mine Development Redemption (average of seven principal companies)	2·520
	26·301
Depreciation of Plant, &c., 6·66% on £1·2197	·162
Depreciation of Property, &c., 6·66% on £1·4458	·192
	26·655
Add Cyaniding Tailings	3·536
	30·191

Neglecting the non-dividend-paying mines and taking the average of nineteen of the principal dividend-paying companies, the result appears to be as follows, viz. :—

	Per Ton Milled. Shillings.
Mining	14·387
Hauling and Pumping	2·094
Transport of Ore on Surface	·677
Milling, &c.	4·315
General Charges	2·297
Maintenance of Plant	1·985
Mine Development Redemption, as before	2·520
	<hr/>
	28·275
Depreciation of Plant, 6·66% on £1·133	·151
Depreciation of Property, 6·66% on £0·690	·092
	<hr/>
	28·518
Add Cyaniding of Tailings	3·536
	<hr/>
Total per ton of Ore Milled	<u>32·054</u>

The following appear to be the averages of cost of mining and milling auriferous quartz per ton milled in the district specified, according to data obtained from the mineral industry.

		Shillings.		
Alice Gold and Silver, Montana	1897	41·04	Per ton of Ore Milled	Short ton of 2000 lbs.
Montana Co., Montana	1890	36·76		
New Elkhorn, Colo- rado	1898	78·24	" "	" "
Gold Coin, Colorado .	1896	38·40	" "	" "
Portland, Cripple Creek	1898	108·92	" "	" "
Stratton's Independ- ence, Cripple Creek	1900	99·68	" "	" "
Isabella, Cripple Creek	1897	94·36	" "	" "
Daly, Utah	1896	88·04	" "	" "
De Lamar, Idaho {	1897	43·32	" "	" "
	1900	40·01	" "	" "
Mercur, "	1897	10·30	" "	" "
Homestake, Dakota . .	1896-7	14·96	" "	" "
Rose, California . . .	1900	9·76	" "	" "
Standard, California .	1898	54·14	" "	" "
Wildman " {	1895	9·536	" "	" "
	1896	10·312	" "	" "
Hector "	1896	7·472	" "	" "
Alaska Treadwell, Alaska	1900	6·772	" "	" "
Alaska Mexican, Alaska	1896	7·245	" "	" "



MINING COSTS

The following may be taken as fair approximations of the working costs per ton of ore milled in the countries specified; the high costs in the Cripple Creek and some other districts appear to be due to the refractory character of a portion of the ores.

	Shillings.
Alaska	4·64 to 7·24
California	7·47 „ 54·14
Uruguay, South America	10·24 „ —
California (Forty-seven mines)	12·00 „ 269·00
Mexico	16·00 „ 24·33
South Africa	28·275 „ —
Brazil	29·75 „ —
New Zealand	30·44 „ 155·90
India	33·58 „ 54·11
Colorado, U.S. America	38·40 „ 78·24
Australia	39·25 „ 135·00
Cripple Creek, U.S. America	94·36 „ 108·92

The total cost of production may vary very much, or be greatly increased, when a company is working with borrowed capital, when spending money upon an unproductive business, as prospecting for new sources of ore, or when the standing charges are excessive. The following working costs have been obtained by dividing the total expenditure per annum by the number of tons of ore milled.

WORKING COSTS PER TON OF ORE MILLED.

NAME.	Shillings.			Notes.
	1897	1898	1899	
SOUTH AFRICAN MINES.				
Barrett	12·02	—	—	
Buffelsdoorn Estate	—	—	23·88	
City and Suburban	—	25·05	—	
Consolidated Main Reef	—	*33·042	*43·60	
Crown (Deep)	26·59	26·29	—	
Crowd Reef	*30·00	*26·37	*24·37	
Driefontein Consolidated	—	—	*20·02	
Geldenhuis Estate	20·225	23·54	—	
	*25·23			
Geldenhuis Main Reef	24·66	—	—	Working costs without depreciation:—
George Goch	22·43	—	—	
Henry Nourse	*36·18	*29·23	*34·30	{ 1897 32·00
Le Champ D'Or	*40·34	—	—	{ 1898 25·50
Langlaagte Block B.	*18·16	*17·38	—	{ 1896 19· 4
				{ 1897 17· 8
				{ 1898 15· 8

WORKING COSTS PER TON OF ORE MILLED.

NAME.	Shillings.			Notes.
	1897	1898	1899	
S. AFRICAN MINES (continued).				Working costs without depreciation :— Shillings.
Langlaagte Estate	—	—	—	{ 1896 18-0 1897 15-4 1899 17-2
Langlaagte Star	—	61.08	26.79	Including interest on £500,000 Debentures.
Langlaagte (Deep)	—	—	30.32	
May Consolidated	15.89	*31.11	—	{ Working costs without depreciation :— Shillings. 26.2
New Comet	—	—	*34.77	
New Modderfontein	—	20.13	24.69	
North Randfontein	33.03	31.36	—	
Nourse (Deep)	—	20.47	32.50	
Paarl Central	*29.48	*29.11	—	
Porges Randfontein	27.97	28.65	—	
Princess Estate	35.94	—	—	
Roodepoort United	28.40	—	—	
Roodepoort Gold	—	33.63	—	
Robinson (Deep)	—	—	47.94	Do. 23.50
Robinson Randfontein	—	33.08	—	
Salisbury Gold	28.79	—	—	
Simmer and Jack	—	—	—	
Stanhope	23.90	33.67	19.41	
South Randfontein	—	44.90	—	
Transvaal Gold	—	20.97	31.54	
Treasury	24.10	22.80	19.23	
Village Main Reef	—	38.23	—	
Wemmer	43.25	—	—	
Witwatersrand	27.61	34.53	—	

NOTE.—When depreciation is stated to have been charged a * is placed before the sum.

NAME.	Shillings.				
	1895	1896	1897	1898	1899
AUSTRALIA AND NEW ZEALAND.					
Aladdin's Lamp	100.60	135.00	—	—	—
Baker's Creek, ½ year	42.72	—	—	—	—
" " "	52.66	—	—	—	—
Brilliant & St. George	—	39.25	—	—	—
White Feather	—	28.17	—	—	—
Great Boulder Proprietary	—	—	—	60.14	45.76
Lake View Consols	—	—	—	44.00	—

WORKING COSTS PER TON OF ORE MILLED.

AUSTRALIA AND NEW ZEALAND (continued).	NOTE.—Working costs as stated by Company :—					Per Ton Milled.
	Battery cost, including realization of					
						£0 6 10½
						0 5 11
						0 7 6
						3 16 9
						7 4 5½
	Shillings.					
	1895	1896	1897	1898	1899	
Mount Morgan	44·46	46·56	—	—	—	
Hauraki Gold	240·94	137·94	—	155·90	—	
Waihi	34·46	34·10	34·84	30·44	—	
INDIAN AND MIS- CELLANEOUS MINES.						
Champion Reef	—	—	—	58·26	64·70	
Mysore	40·30	41·83	—	—	—	Depreciation charged:— { 1900 { 6·772
Nundydroog	—	—	36·916	33·583	—	
Alaska Treadwell	5·48	4·64	—	—	—	
Alaska Mexican	7·80	7·25	6·029	6·79	6·91	
St. John del Rey	—	29·75	—	—	20·32	

NOTE.—*Indian Mines.* Kolar Gold Field:—"Memoirs of the Geological Survey of India," by F. H. Hatch, Ph.D., Assoc. M. Inst. C.E., F.G.S., Mining Specialist Geological Survey of India, Vol. xxxiii., Part I., Calcutta, 1901.

The mines of the Kolar district are held on lease from the Mysore Government at a royalty of 5 per cent. of the gold produced. The gross working expenses, including royalty, depreciation of plant and machinery, and London office, per ton (long) of ore milled at six of the leading mines during 1899 appear to have been as follows :—

	Working.	Royalty and Depreciation.	Total Cost per Ton (long).	Tons Milled.
	Shillings.	Shillings.	Shillings.	
Mysore	37· 7· 6	8· 4· 8	46· 0· 4	92,343
Champion Reef	47· 8· 1	7· 3· 6	54· 11· 7	93,121
Ooregum	43· 9· 9	4· 3· 8	48· 1· 7	64,107
Nundydroog	45· 2· 4	6· 5· 8	51· 8· 2	35,200
Balaghat	64· 11· 1	11· 8· 1	76· 7· 2	11,070
Coromandel	36· 10· 2	2· 11· 6	39· 9· 8	13,100

The average working costs for these six mines works out shillings 50·6·5 per ton of ore milled.

As mentioned previously, a comparison of costs is made difficult through many statements only referring to the actual working costs and not giving the whole of the costs incurred. The great variation in the cost of getting a ton of ore and realizing its contents may, however, be illustrated by comparing the results obtained at the Alaska Treadwell Mines and the Indian Mines, of which we have full particulars of the total costs, observing, however, that royalty and depreciation have to be deducted from the Indian costs to place them on the same basis as the Alaska Treadwell costs.

	Shillings.
Indian costs	50·541
Less Royalty and Depreciation	6·566
	<hr/>
	43·975
Alaska Treadwell cost	6·772

Indian costs equal to 11·898 dwts. of fine gold per long ton, or 13·087 dwts. of rough ore assay. Alaskan costs equal to 1·594 dwts. of fine gold per short ton, or 1·7534 dwts. of rough ore assay, equal to 1·9638 dwts. per long ton, allowing an extraction of 90 per cent. of the contents of the rough ores.

According to the tables of costs, it will be noted that, under favourable conditions, ores assaying about 2 dwts. of fine gold to the ton may be mined with a profit, and that the conditions may vary so much that ores of even 28 dwts. or more fine gold per ton may not pay to work. It will be evident, then, that the various conditions under which the working of gold-mining properties may be carried on require the careful consideration of experts, notwithstanding that the assay contents of the ores may be considerable.

In bringing out new mining companies it is usual to make an estimate of the probable returns or output to be expected, the cost of placing the mine in a position to do this, and the estimated profit to be obtained, based upon the working costs at other mines. These estimates are presumably made by some competent person or mining engineer, who should to some extent be made responsible for such statements. In practice, very frequently nothing more is heard of this important person,

and the money appears to be spent in any manner the directors may think proper, without reference to the engineer or person upon whose statements the company may have been formed. If the reporting engineer continued as consulting engineer to the company and appeared at the meetings of shareholders to answer questions, in all probability he would be more careful in making statements, as his reputation would greatly depend upon results, and even if he were well paid for his work, the advantage likely to accrue to the company might far exceed any such charges.

CHAPTER VII.

VENDOR.

THE determination of the price to be paid the vendor and the manner of making the payment are matters of very great importance in their bearing on the ultimate success of a mining enterprise, and it should be possible to arrive at some general rules to observe in these matters, keeping in view the mutual interests of the vendor and purchaser, as the vendor upon selling his property becomes a partner with the purchaser and his interests, or the interests of the shares generally become identical. If we refer to what has taken place we shall find that many of the best dividend-paying mining companies have purchased their property for comparatively small sums, and that many of the non-dividend companies have paid large amounts for their properties.

With regard to the mines which have been worked to a profit, or have been "opened up" previously to the formation of a company to work them, undoubtedly the vendor's price should be considerable, there being comparatively little risk to the purchaser, and these sales may be arranged in the ordinary manner of taking over a business or going concern, but the majority of companies formed are for working "prospects," and it is only proposed to refer to this class of properties.

As observed, under the head "Working Capital," many companies appear to have failed owing to their having insufficient working capital, although the nominal capital has been considerable. When the working capital is too small, either fresh capital must be raised, or the profits, if any, may be applied to the development of the property. The indications may be favourable, and yet, after the available capital has been spent, no profits may have been realized. Attempts to obtain more capital are then generally made by increasing the nominal capital of the company and giving a bonus to those finding new

capital by a reconstruction of the company, and the issue of new partly-paid shares, or the issue of preference or cumulative preference shares, or of debentures. All these latter measures lead to a large reduction of the interests of the first shareholders, who took the greatest risk, and the possible total failure of the company, all of which might probably have been avoided if the vendor in the first instance had taken a less proportion of the nominal capital of the company. Supposing that the amount appropriated for working capital had been excessive, the vendor would still be owner, through his shares, of his proportion of this excess, and his shares might be of considerable value. It appears, then, that the amount of working capital necessary should first be estimated before determining how much may be paid the vendor, the more so as it is usual to include in the price to be paid the vendor the promoters' commissions for finding the cash capital.

The value of a simple mining claim can be only the cost of obtaining a title, plus a commission; any higher value must depend on the actual discovery of a vein or veins of some value on the property.¹

The owner of a claim on which a vein has been discovered will endeavour to develop this as far as he can before selling, if he has any faith in it, as this may increase its value greatly or out of all proportion to the amount expended, and the price to be paid for a claim should increase in proportion to the development done, and consequently, the diminished risk which the purchaser may run. The owner of a claim or claims who, from want of means, is unable to explore or develop his property must be content with a small price. When the vendor is an Exploration company, there is no excuse for not having developed the property, and it would not be advisable to purchase undeveloped claims of such a company, as its business is to make profits by the development or improvement of unexplored properties. It is not an unusual thing for

¹ According to the Report of the Directors of Rand Mines, "Ltd." for 1897, the cost of the claims, when calculating no value for water rights, worked out at about £164 per claim.

miners to give half their discovery to a partner who will find the means to put the mine in a state to treat ores, and then share the working expenses and returns in equal proportions, whether or not a profit is made. The interest of all is to keep the amount of nominal capital as low as possible, that the rate of dividends may be high, thereby increasing the market value of the shares, one share getting 10 per cent. dividends frequently being worth more in the market than two shares getting 5 per cent. The danger of a large nominal capital is that the shares may be worth nothing through dividends being intermittent or the percentage falling to a low level.

As noted under "Mining Risks," the value of a mining claim not only depends upon the richness of the vein discovered and the amount of development done, but equally so on the facilities for working it, the risk of law suits as to title, the labour question, hostile tribes, carriage, and climate. No one will dispute that the working of a deep level mine will be more expensive than the working of an outcrop mine on the same reef, on account of the greater capital expenditure required and the increased working costs; in fact, the value of a mining property is a very variable one, yet we find many hundreds of companies formed, each one giving the same price for a property, and from this we are bound to suppose that these sums have been fixed without any rule whatever.

As to the payment to the vendor. Many methods have been adopted, such as giving founders' shares, only entitled to dividends after a fixed dividend has been paid on the ordinary shares; by deferred shares with similar conditions, by cash and shares, ordinary or deferred, and by ordinary shares with or without certain conditions as to sale. It is questionable if any advantage may arise from the above combinations, as the more difficult the payment to the vendor is made, the greater will be the number of shares required to satisfy him, and consequently, the greater the nominal capital upon which to pay dividends, as the deferred shares frequently become ordinary ones after certain dividends have been paid. If the property purchased is of any real value, there can be no

objection to paying cash for it, the more so that very possibly a very much less amount would be accepted, the nominal capital of the company would be reduced, and therefore the rate of dividends would be higher, and the shares would be of much more value. The difficulties placed in the way of the vendor receiving payment appear to arise from distrust of the property being of value, but it is hard to see to what extent the acceptance of such terms as are frequently made guarantees the value of the property, and if the purchaser has the property examined by a competent person before concluding to receive it, he should know quite as much of it as the vendor himself, and if not satisfied, it seems clear that the purchase should not be concluded.

The interests of the vendors are in many respects identical with those of the purchaser, as, unless he sells for cash, he becomes a partner, and the question of payment resolves itself into the proportionate share he shall receive in the proposed company more than in receiving a large number of shares which may be of small or no value, and which, in any event, will make the possible rate of dividends much less; whereas, with a less number of shares and more working capital, his chance of making a profit will be much greater. What, however, appears to be most evident is that unless the vendor formulates his claim so that the capital may be adjusted on a reasonable basis to make profits, there can be no object in forming a company to work his property.¹

¹ *Purchase and Sale of Mines*.—Mr. D. C. Davies, M.E., F.G.S., in his work on “*Metalliferous Minerals and Mining*,” lays down the following axioms:—

1st.—“They who take the risk are entitled to the profits of success.”

2nd.—“Where nothing has been discovered that can be profitably worked, there is nothing to pay for.”

In a mine which has not been worked, he is of opinion that the original discoverer should be remunerated for his trouble, intelligence, and expense in making such discovery, and suggests that, if the money has been judiciously expended, he should be paid double the actual cost incurred, and get a similar amount in shares in the proposed company, but should not be allowed to throw these shares on the market, except by special arrangement, until the mine pays its cost.

In the case of the transfer of a mine in full work and paying an annual income, the price to be paid should not exceed five years' purchase added to the valuation price of the plant.

CHAPTER VIII.

GOLD-MINING FINANCE.

THE nominal capital of the African dividend-paying mining companies has generally been divided into ordinary shares of £1, fully paid. There are, however, a few companies with shares of higher nominal value, viz. :—

	£	Ratio of Increase.
City and Suburban.		
Increased by division of shares	4	16 times
Robinson.		
Increased by division of shares	5	50 „
Simmer and Jack.		
Increased by division of shares	5	35 „
Wolhuter.		
Increased by division of shares	4	4 „
Treasury.		
Increased by division of shares	4	4 „
Langlaagte Proprietary.		
Original issue	4	—

The vendors' shares have generally been ordinary shares fully paid and without restrictions as to sale.

With Australian dividend-paying mining companies, the capital has not unfrequently been divided into shares of a fraction of a pound or £1 shares partially paid up, but there are a few instances of shares of higher nominal value, viz. :—

	£	Ratio of Increase.
Australian Mining Co.		
Original Issue	20	—
Brilliant Gold.		
Original Issue	2	—
Ivanhoe Gold Corporation.		
Original Issue	5	—
Golden Horse Shoe Estates.		
Increased by division of shares	5	15 times.

Many of the African dividend-paying companies have been registered with a small nominal capital, and then additional

working capital has been raised by a further issue of shares at a large premium. Eight Australian companies have also lately adopted this method to a small extent. The issue of shares at a premium appears to have been introduced by the African companies about the year 1886. Several of the African companies have benefited largely by the sale of portions of their property to other mining companies, and by the sale of town lots, stands, &c., whereas the Australian companies have not had this advantage, neither have they derived much profit from the issue of shares at a premium.

It has not been possible to arrive at the amount of profits made by all of the African mining companies from the sale of portions of their property, but the profits obtained by the issue of shares at a premium have been ascertained with considerable accuracy, and as it is stated that these issues have been made with the express object of obtaining additional working capital, in making up the estimates of profits or rate of dividends paid upon the capital invested, the premiums received on issues or sales of shares have been treated as extra capital invested over and above the face value of the shares or stated nominal capital. Australian and other companies have been similarly treated in this respect.

In those companies where the original shares have been subsequently divided into a number of shares of equal or larger face value than the old shares, and the nominal capital largely increased in amount by this means, frequently without fresh capital having been invested, the percentage of dividend has been calculated upon the actual paid-up capital, and a similar course has been adopted with those companies in which the shares have not been fully paid up, so that, in the tables, the average dividend rate per annum from date of registration represents the dividend rate on the amount of cash actually paid up, whether this be more or less than the nominal issued share capital.

With reference to the amount of nominal capital, it will be noted that, in some instances, there has been a desire to keep this low, even by paying a large premium on the shares issued,

whilst in others it has been increased as much as fifty times its original amount, although no more cash had been provided. In the first case, the assets valuation, according to the balance-sheets, may appear to be greater than the amount of nominal capital, the difference having been paid out of profits or premiums received on shares, and the rate of dividends will appear to be much higher than if they had been paid upon the cash capital actually contributed. In the second case, the assets valuation will be found to have been increased beyond their cash value, in order to balance the increased amount of nominal capital, and the rate of dividends will appear smaller than if they had been paid upon the cash actually contributed.

It does not appear, at first sight, that the shareholders should benefit more by one or the other of these methods, unless the public are willing to pay more for, say, ten shares of £5 nominal value than for one share of £1 nominal value, earning the same amount of dividends. It may be argued that the market value of the shares should be the value of the property or assets, but this may vary daily, and it does not seem probable that a property could be sold, as a whole, for such an amount.

It is more generally supposed that a mining property decreases in value in proportion to the quantity of ore extracted, but, occasionally, during the course of the works of development, the vein may improve or show indications leading to the hope of a longer lease of prosperity.

Increasing the nominal capital by a division of the shares may be considered to be the same as issuing shares at a discount; increasing the valuation of the assets at the same time can hardly be looked upon as fair to future investors, who might, to a considerable extent, base their estimate of the safety of the business upon the amount standing under this head. Increase in the assets value may also arise from carrying certain expenses to capital account, not writing off a sufficient sum for depreciation, difference of valuation at different periods, &c., &c. And it may happen that a manager places part of his cost to permanent works account, to make the working costs appear small, or to make an apparent profit. This increased

assets value may be paid (1) out of working capital in hand, or (2) by calling up unpaid capital; (3) by the issue of more shares at par; (4) by issuing debentures, or by issuing shares at a premium, to enable the estimated profits to be divided. In each case a portion of the dividends declared comes out of the pockets of the shareholders. In the third case the rate of dividends is decreased, owing to the increase of nominal capital; and, in the fourth, the amount and rate of dividends may be greatly increased by the profit or premiums received upon the issue of more share capital, but this increase in dividends comes out of the shareholders' pockets. This outlay, however, may possibly be recovered in the increased market value of the shares, due to the increased rate of dividends and the fact that the shareholders have taken up shares at a premium, but unless the old shareholders take advantage of this opportunity of sale, they may make a loss of the difference between the premiums they have paid and the dividends they may receive. The public stand to make a loss by purchasing shares at a high price based upon the declaration of a fictitious dividend.

The following example illustrates what may be the effect of issuing shares at a premium.

A company with £50,000 nominal capital issues 25,000 £1 shares at par—£15,000 for vendor and £10,000 for working capital. Shortly after, the remaining 25,000 shares are issued at a premium of £4 each for working capital, realizing £125,000, of which £100,000 is considered as profit. During the first and second years £55,000 is spent on permanent works and a profit of £25,000 is made on working, making total profit £125,000, and, in order to pay a dividend and leave £10,000 remaining as working capital, £30,000 permanent works is debited to profit account, and £95,000 is divided, equal to 190% on the nominal capital of £50,000, which would then represent £80,000 invested, and the shareholders would be out of pocket £5000, the difference between £95,000 paid them in dividends and £100,000 received of them as premiums on shares.

By not issuing shares at a premium, but increasing the nominal capital to £80,000, 31¼% dividends might be paid on

this account. By not increasing the nominal capital, but by issuing £30,000 6% debentures, dividends of 45·4% might be paid, and if neither of these things were done, no profits could be divided and the working capital would be reduced to £5000, the nominal capital representing £75,000 invested.

It is to be presumed that the market price of the shares would vary greatly according to which of the above methods of finance were adopted, notwithstanding that the actual value of the property would be the same.

Coming now to reconstructions, we may reasonably suppose that in these there have been indications which have led to a hope that a profit may be made. The probable cause of failure has been want of working capital, or that a large portion of the funds have been spent in prospecting, or in making experiments, &c., which have been unproductive. The difficulties in obtaining fresh capital under these circumstances are generally great. The original shareholders are not always prepared to find this, or a portion of them only are able or willing to do so. Not unfrequently the company has obtained a loan, or has issued preference shares or debentures before resolving to wind up, and this makes the case most difficult to deal with, and very often leads to the total abandonment of a property which, without encumbrances, might be considered fairly good. It is a question whether the difficulties in such cases are not very much accentuated by the unwillingness of the shareholders to relinquish a portion of their holding in proper season, that is to say, nominal share holding, as, in any case, their relative share in the concern is reduced by the raising of new capital. And not unfrequently the nominal capital of a company represents a comparatively small amount of cash.

We will suppose a company with nominal capital of £100,000 is making a small profit, say 1% per annum, but for want of working capital no more profit may be expected. Why not reduce the nominal capital to £10,000, remembering that each shareholder would hold the same relative share in the business and receive the same amount of profit as before? The reduced capital would be getting 10% interest, and then, possibly, many of the shareholders might be induced to come in with fresh

capital, as the hope of an increased rate of dividends on the smaller capital might reasonably be entertained, whereas the increasing of the capital, by the issue of preference shares, would lead to very different results and probably total failure. With a small capital making 10% dividends, the difficulties of getting more capital would in all probability be less, even if such capital had to be raised otherwise than amongst the shareholders.

In some instances, instead of reducing the number of shares, these have been considered as of less nominal value or less paid up. The public appear to give undue weight to the face value of shares, and not to bear in mind their relative proportion to the whole nominal capital, preferring, say, 500 £1 shares of no market value to 50 2s. shares worth par.

With a considerable reduction of the nominal capital, there can be no doubt that the list of dividend-paying mines would be greatly increased, and that many companies would be saved from failure. If a loss has to be made, there appears to be no valid reason for prolonging the date of making it.

With regard to mining debentures or preference shares as a means of raising additional capital, the superior security offered by these over ordinary shares will depend, not so much on the amount of assets of the company as on the capability of the mine to give sufficient profits to enable a dividend to be paid on the ordinary shares as well as on the preference ones or debentures, as, without this security, the ordinary shareholders will have no inducement to work the mine in a proper manner, and it will, in consequence, most probably fall into the hands of the holders of the preferred shares, who will then either have to risk more capital, form a new company, sell the property, or make a heavy loss—matters which they may not be prepared for, and which they may have endeavoured to avoid by selecting this class of shares. Mining debentures may have no market, and in this sense they may be inferior to ordinary shares, which may, in certain circumstances, reach a good premium. Cumulative preference shares are still more likely to encounter the above difficulties, and a reduction of the nominal capital of a company, before attempting to raise more capital, appears to be the preferable course to adopt.

CHAPTER IX.

MINING FINANCE COMPANIES.

UNDER certain conditions, finance companies, for the promotion of mining companies and the investment of money in mines, should be safe and capable of paying good dividends, as the risks may be averaged over a considerable number of mines, after the manner of conducting insurance companies, but to carry on this class of business with success the assistance of first-class mining engineers would be required to determine the probable risks in each instance, after the manner that ships are classified, or as an actuary is employed by life assurance companies. It is to be supposed that the true interest of a finance company would be to have nothing to do with a doubtful property, as although, in isolated instances, a certain profit might possibly be secured, owing to circumstances of the mining market, undoubtedly their profits would be more secure, and possibly much larger when dealing with good properties, whereas doubtful ones might lead to considerable loss.

The improvement of properties for re-sale is a very legitimate business, but the profits to be expected may very much depend upon the raw material. The fact of a financial company promoting a mining property should be a guarantee that every possible care has been exercised to investigate the merits of the property, and that the amount of nominal capital of the proposed company has been carefully proportioned to its yielding capacity. There must always be a certain amount of speculation in any new business, but under ordinary circumstances and under expert guidance, this need not be excessive.

We are accustomed to hear that promoters of mining com-

panies make enormous profits, but if we may judge by the dividends paid by mining finance companies, these appear to be less than those obtained by working mines. It is difficult to obtain sufficient data upon this subject, and we must be content with the general impression that large losses made by finance companies have arisen from over-speculation. The idea of finance companies, as a means of averaging risks, is an excellent one if properly carried out, but rather rigid rules should be laid down with regard to speculative business. Under certain conditions a large finance company may become a most dangerous element through its ability to bring out a company without due regard to the value of a property, or with such an excessive nominal capital that nothing but failure can result. Many of these companies are styled "exploring companies," and have been established for ten years or more, but very little is known of their having discovered a mining property giving to-day large profits. The great producing mines appear to have been, as a rule, discovered by individuals without that assistance we are bound to suppose exploring companies have at their command, and this leads to the conclusion that numerous finance companies have not marched with the times and taken advantage of the great opportunities which the command of capital gives in any business, as may be noted in the consolidation of numerous industrial branches of business. It is to be hoped that the numerous failures to obtain results which have taken place may ultimately lead to a more careful study of the lines upon which such companies should be run. It is notable, however, that the failures have generally happened with the smaller companies, and, as in mining, this may have been largely due to insufficient capital and want of knowledge, or an eagerness to do what only companies with large capital could be expected to accomplish.

Of the 1166 finance companies, the following appears to have been their average nominal capital:—

	Average Nominal Capital.
91 Dividend-Paying Companies	£398,421
86 Non-Dividend Reconstructions	185,872
612 Non-Dividend Remaining	134,215
377 Defunct Companies	45,000

CHAPTER X.

THE DETERMINATION OF THE PRESENT VALUE OF A MINE AND
THE ESTIMATING AND SAMPLING OF ORE RESERVES.

THE price to be paid to the vendor, the nominal capital, and the expected results to be realized by a gold-mining company, are usually to a large extent based upon the assay values of samples of the veins proposed to be worked, and, therefore, much attention has been paid by mining engineers to the methods to be adopted to obtain the most reliable information possible as to the extent and value of ore deposits, and, if in many instances results have varied considerably from the expectations looked for, the whole matter of valuations of this description is so surrounded with difficulties, and there are so many distinct influences to take into consideration, that a prudent course is to subject this class of work to the criticism of independent engineers of considerable experience.

As far as it has been possible to obtain data, the assays of samples taken with a view to estimate the value of ore reserves, in many instances, appear to have given a much higher value than the actual yield when the ore had been broken and milled. This might arise from the ore from the centre of a block of ground marked out having diminished in value, but the chances the other way being equal, we must look for some other motive, and it has generally been admitted that much depends upon the personal factor of the investigator, his experience, temperament, and his desire to arrive at the most impartial results. Deductions have to be made from the assay value of a sample of ore for loss in extraction, according to the class of ore, whether free milling or refractory. Then, as will be seen by the tables of

yields, most veins decrease in yield in depth from the surface downward, the decrease being very great within a comparatively short distance from the surface, and then a more gradual decrease being noted. This variation in yield appears to differ in different districts. It will also be noted from the tables of yields that samples giving by assay 3 ozs. of gold per ton and over, may very well be rejected from our estimates, as in very rare instances are veins found to give any appreciable quantity of ores of this value.

The following particulars of estimated values of reserves obtained from averages of assays of samples taken at four of the Witwatersrand dividend-paying mines, and the actual yield obtained, have been extracted from Mr. Goldmann's work on South African Mining and Finance:—

WITWATERSRAND DIVIDEND-PAYING MINES.

Data from Mr. Goldmann's "South

Name of Company.	GOLD RETURNS OBTAINED FROM:—			Gold Yield per ton.
	South Reef.	Main Reef Leader.	Main Reef.	
	dwts.	dwts.	dwts.	dwts.
CITY AND SUBURBAN.				
Average Assays per ton	31·55	19·89	—	{ Milling . . . 9·071 { Tailings . . . 5·324
				<u>14·395</u>
CROWN REEF.				
Average Assays per ton	37·00	32·00	3·91	{ Milling and { Cyaniding 11·14
*ROBINSON.				
Average Assays per ton	75·19	44·17	17·00	{ Milling . . . 20·36 { Tailings . . . 5·03
				<u>25·39</u>
*WEMMER.				
Average Assays per ton	15 to 19	58·00	{ Not much { worked { 8·11	{ Milling . . . 14·40 { Tailings . . . 6·45
				<u>20·85</u>

* No data as to proportion of tons from each reef milled, but the

NOTE OF ASSAY VALUES AND YIELD.

African Mining and Finance."

NOTES.

	Tons.	Dwts.		Dwts. per Ton.
Ore Milled	62,189 South Reef .	31·55	Yield by Milling	9·071
„ „	53,816 Main Reef Leader	19·89	And Tailings Assayed	5·324
Total	<u>116,005</u> Average Assay	<u>26·14</u>	Total	<u>14·395</u>
Or 55% of the Assay Value.				
	Tons.	Dwts.		
Ore Milled	103,750 South Reef .	37·00	Yield 11·14 dwts., and 81·3%	
„ „	95,856 Main Reef Leader	32·00	of the gold contents were	
Total	<u>199,604</u> Average Assay	<u>34·59</u>	extracted. Total contents,	
			therefore, 13·70 dwts., or 39·7%	
			of the assay value per samples.	

assay value of samples appears to be greatly in excess of yields.

The following particulars and assays of samples of reefs of Rhodesian and other mining companies have also been compiled from data given by Mr. Goldmann in his work on South African Mining and Finance:—

Date of
Registration.

1893

ANGLO-FRENCH MATABELELAND Co., LTD.¹

Nominal Capital, £60,000. Issued, 39,750.

Main and South Reef.—

Assays: On surface, 2 dwts. and 8 dwts. per ton.

„ In depth, 5 ozs. 8 dwts. per ton.

„ „ 5 „ 7 „ „

„ „ 10 „ 10 „ „

Claim No. 29.—Width, 10 feet. Pans all through about 12 dwts. per ton.

Syndicates' 40 Claims.—Width, 5 ft. 6 ins. Range from 6 to 38 dwts. per ton.

B. Reef.—Panning 15 dwts. per ton. Width, 2 ft. 6 ins. *D. Reef*, 6 in. leader, 3 to 4 ozs. per ton, and *Reef*, 2 ft. 6 ins. wide, panning 10 to 12 dwts. per ton.

1895

BRAND KUMALU SYNDICATE LTD.²

Nominal Capital, £60,000. Issued, 50,000.

Reef 3 ft. 6 ins.—Wide assays, 7 to 120 ozs. per ton. Other Reef panning 15 dwts. per ton.

No. 2 Block.—2 ft. wide. Panning 1 oz. per ton.

No. 5 Block.—Outcrop. Panning 10 dwts. per ton.

Reef.—Patchy, 4 ft. wide. Assay, 20 ozs. per ton.

Maid.—Outcrop. Assay, 4 ozs. 13 dwts. per ton.

N. Tauba Tauba.—Assay, 15 dwts. per ton.

1895

CLARK'S CONSOLIDATED.

Nominal Capital, £240,000. Issued, 225,000.

Lo Matchie Claims.—Assay, 22 ozs. per ton.

1895

COLENBRANDER'S MATABELELAND DEVELOPMENT Co.

Nominal Capital, £280,000. Issued, 220,000.

Golden Quarries.—60 to 70 ft. wide.

Grace Darling.—3 to 4 ft. wide. Panning 15 to 30 dwts. per ton.

Victoria and Martha.—Reefs estimated, 1 oz. to 1 oz. 10 dwts. per ton.

Martha.—4 ft. wide. 15 dwts. to 4 ozs. 10 dwts. per ton.

Boomani.—4 ft. wide. 3 ozs. 12 dwts. per ton.

¹ Reconstructed 1895. In 1900 Nominal Capital increased to £110,000. In debt over £10,000.

² Extinct in 1900.

ESTIMATING AND SAMPLING OF ORE RESERVES 91

Date of
Registration.

- 1895 CONSOLIDATED BELINGWE DEVELOPMENT Co.
 Nominal Capital, £200,000. Issued, 116,200.
Various Reefs.—15 to 8 ozs. per ton. The majority, 2 to 3 ozs. per ton.
Fondoque.—3 ozs. 10 dwts. per ton.
Firey Cross.—Lode, 2 ft. wide. Milling, 12 to 15 dwts. per ton.
Sabi.—Lode, 4 ft. wide. Assay, 3 ozs. per ton.¹
- 1893 GOLDFIELDS OF MASHONALAND.²
 Nominal Capital, £200,000.
 1107 tons Milled. Yield, 7 dwts. per ton.
 3750 " " " " " 10 ozs. 30 dwts. per ton.
- 1895 GOLDFIELDS OF MAZOE.²
 Nominal Capital, £100,000.
Alice.—Lode, 4 ft. wide. Assay, 3 ozs. 10 dwts. per ton.
- 1895 GOURLAY'S RHODESIA DEVELOPMENT Co.²
 Nominal Capital, £150,000.
Eclipse Reef.—8 ft. wide. Assay, 1 oz. 17 dwts. per ton.
Caledonian Reef.—5 ft. wide. Assay, 1 oz. 4 dwts. per ton.
- 1895 LA CONCORDE AND CITY AND SUBURBAN.²
 (MATABELELAND GOLD DEVELOPMENT Co.)
 Nominal Capital, £300,000.
Reef.—4 ft. to 6 ft. Assays, 15 dwts. to 4 ozs. per ton.
Eileen Reef.—Assays, 15 dwts. to 2 ozs. per ton.
Changed Luck Reef.—Assays, 12½ dwts. to 38 ozs. per ton.
- 1894 LOMAGUNDA DEVELOPMENT Co.
 Nominal Capital, £150,000. Issued, 120,000.
Reef.—4 ft. wide. Assays, 1 oz. 10 dwts. per ton. 1 oz. 10 dwts. per ton.
 " 4 ozs. 13 dwts. " 1 oz. 4 dwts. "
 " 10 " "
 " 1 oz. 10 " "
Reef.—2 ft. 6 ins. wide. Assays, 1 oz. to 3 ozs. and 3 to 4 ozs. per ton.
- 1893 MASHONALAND (CENTRAL) GOLD-MINING Co.
 Nominal Capital, £200,000. Issued, 180,000.
South Reef.—6 ft. width. Assay, 1 oz. 7 dwts. to 1 oz. 16 dwts. per ton.
 Total width, 23 ft. 4 ft. width assay, 4 dwts. per ton.
 " " 22 ft. Average assay, 8 to 10 dwts. per ton.

¹ Yield, 13·133 dwts.

² Extinct in 1900.

Date of
Registration.

- 1895 MATABELELAND DEVELOPMENT Co.
 Nominal Capital, £300,000. Issued, 270,000.
 Assays, 5 dwts. to 1 oz. $11\frac{3}{4}$ dwts. per ton.
 „ 1 oz. 5 dwts. and 2 ozs. 18 dwts. per ton.
- 1895 MOONIE CREEK DEVELOPMENT Co.
 Nominal Capital, £100,000. Issued, 50,000.
 Assays, 1 oz. $12\frac{1}{2}$ dwts. per ton.
 „ 1 oz. 14 grs. per ton.
- 1895 MOORE'S RHODESIA CONCESSION "LTD."¹
 Nominal Capital, £150,000.
 Reef.—3 ft. Assays, 2 ozs. 8 dwts. per ton.
- 1895 NELLY AND PIONEER REEFS GOLD-MINING Co.
 Nominal Capital, £65,000.
 Reef.—21 ins. wide. Assay, 7 ozs. per ton.
 „ 12'6. 20 ins. wide. Assay, 5 dwts. to 1 oz. per ton.
 „ 2 ft. Assay, 19 ozs. per ton.
 Pannings give up to 7 ozs. per ton.
- 1895 PREMIER TATI MONARCH REEF Co.
 Nominal Capital £300,000. Issued, 250,000.
Monarch Reef.—In some places, 80 ft. wide. Average assay,
 4 dwts. per ton. 4 to 16 ft. width give 5 dwts. to 2 ozs.
 per ton. Yield by milling, 7·86 dwts. per ton.
 „ „ (1899) 6·869 dwts. per ton.
 „ „ (1900) 3·464 „ „
- 1895 PROSPECTORS OF MATABELELAND "LTD."
 Nominal Capital, £200,000.
Shamrock Reef.—Width, $2\frac{1}{2}$ ft. to 5 ft. estimated, 1 oz. per ton.
Olga Reef.—Width, 7 ft. Panning 1 oz. 10 dwts. per ton.
Electric Reef.—Width, 4 ft. Assays, 1 oz. $6\frac{1}{2}$ dwts. per ton.
Czar Reef.—Width, 3 ft. Assays, 1 oz. 10 dwts. to 2 ozs. per ton.
Garden Reef.—Width, $2\frac{1}{2}$ ft. Assays, 1 oz. 10 dwts. per ton.
- 1895 RHODESIA "LTD."
 Nominal Capital, £200,000. Issued, 125,000.
Criterion Reef.—6 ft. wide. Assays, 4 ozs. 10 dwts. per ton.
Golconda Reef.—Pans 8 to 15 dwts. per ton.
Cure Reef.—Assays up to 60 ozs. per ton.

¹ Extinct in 1900.

ESTIMATING AND SAMPLING OF ORE RESERVES 93

Date of
Registration.
1895

RHODESIAN CLAIMS LTD.¹

Nominal Capital, £275,000. Vendors, 175,000.

- Labouchere*.—Width, 10 ft. 2½ ft. assay 7 ozs. per ton.
Hornet.—Width, 4 ft. Assay, 6 ozs. per ton.
Elephant.—Width, 12 ft. Assay, 1 to 3 ozs. per ton.
L'Infinisible.—13½ ft. Assay, 1 oz. 10 dwts. per ton.
Attorney.—Width, 5 ft. Assay, about 2 ozs. per ton.
Lawyers.—Width, 3 ft. Assay, 1 to 9 ozs. per ton.
Florence.—Assay, 1 oz. 3 dwts. per ton.
Montgomery.—Estimated, 2 ozs. per ton.
Golden Crescent.—Width, 4 ft. Estimated, 2 ozs. per ton.

1895

RHODESIAN MINING AND FINANCE CO.

Nominal Capital, £250,000. Issued, 100,000.

- Reef*.—4 ft. wide. Assay, 6 ozs. per ton.

1894

ST. HELEN'S DEVELOPMENT SYNDICATE.

Nominal Capital, £100,000. Issued, 35,000.

- Long John Reef*.—5 ft. wide. Panning 2 ozs. 10 dwts. per ton.

1894

SALISBURY REEF GOLD-MINING CO.

Nominal Capital, £200,000. Issued, 154,000.

- Reef*.—4 ft. 6 ins. wide. Estimated, 1 oz. 10 dwts. per ton.
Rotten Reef.—Estimated, 1 oz. 4 dwts. per ton.

1893

TATI BLUE JACKET SYNDICATE.

Nominal Capital, £60,000.

- New Zealand Reef*.—Assay 4 ozs. 9 dwts. to 4 ozs. 10 dwts. per ton.
Blue Jacket Reef.—Assays 4 ozs. 7 dwts. per ton. 19½ tons yielded 2 ozs. 3 dwts. 1 gr. per ton.
Australian Reef.—2½ tons yielded 7 ozs. 12 dwts. per ton. Other crushing yielded 8 ozs. per ton.
Amelia.—2 ft. wide. Assayed 14 dwts. to 2 ozs. per ton.

1894

TAYLOR'S MATABELE GOLDFIELDS.²

Nominal Capital, £100,000. Vendor, 75,000.

- 9 *Blocks*.—Assays 3 to 12 ozs. per ton.

¹ Extinct in 1900.

² Reconstructed after

Date of
Registration.
1894

UNITED RHODESIA GOLDFIELDS.

Nominal Capital, £750,000. Issued, 655,000. Vendor, 430,000.

Dickens Reef.—Average assay, 2 ozs. 19 dwts. per ton. 227 tons yielded at the rate of 2 ozs. 5 dwts. per ton. 58 tons yielded at the rate of 3 ozs. per ton.

Inez Reef.—Width, 7 ft. 6 ins. Assays, 9 dwts. 20 grs. to 1 oz. 7 dwts. per ton. 40 tons yielded at the rate of 1 oz. 14 dwts. per ton. Tailings assaying 1 oz. 9 dwts. per ton.

Old Chum Reef.—Width, 5 ft. 6 ins. Assay, 1 oz. 5 dwts. per ton. 7 tons yielded at the rate of 2 ozs. 10 dwts. per ton.

Panha!anga Reef.—Assays, 1 oz. 18 dwts. to 2 ozs. 6 dwts. per ton.

Lion Reef.—Assay, 1 oz. to 2 ozs. 14 dwts. per ton.

Just in Time Reef.—Assays, 1 oz. 2 dwts. to 1 oz. 12 dwts. per ton.

Umfuli Reef.—Assays, 8 dwts. to 16 dwts. per ton.

Auriga Reef.—41 tons yielded at the rate of 13 dwts. 4 grs. per ton. Tailings, 10 dwts. 10 grs. per ton.

1893 VICTORIA DISTRICT (MASHONALAND) GOLD-MINING Co.¹

Nominal Capital, £200,000. Issued, 118,000. Vendors, 75,000.

600 tons of ore yielded at the rate of 11 ozs. 72 dwts. per ton.

Assay of 1 in. string, 4 ozs. per ton. Vein, 3 ft. to 8 ft. 6 ins. wide gave a yield from 100 tons of over 1 oz. per ton, and a large mass of quartz assayed over 5 ozs. per ton.

1894 WHITE'S SYNDICATE.²

Nominal Capital, £100,000. Issued, 60,000. Vendor, 30,000.

Average assays from the various reefs, 2 to 3 ozs. per ton.

1894 WILLOUGHBY'S CONSOLIDATED Co.

Nominal Capital £1,000,000. Issued, 708,500. Vendor, 517,000.

No. 1 Reef.—Width, 22 ft. 10 ft. average 10 dwts., and 4 ft. 18 dwts. per ton.

No. 2 Reef.—7 ft. of lower grade.

No. 3 Reef.—8 ft. 3 ft. averaged 4 dwts., and 5 ft. 1 oz. 10 dwts. per ton.

Queen's Claim.—4 ft. to 6 ft. wide. Average, 1 oz. 10 dwts. per ton for 6 ft., and 2 ozs. 4 dwts. per ton for 4 ft.

Bonsor Reef.—3 to 4 ft. wide. Assaying from 2 to 3 ozs. per ton.

Eiffel Blue } 3 ft. 6 ins. Assaying 6 dwts. to 2 ozs. 6 dwts.
Grand Manica } per ton.

From the width and assay value of the veins, as given by Mr. Goldmann, it might fairly be presumed that considerable results would have been obtained by several of the companies

¹ Extinct in 1900.

² Reconstructed 1895. Extinct in 1900.

mentioned, but, up to May, 1900, no important returns from any of these mines are reported in Mr. Skinner's "Mining Manual."

It may be noted that details of African mines only have been given, and this has arisen from the difficulty of obtaining similar reliable data with regard to gold-mines in other districts. The object of giving data of this nature has been merely to point out that assays of samples of veins should be received with considerable caution, especially when the assay per ton of ore reaches 3 ozs. of gold and above that value, and when large amounts have to be paid for properties a purchaser may reasonably require that the estimates of values shall be based not alone upon assays of samples from the vein, but upon the results of milling some hundreds of tons of ore, and if we neglect to require this we run great risks, and should not complain of the loss of our money, or lay the blame to gold-mining if such should happen.

CHAPTER XI.

CONCLUDING REMARKS.

It will have been noted that there are a few large gold-mining companies making considerable profits, and a good many others doing fairly well from a commercial point of view, but that the number of failures has been large, many of which, however, have been brought about by paying too large a sum to the vendors without raising a proportionate amount of working capital or duly measuring the capabilities of the property to make returns. There may also have been some instances of ignorance of mining or mismanagement, but where actual work has been carried out to develop the properties to any extent, although the returns may not have been large, yet with a reduced amount of capital small profits might usually have been divided, and we may therefore conclude that gold-mining is not in itself subject to excessive risks beyond those of many other industries if we take ordinary trouble to see that the matters most essential to its success are carried out. What has most tended to make gold-mining a failure has been the payment of excessive commissions to promoters of gold-mining companies. The effect of this has been to make England a bad market for owners of good mining properties, as the actual owner may get very little for his property beyond some fully-paid shares which may never be of value, through the nominal capital of the company purchasing being so large as not to allow of a fair dividend being paid, especially if the intermediary absorbs so large an amount in shares as to unduly limit the working capital. The discoverer of a mine of any value is therefore induced to make arrangements locally, if possible, for working

his mine, so that he may receive some cash, even by working on a small scale, in the hope that actual results may ultimately lead to his obtaining the means to enlarge the scale of his operations; and if in making such an arrangement he finds he must give away a very large share of his property, at any rate he knows that he will only have to pay dividends upon hard cash actually spent in improving the property, and that the fraction of it which may remain to him will therefore be proportionately more valuable. With properties of no value, or of doubtful value, a high commission to secure a sale would not be of so much importance to the vendor, as there would be very little chance of securing local assistance to open-up and test a property of this kind, and if such assistance were obtained, the result might be hard work, no profits, and loss of credit; whereas, in case of an immediate sale for shares in a London company, these might be sold for something, there would be little hard work, and the vendor might not suffer much in credit in his own district.

The custom of paying high commissions on the purchase and sale of gold-mining properties might be defended if it in any way guaranteed results, but as it is, the system is a tax upon the discoverer of a property and upon the public, without any compensating quality. The remedy for this state of things lies in the hands of the public, and it is to be hoped that a study of the data herein contained, relating to gold-mining companies, may be of assistance to intending investors, enabling them to discriminate between purely speculative problems and those which present reasonable chances of success on a commercial basis.

APPENDIX

APPENDIX

TABLES NOS. I. TO XI. OF DATA RELATING TO DIVIDEND-PAYING COMPANIES, giving :—

Date of Registration.

Name of Company.

Nominal Capital at date of Registration, or in May, 1897.

Additions or Reductions of Nominal Capital.

Total Nominal Capital in May, 1900.

Total paid-up Capital in May, 1900.

Total amount of Dividends paid to May, 1900.

Percentage of Dividends paid per annum from date of Registration, calculated upon average paid-up Capital from same date.

Total Premiums received on issue of Shares.

Total Debentures outstanding.

List Prices of Shares, May, 1900.

Amounts paid in Shares and Cash to Vendor.

Calculated average paid-up Capital from date of Registration to 1900.

Calculated average amount of Dividends paid per annum from date of Registration to 1900.

Nominal or Face Value of Shares.

Amount paid up on each Share.

Rate of last year's Dividends paid on Nominal Value of Shares.

Average List Prices of Shares from 1897 to 1900.

List Prices of Shares for 1897-98-99-1900.

Rate of last year's Dividends on average List Prices of Shares.

NOTE.—Increase of capital by a division of shares on the issue of bonus shares to the shareholders has not been considered as an increase of the cash capital, which has been taken to consist of the fully-paid shares issued to the vendor, and the cash paid up upon the remaining shares issued, whether more or less than the face value of the shares.

Premiums received on the issue of Shares.—As these premiums have gone to pay cost which otherwise would have been paid out of profits or by an increased issue of shares, any excess paid over the face value of shares has been considered as capital invested by certain shareholders for the general benefit of the concern.

The following example will illustrate the method adopted to ascertain the average amount of cash capital employed and the average rate of dividends paid upon this capital from the date of registration of a company to some other date.

CITY AND SUBURBAN COMPANY.

RESULTS TO 1895.

Date of Registrat'n.	Nominal Capital.	Premiums on Shares received. Add.	—	—
	£	£	£ Years.	£
1886	50,000	—	50,000 × 2 . . .	100,000
1888	59,510	—	59,510 × 1 . . .	59,510
1889	65,000	63,498	128,498 × 3 . . .	385,494
1892	85,000	55,000	203,498 × 1 . . .	203,498
1893	85,000	76,250	279,748 × 3 . . .	839,244
Total Premiums .		194,748	10	1,587,746
	Average yearly capital			158,774
	Average yearly dividend			20,500

Total dividends paid $\frac{10}{\text{£}205,000} = 12.9\%$ per annum from date of registration.

Five dividends were paid, viz., 5%, 50%, 100%, 25%, and 75%, which, added together, make 255%, as stated by Mr. Goldmann in his work on South African Mining-Finance, but this hardly conveys to the ordinary mind a correct appreciation of the results without some calculation.

ALL AFRICA DIVIDEND

Date of Registration.	No.	NAME.	CAPITAL.				Total Dividends to May, 1900.
			Nominal when Registered.	Additions to.	Total Nom. in May, 1900.	Total paid up, May, 1900.	
			£	£	£	£	£
1885	1	Barrett (Lydenburg)	*120,000	—	120,000	261,215	21,000
1886	—	Johannesburg Pioneer	15,000	6,000	21,000	21,000	439,950
„	—	Jubilee	15,000	35,000	50,000	122,354	320,475
„	—	Salisbury	15,000	85,000	100,000	188,856	90,300
„	—	Wemmer	12,000	68,000	80,000	145,256	452,940
„	—	Witwatersrand	210,000	142,083	352,083	721,299	285,000
„	6	City and Suburban	50,000	1,310,000	1,360,000	279,748	817,000
1887	—	Ferreira	12,000	78,000	90,000	193,932	1,267,350
„	—	Geldenhuis Estate	80,000	120,000	200,000	307,894	710,750
„	—	Henry Nourse	35,000	90,000	125,000	167,250	381,250
„	—	Jumpers	42,000	58,000	100,000	193,845	311,500
„	—	May Consolidated	22,000	268,000	290,000	364,375	238,250
„	—	New Heriot	50,000	64,864	114,864	164,445	536,749
„	—	New Primrose	35,000	265,000	300,000	376,612	741,446
„	—	Robinson	50,000	2,700,000	2,750,000	134,624	2,850,937
„	—	Roodepoort United	50,000	200,000	250,000	281,625	333,750
„	—	Sheba (Lydenburg)	600,000	650,000	1,250,000	543,181	731,498
„	—	Simmer and Jack	75,000	4,925,000	5,000,000	1,015,487	538,960
„	—	Stanhope	30,000	4,000	34,000	39,000	109,650
„	—	Wolhuter	40,000	820,000	860,000	399,165	185,000
„	14	Worcester	15,000	80,772	95,772	122,434	314,782
1888	—	Crown Reef	70,000	50,000	120,000	236,187	1,157,900
„	—	Durban Roodepoort	90,000	35,000	125,000	158,662	672,583
„	—	Langlaagte Estate	450,000	20,000	470,000	613,362	1,410,780
„	—	Meyer and Charlton	40,000	60,000	100,000	247,648	359,848
„	—	Nigel	160,000	90,000	250,000	358,235	305,456
„	6	Princess Estate	125,000	75,000	200,000	299,334	31,500
1889	—	Block B, Langlaagte	550,000	82,500	632,500	679,250	94,050
„	—	Glencairn	175,000	325,000	500,000	725,000	248,750
„	3	New Comet	200,000	25,000	225,000	496,250	28,125
1890	—	Village Main Reef	28,000	372,000	400,000	886,906	209,543
„	2	Le Champ D'Or	100,000	34,591	134,591	147,200	95,568
1891	1	Treasury	15,000	525,000	540,000	181,200	195,650
1892	—	Crown (Deep)	250,000	50,000	300,000	800,000	225,000
„	2	Ginsberg	130,000	30,000	160,000	225,000	144,000
1893	1	Geldenhuis (Deep)	300,000	—	300,000	471,449	345,000
1894	—	Bonanza	200,000	—	200,000	200,000	460,000
„	—	Jumpers (Deep)	400,000	123,895	523,895	873,159	104,779
„	—	New Kleinfontein	70,000	205,000	275,000	404,625	63,375
„	—	Nourse (Deep)	450,000	—	450,000	862,863	45,000
„	—	Robinson (Deep)	450,000	450,000	900,000	716,664	112,500
„	6	Rose (Deep)	400,000	25,000	425,000	813,750	340,000
		Totals	6,226,000	14,547,705	20,773,705	16,440,341	18,327,944

* As reduced in 1892 from £240,000.

MINES TO DECEMBER, 1894.

Equal to % per annum after year of Regis- tration.	Premiums on Shares.	Debentures.	List Prices in May, 1900.	Average paid-up Cap- ital from date of Registra- tion to May, 1900.	Average amount of Dividends paid per annum from date of Re- gistration.	Shares to Vendor.	Cash to Vendor.
%	£	£		£	£	£	£
·577	—	—	7/6 — 8/6	242,481	1,400	—	—
156·000	—	—	—	20,143	31,425	9,300	—
30·406	72,354	—	6 — 6¼	75,283	22,891	9,000	—
5·011	113,106	—	2½ — 2¾	128,712	6,450	11,000	—
30·652	65,256	—	10½ — 11	105,548	32,353	—	—
5·097	369,216	—	5 7/16 — 5 9/16	340,814	20,357	173,500	—
30·178	194,748	—	5 — 5¼	193,373	58,357	30,000	4,000
63·318	103,932	—	20 — 20½	142,697	97,488	6,000	—
23·706	107,894	—	6¼ — 6½	230,627	54,673	62,000	—
24·588	42,250	—	7 — 7¼	119,269	29,327	24,000	—
14·249	93,845	—	4½ — 4¾	168,150	23,961	17,000	—
8·101	75,625	—	4½ — 4¾	226,183	18,325	—	—
35·527	49,581	—	5 7/8 — 6 1/8	116,214	41,288	40,000	—
30·274	202,906	—	3 3/4 — 3 7/8	188,391	57,034	16,850	—
185·097	—	—	8 3/8 — 8 5/8	118,479	219,302	—	—
16·839	31,625	—	3 1/4 — 3 1/2	152,461	25,673	36,000	—
24·789	50,000	175,000	1 1/2 — 1 1/4	227,796	56,269	—	—
9·114	440,487	500,000	5 5/16 — 5 7/16	454,856	41,458	52,000	—
21·498	5,000	—	3 3/16 — 3 5/16	36,428	7,832	23,000	—
6·631	184,165	—	4 — 4 1/4	214,589	14,230	29,000	—
24·706	26,662	—	2 — 2 1/2	98,035	24,221	10,000	—
42·915	116,187	—	13 1/2 — 14	224,838	96,491	56,000	—
38·208	33,662	—	5 — 5 1/4	146,690	56,048	70,000	—
20·445	143,362	—	3 — 3 1/4	575,028	117,565	400,000	—
22·859	147,648	—	5 — 5 1/4	131,177	29,987	35,000	—
13·581	134,941	—	3 — 3 1/4	187,421	25,454	10,500	—
1·196	10,000	60,000	1 1/2 — 1 5/8	219,445	2,625	—	—
1·301	46,750	—	1 5/16 — 1 7/16	656,750	8,550	450,000	—
4·145	225,000	140,000	2 — 2 1/8	315,789	13,092	150,000	—
·806	43,750	200,000	2 5/8 — 2 7/8	317,159	2,556	160,000	—
5·165	486,906	—	7 5/8 — 7 7/8	338,067	17,462	17,500	—
6·937	12,200	18,000	1 3/8 — 1 1/2	137,760	9,557	70,000	—
22·212	46,200	54,000	4 1/2 — 4 3/4	110,100	24,456	13,500	—
4·736	500,000	—	10 7/16 — 11 1/8	593,750	28,125	160,000	—
9·504	—	—	2 3/4 — 3	189,375	18,000	110,000	—
12·293	171,449	112,000	9 1/4 — 9 3/4	400,892	49,285	175,000	—
38·333	—	—	3 5/8 — 3 7/8	200,000	76,666	125,000	—
3·412	349,264	—	4 7/16 — 4 9/16	511,702	17,463	200,000	—
1·872	154,625	100,000	2 3/8 — 2 1/2	199,147	3,728	50,000	—
1·276	412,863	—	4 7/8 — 5 1/8	587,621	7,500	300,000	—
2·616	266,664	—	4 1/2 — 4 3/4	716,664	18,750	125,000	—
9·164	388,750	—	8 3/4 — 9	618,333	56,666	230,000	—
14·249 Av. %	5,918,873	1,359,000	—	10,978,237	1,564,340	—	—

ALL AFRICA DIVIDEND

Date of Registration.	No.	NAME.	CAPITAL.				Total Dividends to May, 1900.
			Nominal when Registered.	Additions to.	Total Nominal in May, 1900.	Total paid up, May, 1900.	
			£	£	£	£	£
1895	-	Angelo Gold	225,000	50,000	275,000	423,661	137,500
„	-	Driefontein Consolid't'd	225,000	50,000	275,000	340,000	68,750
„	-	Glen (Deep)	600,000	—	600,000	817,622	60,000
„	-	Glynn's Lydenburg . .	175,000	—	175,000	178,380	58,573
„	-	Lancaster	300,000	100,000	400,000	509,857	67,260
„	-	Porges Randfontein . .	500,000	—	500,000	550,000	150,000
„	-	Waterfall Estate & Gold	25,000	—	25,000	25,000	2,500
„	-	Windsor	100,000	—	100,000	100,000	20,000
„	9	Transvaal Gold	200,000	440,000	640,000	704,225	120,845
1896	1	Rietfontein A	350,000	—	350,000	417,500	71,437
1897	-	Bonsor (Rhodesia) . .	220,000	—	220,000	220,000	11,000
„	-	Chimes Exploration . .	100,000	—	100,000	135,961	90,049
„	-	Geelong Gold (Rhodesia)	250,000	—	250,000	242,500	15,000
„	-	South Randfontein . .	450,000	—	450,000	500,000	45,000
„	5	Langlaagte Proprietary	100,000	—	100,000	100,000	10,000
—	-	Totals	3,820,000	640,000	4,460,000	5,314,706	927,914

MINES, 1895, 1896, 1897.

Equal to % per annum, after year of Registration.	Premium on Shares.	Debentures.	List Prices in May, 1900.	Average from date of Registr ⁿ to May, 1900.		Shares to Vendor.	Cash to Vendor.
				Paid-up Capital.	Cash Divs. paid per ann		
%	£	£	%	£	£	£	£
7.903	148,661	—	6 $\frac{1}{4}$ — 6 $\frac{1}{2}$	347,946	27,500	100,000	—
4.119	65,000	100,000	4 — 4 $\frac{1}{4}$	309,000	13,750	100,000	—
1.672	217,622	—	4 — 4 $\frac{1}{4}$	717,373	12,000	366,000	—
6.733	11,028	—	1 $\frac{3}{4}$ — 2	173,969	11,715	140,000	—
3.197	158,555	116,050	2 $\frac{5}{8}$ — 2 $\frac{3}{4}$	420,713	13,452	134,500	—
5.555	50,000	—	1 $\frac{7}{10}$ — 1 $\frac{9}{10}$	540,000	30,000	387,500	—
2.000	—	—	$\frac{7}{10}$ — $\frac{9}{10}$	25,000	500	Reconstruction	—
4.000	—	—	1 $\frac{3}{4}$ — 2	100,000	4,000	—	—
3.432	100,000	—	2 $\frac{5}{10}$ — 2 $\frac{7}{10}$	704,225	24,169	460,000	—
4.277	100,000	—	1 $\frac{5}{8}$ — 1 $\frac{3}{4}$	417,500	17,859	149,392	—
1.666	—	—	1 $\frac{3}{10}$ — 1 $\frac{5}{10}$	220,000	3,666	100,000	—
7.381	17,936	41,000	$\frac{3}{4}$ — 1	101,655	7,504	2nd Reconstruction	—
2.061	42,500	—	3 $\frac{1}{8}$ — 3 $\frac{3}{8}$	242,500	5,000	115,000	—
3.000	50,000	—	—	500,000	15,000	250,000	—
3.333	—	—	—	100,000	3,333	—	—
Av. 3.850%	961,302	257,050	—	4,919,881	189,448	—	—

ALL AFRICA DIVIDEND.

Date of Registration.	NAME.	Nominal or Face value of Shares.	Amount paid up on each Share.	Av. rate of Cash Dividends per ann., from date of Registration, on paid up value of Shares.	Last year's Dividends paid on nominal value of Shares.
		£	£	%	%
1885	Barrett	1	1'088	577	0
1886	Johannesburg Pioneer	1	1	156	550
"	Jubilee	1	2'447	30'406	50
"	Salisbury	1	1'888	5'011	10
"	Wemmer	1	1'815	30'652	75
"	Witwatersrand	1	2'048	5'097	30
"	City and Suburban	4	'822	30'178	10
1887	Ferreira	1	2'155	68'318	150
"	Geldenhuis Estate	1	1'530	23'706	5
"	Henry Nourse	1	1'338	24'588	50
"	Jumpers	1	1'938	14'249	25
"	May Consolidated	1	1'261	8'101	30
"	New Heriot	1	1'431	35'527	50
"	New Primrose	1	1'255	30'274	30
"	Robinson	5	'245	185'097	8
"	Rodepoort United	1	1'126	16'839	12'50
"	Sheba	1	'505	24'789	11'25
"	Simmer and Jack	5	1'080	9'114	4
"	Stanhope	1	1'147	21'498	10
"	Wolhuter	4	1'856	6'631	10
"	Worcester	1	1'278	24'706	15
1888	Crown Reef	1	1'963	42'915	140
"	Durban Rodepoort	1	1'269	38'208	75
"	Langlaagte Estate	1	1'305	20'445	15
"	Meyer and Charlton	1	2'476	23'859	40
"	Nigel	1	1'604	13'581	15
"	Princess Estate	1	1'814	1'196	7'50
1889	Block B, Langlaagte Ordinary	1	1'073	1'301	8
"	Glencairn	1	1'450	4'145	25
"	New Comet	1	2'205	'806	12'50
1890	Village Main Reef	1	2'217	5'165	40
"	Le Champ D'Or	1	1'093	6'937	30
1891	Treasury	4	1'342	22'212	17'50
1892	Crown (Deep)	1	2'666	4'736	25
"	Ginsberg	1	1'406	9'504	25
1893	Geldenhuis (Deep)	1	1'571	12'293	40
1894	Bonanza	1	1	38'333	55
"	Jumpers (Deep)	1	1'666	3'412	20
"	New Kleinfontein	1	1'749	1'872	10
"	Nourse (Deep)	1	1'917	1'276	10
"	Robinson (Deep)	1	'796	2'616	25
"	Rose (Deep)	1	1'912	1'164	40
1895	Angelo	1	1'540	7'903	50
"	Driefontein Consolidated	1	1'236	4'449	25
"	Glen (Deep)	1	1'362	1'672	10
"	Glynn's Lydenburg	1	1'065	6'733	25
"	Lancaster	1	1'451	3'197	10
"	Porges Randfontein	1	1'100	5'555	10
"	Waterfall Estate and Gold	25	'250	2	5
"	Windsor	1	1	4	20
"	Transvaal Gold	1	1'165	3'432	10
1896	Rietfontein A	1	1'315	4'277	22'50
1897	Bonsor (Rhodesia)	1	1	1'666	5
"	Chimes Exploration	1	4'974	7'381	5
"	Geelong Gold (Rhodesia)	1	1'212	2'061	7'50
"	South Randfontein	1	1'111	3	10
"	Langlaagte Proprietary	4	4	3'333	5

PAYING MINES.

Average List Prices of Shares from 1897 to 1900.	LIST PRICES OF SHARES.				Last Dividend % on average List Price of Shares.
	1897.	1898.	1899.	1900.	
£					%
·435	·50—·55	·37—·42	·40—·45	·37—·42	—
11·833	10·50—11·00	10·00—10·50	14·00—15·00	—	4·64
7·061	6·75—7·25	8·00—8·25	6·87—7·12	6·00—6·25	7·08
2·590	2·25—2·50	2·62—2·87	2·87—3·12	2·12—2·37	3·86
9·966	6·75—7·00	8·87—9·12	13·12—13·37	10·50—11·00	7·53
4·866	4·00—4·12	3·19—3·62	6·44—6·56	5·44—5·56	6·17
5·264	3·94—4·06	5·75—5·87	6·06—6·18	5·00—5·25	7·60
21·562	18·75—19·25	23·00—23·50	23·50—24·00	20·00—20·50	6·95
5·935	3·37—3·50	5·31—5·43	8·50—8·62	6·25—6·50	8·43
7·967	6·62—6·87	8·69—8·82	9·12—9·37	7·00—7·25	6·27
5·030	3·50—3·75	5·00—5·25	6·50—6·75	4·62—4·87	4·97
3·670	2·12—2·25	2·37—2·50	5·81—5·94	4·12—4·25	8·17
7·090	7·50—7·75	7·37—7·62	7·12—7·37	5·87—6·12	7·05
4·077	3·94—4·06	3·44—3·56	4·94—5·06	3·75—3·87	7·35
8·777	7·75—8·00	7·87—8·12	10·62—10·87	8·37—8·62	4·55
3·981	3·62—3·87	3·75—3·87	4·87—5·12	3·25—3·50	3·14
1·647	1·94—2·06	1·87—1·94	1·44—1·56	1·12—1·25	6·81
4·684	3·62—3·87	3·00—3·12	6·12—6·25	5·62—5·87	4·25
·576	·75—1·00	·62—·75	·19—·31	·37—·62	17·36
5·061	4·75—5·00	5·62—5·75	5·50—5·62	4·00—4·25	7·88
2·716	2·87—3·12	2·12—2·37	3·25—3·50	2·00—2·50	5·51
14·092	11·25—11·50	12·37—12·62	18·50—19·00	13·50—14·00	9·93
5·967	6·25—6·50	6·00—6·25	6·12—6·37	5·00—5·25	12·56
3·467	4·00—4·25	2·87—3·12	3·56—3·69	3·00—3·25	4·32
5·280	5·25—5·50	4·00—4·25	6·37—6·62	5·00—5·52	7·57
2·436	1·50—1·62	1·31—1·44	3·62—3·75	3·00—3·25	6·14
1·966	2·37—2·50	1·87—2·00	2·00—2·25	1·12—1·62	3·82
1·028	·93—1·06	1·06—1·12	·94—1·06	·94—1·12	7·76
2·061	1·81—1·94	1·81—1·94	2·37—2·50	2·00—2·12	12·13
2·482	1·06—1·19	2·56—2·69	3·37—3·50	2·62—2·87	5·04
6·482	3·25—4·00	5·56—5·69	8·87—9·00	7·62—7·87	6·17
1·512	·75—1·00	1·12—1·37	2·37—2·62	1·37—1·50	19·86
3·827	2·00—2·25	3·12—3·25	5·25—5·50	4·50—4·75	18·28
11·591	9·75—10·25	10·50—10·75	14·62—14·87	10·87—11·12	2·15
2·732	2·31—2·44	1·87—2·12	3·62—3·75	2·75—3·00	9·15
7·934	4·37—4·62	6·87—7·12	10·62—10·87	9·25—9·75	5·04
3·995	3·50—3·75	3·31—4·06	4·87—5·00	3·62—3·87	13·78
4·915	—	4·50—5·00	5·62—5·37	4·44—4·56	4·07
2·373	2·00—2·25	2·00—2·12	2·81—2·94	2·37—2·50	4·21
4·841	3·00—3·50	4·75—5·00	6·12—6·37	4·87—5·12	2·06
8·031	6·50—7·00	9·25—9·50	11·25—11·50	4·50—4·75	3·11
7·873	3·25—3·75	6·12—6·37	10·75—11·00	8·75—9·00	5·08
5·656	3·56—3·69	5·00—5·25	7·44—7·56	6·25—6·50	8·84
3·842	2·50—2·75	3·75—3·87	4·75—4·87	4·00—4·25	6·50
3·625	—	2·00—2·25	4·56—4·69	4·00—4·25	2·76
2·045	2·43—2·56	1·87—2·00	1·75—2·00	1·75—2·00	12·25
2·778	1·93—2·06	2·12—2·25	4·19—4·31	2·62—2·75	3·59
1·466	1·25—1·37	1·00—1·12	1·93—2·06	1·44—1·56	6·84
·467	·37—·62	·25—·50	·45—·55	·44—·56	2·65
2·607	—	—	3·12—3·25	1·75—2·00	7·66
2·951	4·00—4·12	3·19—3·31	2·06—2·18	2·31—2·44	3·39
1·768	—	1·75—2·00	1·62—1·87	1·62—1·75	12·71
2·607	—	—	3·12—3·56	1·81—1·94	1·91
·655	—	·37—·50	—	·75—1·00	7·69
3·560	—	2·75—3·00	4·50—4·62	3·12—3·37	2·10
No data	—	—	—	—	—
No data	—	—	—	—	—

ALL AFRICA. FINANCE No. I.

Date of Registration.	No.	NAME.	CAPITAL.				
			Nom. in May, 1897.	Additions to.	Reduction of.	Total in May, 1900.	Total paid up, May, 1900.
			£	£		£	£
1888	1	Bechuanaland Exploration	400,000	—	—	400,000	568,750
1889	—	Anglo-French Exploration	700,300	—	—	700,000	820,300
„	2	Johannesburg Consolidated Investment	2,750,000	—	—	2,750,000	3,589,396
1892	1	Consolidated Goldfields	2,700,000	550,000	—	3,250,000	3,250,000
1894	—	Exploring Land and Minerals	500,000	—	—	500,000	325,155
„	—	Henderson's Transvaal	300,000	1,700,000	—	2,000,000	1,496,573
„	3	New African Company	400,000	—	—	400,000	200,000
1895	—	Eastern Investment	1,000,000	—	—	1,000,000	937,500
„	—	Rhodesian Exploration and Developing	100,000	50,000	—	150,000	284,406
„	—	Rhodesia Goldfields	1,000,000	—	—	1,000,000	447,849
„	—	Rhodesian Prospectors	20,000	—	—	20,000	6,624
„	5	Robinson South African Banking	3,000,000	—	—	3,000,000	3,000,000
1896	1	Trust Français	1,215,000	—	—	1,215,000	1,012,500
1897	1	A. Goerz & Co.	1,015,000	—	—	1,015,000	865,000
		Totals	15,100,300	2,300,000	—	17,400,300	16,804,053

APPENDIX—TABLE IV.

• DIVIDEND 1888 TO 1900.

Total Dividends to May, 1900.	Equal to % per annum after year of Registration.	Premiums on Shares.	Debentures.	List Prices of Shares, May, 1900.	Shares to Vendor.	Cash to Vendor.	Average from date of Registration.	
							Paid-up Capital.	Dividends per annum.
£	%	£	£		£	£	£	£
60,000	1·415	168,750	—	$1\frac{5}{10}$ — $1\frac{7}{10}$	79,000	16,000	353,125	5,000
723,280	15·448	120,000	—	$3\frac{2}{10}$ — $3\frac{11}{10}$	—	—	425,641	65,753
879,859	5·604	907,000	—	$1\frac{11}{10}$ — $1\frac{3}{4}$	10,000	345,000	1,427,126	79,987
2,466,900	14·156	—	500,000	$7\frac{1}{10}$ — $7\frac{3}{4}$	1,358,000	—	2,178,125	308,362
47,758	2·768	—	—	$1\frac{1}{8}$ — $1\frac{1}{4}$	—	—	287,562	7,959
30,000	·556	—	229,000	6% $1\frac{5}{10}$ — $1\frac{1}{10}$	1,500,000	—	898,286	5,000
395,000	32·816	—	—	$2\frac{7}{8}$ —3	40,000	8,096	200,000	65,633
75,000	1·764	187,500	—	$\frac{3}{4}$ —1	500,000	—	850,000	15,000
10,000	1·028	159,406	—	$5\frac{7}{8}$ —6	—	—	194,406	2,000
108,266	4·835	—	200,000	$2\frac{11}{10}$ — $2\frac{13}{10}$	75,000	Deb. 75,000	447,849	21,653
488	1·479	—	—	—	—	—	6,624	98
913,041	6·080	—	—	$3\frac{1}{4}$ — $3\frac{1}{2}$	24,000	—	3,000,000	182,608
240,000	5·925	—	—	—	—	—	1,012,500	60,000
195,572	7·536	—	—	$2\frac{11}{10}$ — $2\frac{13}{10}$	640,000	—	865,000	65,190
6,145,164	7·279 Average.	1,542,656	—	—	—	—	12,146,244	884,243

	Rate.	Paid-up Capital.	Dividends per annum.
	%	£	£
1894—Average Dividends	9·319	5,769,865	537,694
1897 " "	5·434	6,376,379	346,549

Date of Registration.	No.	NAME.	CAPITAL.				
			Nom. in May, 1897.	Additions to.	Reductions of.	Total in May, 1900.	Total paid-up Capital, May, 1900.
			£	£	£	£	£
1888	-	Douglas Developing . . .	60,000	—	—	60,000	60,000
"	-	Emerald Land and Mines . . .	30,000	—	—	30,000	18,670
"	3	United African Syndicate . . .	100,100	—	—	100,100	50,100
1889	-	Anglian Mining and Finance	300,000	Reconstruction	—	300,000	249,625
"	2	Elandsfontein Estate . . .	30,000	—	—	30,000	37,000
1890	1	British Transvaal and General	250,000	—	—	250,000	76,414
1891	-	African Gold Recovery . . .	200,000	—	—	200,000	207,551
"	2	Zambesia Exploring . . .	65,000	135,000	—	200,000	237,436
1892	-	Consolidated Deep Levels . . .	200,000	—	—	200,000	187,250
"	2	Rand Central Ore Reduction	155,000	—	—	155,000	193,300
1893	-	Pardy's Mozambique . . .	50,000	—	—	50,000	64,939
"	2	Rand Mines	400,000	90,000	—	490,000	448,989
1894	-	Mashonaland Agency . . .	200,000	200,000	—	400,000	356,111
"	-	Matabeleland Adventurers	11,000	Wound up, 1899	—	11,000	11,000
"	-	South African Gold Trust . . .	500,000	Reconstruction	—	500,000	500,000
"	-	Torva Exploring	100,000	—	—	100,000	100,000
"	5	Transvaal Goldfields . . .	300,000	—	—	300,000	300,000
1895	-	Adler's Consolidated . . .	500,000	—	—	500,000	213,000
"	-	Belgian Mining	500,000	—	—	500,000	500,000
"	-	Botolph	15,000	—	—	15,000	14,000
"	-	Compagnie Française . . .	500,000	—	—	500,000	500,000
"	-	Forbes' Rhodesia	30,000	—	—	30,000	30,000
"	-	Freeman Cohen's Consolidated	1,000,000	—	—	1,000,000	749,055
"	-	Goldfields of Matabeleland	500,000	—	—	500,000	277,000
"	-	Kaffirs Consolidated . . .	50,000	—	—	50,000	37,580
"	-	New Era	80,000	—	—	80,000	80,000
"	-	Sacke Estate	250,000	—	—	250,000	237,500
"	11	South African Investment and Trust	50,000	—	—	50,000	50,000
		Totals	6,426,100	425,000	—	6,851,100	5,786,520

APPENDIX—TABLE V.

DIVIDEND 1888 TO 1900.

Total Dividends to May, 1900.	Equal to % per annum after year of Registration.	Premiums on Shares.	Debentures.	List Prices of Shares, May, 1900.	Shares to Vendor.	Cash to Vendor.	Average from date of Registration.	
							Paid-up Capital.	Dividends per annum.
£	%	£	£		£	£	£	£
30,000	4·166	—	—	—	46,000	2,000	60,000	2,500
1,867	·830	—	—	—	8,100	—	18,670	155
149,122	24·804	—	—	—	—	—	50,100	12,427
203,500	11·983	1,625	—	—	—	—	154,375	18,500
24,920	8·930	7,000	—	—	—	—	25,363	2,266
25,815	3·377	Dr. P/L	27,257	—	—	—	76,414	2,581
100,000	5·354	7,551	—	3/- — 4/-	95,000	55,000	207,551	11,111
65,000	5·867	40,000	—	1 $\frac{5}{8}$ — 1 $\frac{7}{8}$	—	—	124,986	7,333
205,975	13·750	—	—	1 $\frac{1}{4}$ — 1 $\frac{1}{2}$	145,000	—	187,250	25,747
89,820	6·857	38,200	23,600	7 $\frac{7}{8}$	1,000	Founders	163,725	11,227
17,250	4·931	20,000	—	$\frac{1}{4}$ — $\frac{3}{8}$	30,000	—	49,965	2,464
591,650	23·880	—	1,000,000	39 $\frac{1}{16}$ — 39 $\frac{5}{16}$	(£1 Shares)	—	353,921	84,521
40,000	3·248	37,500	—	2 $\frac{1}{4}$ — 2 $\frac{3}{8}$	—	—	205,185	6,666
6,000	9·090	—	—	—	—	—	11,000	1,000
752,500	25·083	—	230,000	6 $\frac{3}{16}$ — 6 $\frac{5}{16}$	—	—	500,000	125,417
35,000	5·633	Dr. P/L	25,449	$\frac{3}{8}$ — $\frac{1}{2}$	—	—	100,000	5,633
210,000	11·666	—	—	1 $\frac{1}{2}$ — 1 $\frac{3}{4}$	65,000	40,000	300,000	35,000
31,950	3·000	—	—	7/6 — 8/6	137,500	5,000	213,000	6,390
90,000	3·200	—	—	—	—	—	500,000	18,000
4,900	7·000	—	—	—	—	—	14,000	980
150,000	6·000	—	—	—	—	—	500,000	30,000
3,000	2·000	—	—	2 $\frac{1}{2}$ — 2 $\frac{5}{8}$	—	—	30,000	600
74,905	1·498	—	—	—	750,000	—	749,055	14,981
16,620	1·200	—	—	$\frac{3}{4}$ — $\frac{7}{8}$	—	—	277,000	3,325
23,017	12·248	—	—	1 $\frac{1}{8}$ — 1 $\frac{1}{4}$	—	—	37,580	4,603
12,000	3·000	—	—	—	—	—	80,000	2,400
33,750	2·842	12,500	—	$\frac{1}{2}$ — $\frac{3}{4}$	125,000	—	237,500	6,750
21,250	8·500	—	73,000	5 $\frac{7}{8}$	—	—	50,000	4,250
3,009,811	8·468 Av.	164,476	—	—	—	—	5,276,640	446,827

	Rate.	Paid-up Capital.	Dividends per annum.
	%	£	£
1894—Average Dividends	13·697	2,588,505	354,548
1897 „ „	3·432	2,688,135	92,279

AUSTRALIA AND NEW ZEALAND

Date of Registration.	No.	NAME.	CAPITAL.			
			Nominal, date of Registration.	Additions to.	Reductions of.	Total in May, 1900.
			£	£	£	£
1845	1	Australian Mining Co.	400,000	—	—	400,000
1881	1	Victory Charters Towers	50,000	—	—	50,000
1886	—	Brilliant Gold	50,000	470,000	—	520,000
"	—	Day Dawn Block	460,000	40,000	—	500,000
"	3	Mount Morgan	1,000,000	—	—	1,000,000
1887	—	Waihi Gold	100,000	220,000	—	320,000
"	—	Baker's Creek	100,000	—	—	100,000
"	3	Day Dawn P.C. Gold	470,000	30,000	—	500,000
1888	1	Blue Spur	130,000	—	—	130,000
"	2	Victoria	24,000	126,000	—	150,000
1889	—	Brilliant and St. George	72,000	—	—	72,000
"	2	Mill's Day Dawn United	300,000	—	—	300,000
1890	1	Queen Cross	100,000	—	—	100,000
1891	—	Victoria and Queen	48,000	—	—	48,000
"	2	Brilliant Block	100,000	—	—	100,000
1892	—	Aladdin's Lamp	100,000	—	—	100,000
"	2	Brilliant Central	100,000	—	—	100,000
1893	1	Craven's Caledonia	30,000	—	—	30,000
1894	—	Associated Gold Mines	375,000	125,000	—	500,000
"	—	Great Boulder Proprietary	175,000	—	—	175,000
"	—	Hannan's Brownhill	75,000	150,000	—	225,000
"	4	Hauraki Gold	40,000	—	—	40,000
1895	—	Burbank's Birthday Gift	150,000	30,000	—	180,000
"	—	East Murchison United	150,000	—	—	150,000
"	—	Gibraltar Consolidated	300,000	—	—	300,000
"	—	Great Boulder Main Reef	120,000	10,000	—	130,000
"	—	Great Boulder Perseverance	1,000	174,000	—	175,000
"	—	Hannan's Oroya	120,000	80,000	—	200,000
"	—	Lady Shenton	160,000	—	—	160,000
"	—	Menzies Gold Reefs Proprietary	175,000	—	—	175,000
"	—	Mayall's United	200,000	—	—	200,000
"	—	{Murchison New Chum, <i>now</i> Chums } Consolidated	160,000	—	—	160,000
"	—	North Boulder Gold	100,000	10,000	—	110,000
"	—	Queensland Menzies	33,000	—	—	33,000
"	—	Robinson	80,000	—	—	80,000
"	—	Royal Oak of Hauraki	100,000	150,000	—	250,000
"	15	Waitekauri Gold	230,000	—	—	230,000
1896	—	Australia United	100,000	—	—	100,000
"	—	Bayley's United	155,000	—	—	155,000
"	—	Golconda	100,000	—	—	100,000
"	—	Howell's Consolidated	150,000	—	—	150,000
"	—	Lake View Consols	250,000	—	—	250,000
"	—	Mount Usher	140,000	—	—	140,000
"	—	Progress	250,000	25,000	—	275,000
"	8	Vale of Coolgardie	90,000	—	—	90,000
1897	—	Ivanhoe Gold Corporation	1,000,000	—	—	1,000,000
"	—	Lachlan Goldfields	75,000	—	—	75,000
"	—	Lady Loch	120,000	—	—	120,000
"	4	Peak Hill	250,000	50,000	—	300,000
1898	—	Kelly's Queen Block	72,000	—	—	72,000
"	2	Sons of Gwalia	300,000	—	—	300,000
1899	—	Golden Horse Shoe Estates	1,500,000	—	—	1,500,000
"	2	Pambula	50,000	—	—	50,000
—	—	Totals	10,980,000	1,690,000	—	12,670,000

DIVIDEND MINES, 1845 TO 1900.

Total paid-up Capital, May, 1900.	Total Dividends to May, 1900.	Equal to % per annum after year of Registration.	Premiums on Shares.	Debentures.	List Prices of Shares May, 1900.	Cash and Shares, Vendor.	Average from date of Registration.	
							Paid-up Capital.	Div'nds per ann.
£	£	%	£	£	%	£	£	£
135,073	66,163	890	—	—	—	—	135,073	890
40,666	290,625	38'176	—	—	4/-—5/-	10,000	40,666	15,296
70,000	603,083	70'126	—	—	9/-—10/-	10,000	61,428	43,077
493,400	496,480	8'359	—	—	9,6—10'6	96,400	424,228	35,463
875,000	5,370,833	43'843	—	—	5 ¹ / ₈ —5 ³ / ₈	875,000	875,000	383,631
350,000	644,500	26'632	30,000	—	10 ¹ / ₂ —10 ¹ / ₂	—	186,154	49,577
87,500	75,000	6'593	—	—	—	90,500	87,500	5,769
490,000	203,250	3'221	—	—	3,3—3'9	470,000	485,384	15,634
91,266	27,126	2'476	—	—	3,6—4'6	115,000	91,266	2,260
144,000	252,000	19'811	—	—	3/-—4/-	—	106,000	21,900
59,400	433,600	67'126	—	—	3—3 ¹ / ₂	—	59,400	39,373
262,500	285,000	9'870	—	—	Shares 10/-	—	262,500	25,909
88,334	33,200	3'758	—	—	3,6—4'6	—	88,334	33,200
42,681	16,800	4'371	—	—	—	—	42,681	1,866
91,000	73,750	9'003	—	—	5 ¹ / ₈ —7 ¹ / ₈	—	91,000	8,193
100,000	175,000	21'875	—	—	—	90,000	100,000	21,875
86,666	12,916	1'862	—	—	—	—	86,666	1,614
24,584	12,500	7'260	—	—	-/6—1/-	—	24,584	1,785
1,039,900	258,750	8'876	589,900	—	3 ¹ / ₄ —3 ³ / ₈	325,000	485,817	43,125
347,500	866,250	70'858	172,500	—	31'9—32'3	130,000	203,750	144,375
173,000	441,375	61'903	30,000	—	8 ¹ / ₂ —9 ¹ / ₂	55,000	118,833	73,562
40,000	144,000	60'000	—	—	1'9—2'3	26,825	40,000	24,000
195,000	74,250	9'519	15,000	—	1 ⁹ / ₁₀ —1 ¹¹ / ₁₀	125,000	156,000	14,850
150,000	52,500	7'000	—	—	1 ⁹ / ₁₀ —1 ¹¹ / ₁₀	—	150,000	10,500
300,000	15,000	1'000	—	—	1 ⁹ / ₁₀ —1 ¹¹ / ₁₀	250,000	300,000	3,000
160,000	38,000	5'937	30,000	—	1 ⁹ / ₁₀ —1 ¹¹ / ₁₀	90,000	128,000	7,600
175,000	56,875	6'500	—	—	11 ¹ / ₂ —11 ³ / ₈	125,000	175,000	11,375
189,820	9,491	1'217	—	—	13 ¹ / ₂ —2 ¹ / ₈	100,000	155,929	1,898
160,000	96,000	12'000	—	—	1 ¹ / ₁₀ —1 ³ / ₁₀	140,000	160,000	19,200
173,811	17,381	2'000	—	—	2/-—3/-	140,000	173,811	3,476
159,250	7,962	1'000	—	—	—	128,000	159,250	1,592
160,000	8,000	{ To 1899 } 1'250	—	—	—	145,000	160,000	2,000
110,000	27,500	5'000	5,000	—	8— ¹ / ₂	85,000	110,000	5,500
32,020	52,800	32'979	—	—	—	16,500	32,020	10,560
79,164	8,000	2'021	—	—	1/-—2/-	60,000	79,164	1,600
250,000	12,500	1'315	—	—	-/4 ¹ / ₂ —-/7 ¹ / ₂	75,000	190,000	2,500
227,293	82,781	7'283	18,901	{ 7 % } { 18,150 }	2 ¹ / ₁₀ —2 ¹⁵ / ₁₀	100,000	227,293	16,556
90,000	4,500	1'250	—	—	—	70,000	90,000	1,125
155,000	15,500*	2'500	—	—	8,6—9/-	—	155,000	3,875
78,750	6,750*	2'142	—	—	4 ¹ / ₈ —5 ¹ / ₈	—	78,750	1,687
150,000	22,500	3'750	—	—	4 ¹ / ₈ —5 ¹ / ₈	90,000	150,000	5,625
250,000	1,125,000	112'500	—	—	10 ¹ / ₄ —10 ³ / ₈	220,000	250,000	281,250
125,250	9,450	1'885	—	—	11/-—12/-	100,000	125,250	2,362
275,000	55,000	5'238	—	—	1 ³ / ₁₀ —1 ⁵ / ₁₀	200,000	262,500	13,750
75,000	1,875	'625	—	—	—	60,000	75,000	469
1,000,000	400,000	13'333	—	—	11 ⁵ / ₈ —11 ⁷ / ₈	960,000	1,000,000	133,333
73,000	3,650	1'665	—	—	3 ³ / ₈ —4 ¹ / ₈	61,000	73,000	1,216
120,000	3,000*	'833	—	—	7/-—8/-	—	120,000	1,000
269,000	108,333	14'444	—	—	4 ¹ / ₂ —4 ¹ / ₂	185,000	250,000	36,111
72,000	64,800	45'000	—	—	—	48,000	72,000	32,400
300,000	30,000	5'000	—	—	6—6 ¹ / ₂	250,000	300,000	15,000
100,000	300,000*	300'000	—	—	13 ¹ / ₂ —13 ¹ / ₂	—	100,000	300,000
29,500	983*	3'332	—	—	—	—	29,500	983
10,821,328	13,497,582	20'183 Average.	891,301	18,150	—	—	9,583,731	1,934,376

* Dividends paid since reconstruction.

	Av. %	£	£
1894	24'216	4,096,264	991,983
1897	11'913	4,985,967	594,010
1899	69'468	501,500	348,383
—	20'183	9,583,731	1,934,376

AUSTRALIA AND NEW

Date of Registration.	NAME.	Nominal or Face value of Shares paid up.	Amount paid up on each Share.	Average rate of Cash Dividends per annum from date of Registration on paid-up value of Shares.
		£	£	£
1845	Australian Mining Company	7'375	7'375	'890
1881	Victory Charters Towers	'1916	'192	38'176
1886	Brilliant Gold	2'	2'	70'126
"	Day Dawn Block	1'	1'	8'359
"	Mount Morgan	'875	'875	43'843
1887	Waihi Gold	1'	1'094	26'632
"	Baker's Creek	'875	'875	6'593
"	Day Dawn P.C. Gold	1'	1'	3'221
1888	Blue Spur Preference and Ordinary	1'	1'	2'476
"	Victoria	1'	1'	19'811
1889	Brilliant and St. George	{ Fully paid '500 Part paid '325	{ '500 '325	67'126
"	Mill's Day Dawn United	'837	'837	9'870
1890	Queen Cross	'833	'833	3'758
1891	Victoria and Queen	{ Fully paid 1' Part paid '712	{ 1' '712	4'371
"	Brilliant Block	{ Fully paid 1' Part paid '700	{ 1' '700	9'003
1892	Aladdin's Lamp	1'	1'	21'875
"	Brilliant Central	'845	'845	1'862
1893	Craven's Caledonia	'233	'233	7'260
1894	Associated Gold Mines	1'	2'311	8'876
"	Great Boulder Proprietary	'100	'199	70'858
"	Hannan's Brownhill	1'	1'209	61'903
"	Hauraki Gold	'125	'125	60'
1895	Burbank's Birthday Gift	1'	1'083	9'519
"	East Murchison United	1'	1'	7'
"	Gibraltar Consolidated	1'	1'	1'
"	Great Boulder Main Reef	'500	'615	5'937
"	Great Boulder Perseverance	1'	1'	6'500
"	Hannan's Oroya	1'	1'	1'217
"	Lady Shenton	1'	1'	12'
"	Menzies' Gold Reefs Proprietary	1'	1'	2'
"	Myall's United	1'	1'	1'
"	Murchison New Chum (<i>now</i> Chums Consolidated).	'300	'300	1'250
"	North Boulder Gold	'500	'500	5'
"	Queensland Menzies	{ Fully paid '250 Part paid '200	{ '250 '200	32'979
"	Robinson	1'	1'	2'021
"	Royal Oak of Hauraki	'250	'250	1'315
"	Waitekauri Gold	1'	1'076	7'283
1896	Australia United	1'	1'	1'250
"	Bayley's United	'225	'225	2'500
"	Golconda	'875	'875	2'142
"	Howell's Consolidated	1'	1'	3'750
"	Lake View Consols	1'	1'	112'500
"	Mount Usher	1'	1'	1'885
"	Progress	1'	1'	5'238
"	Vale of Coolgardie	1'	1'	'625
1897	Ivanhoe Gold Corporation	5'	5'	13'333
"	Lachlan Goldfields	1'	1'	1'665
"	Lady Loch	'500	'500	'833
"	Peak Hill	1'	1'	14'444
1898	Kelly's Queen Block	'500	'500	45'
"	Sons of Gwalia	1'	1'	5'
1899	*Golden Horse Shoe Estates	5'	5'	300'
"	Pambula	1'	1'	3'332
"	*Golden Horse Shoe Gold	1'	1'	—

ZEALAND DIVIDEND MINES.

Last year's Dividends paid on Nominal value of Shares.	Average List Prices of Shares from 1897 to 1900.	LIST PRICES OF SHARES.				Last Dividend % on average List Price of Shares.
		1897.	1898.	1899.	1900.	
£ 50	£ No data	—	—	—	—	—
10'	'350	'275—'325	'425—'475	'400—'450	'20—'25	5'47
10'	'618	'812—'937	'575—'625	'500—'550	'45—'50	32'36
10'	'656	'800—'850	'675—'725	'575—'625	'475—'525	15'24
30'	4'593	3'562—3'687	4'062—4'187	5'375—5'625	5'06—5'19	5'71
40'	7'046	7'25—7'50	4'187—4'312	6'062—6'187	10'37—10'50	5'67
15'	—	—	—	—	—	—
2'50	'178	'150—'175	'175—'187	'187—'212	'162—'187	14'04
4'	'375	'475—'525	'400—'450	—	'175—'225	10'66
10'	'275	—	—	'350—'400	'15—'20	36'36
120'	2'515	1'562—1'687	2'187—2'312	3'000—3'250	3'000—3'125	23'85
15'	'350	'500—'625	'375—'500	'175—'225	'175—'225	35'85
7'50	—	—	—	—	—	—
15'	—	—	—	—	—	—
2'50	'656	1'125—1'250	'625—'750	'312—'437	'312—'437	3'61
5'	1'270	1'937—2'062	1'187—1'312	'500—'625	—	3'93
0'	—	—	—	—	—	—
4'	'075	—	'100—'125	—	'025—'050	12'42
27'50	4'389	2'875—3'000	3'125—3'250	8'062—8'187	3'25—3'37	6'26
100'	1'260	{ £1 Shares } '8'00—'8'125	'975—1'025	1'650—1'675	1'537—1'612	7'93
187'50	7'999	6'125—6'375	7'000—7'125	9'625—9'750	8'87—9'12	23'43
2'50	'259	'425—'475	'250—'300	'200—'225	'087—'112	1'20
12'50	1'546	1'437—1'562	1'062—1'187	1'875—2'000	1'56—1'69	8'08
15'	1'328	'875—1'000	'812—'937	1'812—1'937	1'56—1'69	11'29
5'	'695	1'062—1'187	1'000—1'125	'437—'562	'062—'125	7'19
5'	1'562	1'125—1'250	1'375—1'500	1'937—2'062	1'562—1'687	1'60
7'50	6'968	4'000—4'125	2'625—2'750	9'750—9'875	11'25—11'37	1'07
5'	1'452	1'000—1'125	'562—'687	2'062—2'187	1'937—2'062	3'44
20'	1'906	1'875—2'000	2'062—2'187	2'375—2'500	1'062—1'187	10'49
0'	'265	'375—'500	'187—'312	'225—'275	'100—'150	—
5'	—	—	—	—	—	—
0'	'162	'125—'175	'150—'200	—	—	—
5'	'708	—	'750—'875	'812—'937	'375—'500	3'53
30'	'687	—	'375—'625	'812—'937	—	10'91
10'	'424	'687—'812	'562—'687	'187—'312	'050—'100	23'58
5'	'0625	1/— 1/6	1/3—1/9	1/6—2/-	-/4½—-7/½	20'00
20'	2'328	2'625—2'750	1'500—1'750	2'062—2'187	2'812—2'937	8'59
5'	—	—	—	—	—	—
5'	'261	'150—'175	'100—'150	'312—'325	'425—'450	4'31
7'50	'446	'562—'687	'250—'375	'575—'625	'186—'312	14'71
7'50	1'281	1'000—1'125	1'750—1'875	1'500—1'750	'500—'750	5'85
250'	11'031	7'375—7'625	8'000—8'125	18'125—18'375	10'25—10'375	22'66
7'50	'741	'625—'875	—	'875—'925	'550—'600	10'12
10'	1'343	—	—	1'375—1'500	1'187—1'312	7'44
2'50	—	—	—	—	—	—
20'	9'354	—	4'937—5'062	11'250—11'375	11'625—11'875	10'69
5'	'687	—	—	'875—1'000	'375—'500	7'27
2'50	'359	'500—'625	'137—'162	'325—'375	'350—'400	3'48
20'	4'875	—	2'125—2'375	7'625—7'875	4'50—4'75	4'10
57'50	—	—	—	—	—	—
10'	3'833	—	2'000—2'125	3'212—3'437	6'00—6'125	2'60
15'	13'375	—	—	—	13'25—13'50	5'60
3'333	—	—	—	—	—	—
—	—	2'750—2'875	6'937—7'062	34'50—35'50	—	—

AUSTRALIA AND NEW ZEALAND

Date of Registration.	No.	NAME.	CAPITAL.			
			Nominal in May, 1897.	Additions to.	Reductions of.	Total in May, 1900.
			£	£	£	£
1892	1	Australian Gold Recovery	180,000	—	—	180,000
1894	—	British Westralia	50,000	30,000	—	80,000
„	—	Coolgardie Gold Syndicate	50,000	—	—	50,000
„	—	Elmslie	20,000	100,000	—	120,000
„	—	Gold Estates of Australia	100,000	—	—	100,000
„	5	Swan Syndicate	21,100	30,000	—	51,100
1895	—	Australian Prospecting	60,000	—	—	60,000
„	—	Colonial Goldfields	5,000	245,000	—	250,000
„	—	English and Colonial	20,000	—	—	20,000
„	—	Golden Australia	250,000	—	—	250,000
„	5	London and Western A Exploration	300,000	—	—	300,000
1896	—	Australian Search	5,000	—	—	5,000
„	—	Consolidated Goldfields of New Zealand	225,000	75,000	—	300,000
„	—	Hannan's Public Crushing. London and New Zealand Exploration	70,000	—	—	70,000
„	—	Mathinna Union	100,000	—	—	100,000
„	—	Mines Investment Corpora- tion	20,000	—	—	20,000
„	—	Mines Investment Corpora- tion	300,000	—	—	300,000
1897	—	London and Globe	2,000,000	{ An amal- gamation. }	—	2,000,000
„	—	Westralian Joint Stock Founders	250,000	—	—	250,000
„	3	Westralian Options	10,000	—	—	10,000
1898	1	Colonial Consolidated	250,000	—	—	250,000
—	21	Totals	4,286,100	480,000	—	4,766,100

DIVIDEND FINANCE, 1860 TO 1900.

Total paid-up Capital, May, 1900.	Total Dividends to May, 1900.	Equal to % per annum after year of Registration.	Premiums on Shares.	Debentures.	List Prices of Shares, May, 1900.	Vendor.	Average from date of Registration.	
							Paid-up Capital.	Dividend per annum.
£	£	%	%	£	£	£	£	£
159,000	19,875	1·562	—	—	—	—	159,000	2,484
80,000	136,000	28·332	—	—	—	—	80,000	22,666
49,915	112,309	37·500	—	—	—	—	49,915	18,718
49,961	28,980	9·367	—	—	—	—	49,961	4,830
98,489	49,244	8·332	—	—	—	—	98,489	8,207
48,158	12,200	5·198	—	—	—	—	39,105	2,033
8,057	3,222	7·993	—	—	—	—	8,057	644
96,250	11,000	2·285	—	—	—	—	96,250	2,200
12,170	3,042	5·000	—	—	—	—	12,170	608
26,551	2,655	2·500	—	—	—	—	26,551	531
69,300	56,132	16·199	—	—	—	—	69,300	11,226
1,057	1,321	31·250	—	—	—	—	1,057	330
225,000	22,500	2·500	—	50,000	—	—	225,000	5,625
70,000	9,100	3·250	—	—	—	—	70,000	2,275
81,013	7,951	2·452	—	—	—	—	81,013	1,987
10,576	629	1·484	—	—	—	—	10,576	157
34,317	18,911	13·777	—	* 10,000	—	—	34,317	4,728
800,000	500,000	20·833	—	—	—	—	800,000	166,666
248,364	12,418	1·666	—	—	—	—	248,364	4,139
1,760	176	3·352	—	—	—	—	1,760	59
93,657	6,060	3·235	—	—	—	—	93,657	3,030
2,263,595	1,013,725	11·671 Av. %	—	50,000	—	—	2,254,542	263,143

* Loan.

AVERAGE.

	%	£	£
1894	12·369	476,470	58,938
1897	11·943	1,684,415	201,175
1899	3·235	93,657	3,030

INDIAN AND MISCELLANEOUS

Date of Registration.	No.	NAME.	CAPITAL.				
			Nominal, date of Registration.	Additions to.	Reductions of.	Total in May, 1900.	Total paid-up Capital, May, 1900.
			£	£	£	£	£
1830 } 1856 } R 1888 }	-	{ St. John del Rey. From 1888. Paid dividends, 1842 to 1881, £1,400,500 }	252,000	348,000	—	600,000	441,295
1864	-	Frontino and Boliviar	141,730	—	1,730	140,000	128,662
1867	-	Javali	87,218	—	69,218	18,000	93,388
1870	-	Sierra Buttes	526,250	—	—	526,250	526,250
1871	-	Richmond Consolidated	270,000	—	—	270,000	270,000
1872	-	Western Andes	75,000	—	—	75,000	74,550
1874	-	Antioquia Frontino	67,500	—	—	67,500	66,619
1879	-	Columbian Hydraulic	75,000	—	—	75,000	76,099
1880	-	Mysore Gold	135,000	115,000	—	250,000	445,000
"	-	Ooregum	245,000	20,000	—	265,000	203,905
1882	-	Orita Gold	20,000	10,000	—	30,000	30,000
"	-	Sucre Mine	15,000	—	—	15,000	12,630
1883	-	Columbian Mines Corporation	30,000	—	—	30,000	26,204
1889	-	Champion Reef	200,000	20,000	—	220,000	286,370
"	-	Chiapas	252,500	—	—	252,500	233,061
1890	-	Alaska Treadwell	1,000,000	—	—	1,000,000	1,000,000
1891	-	Darien Gold	100,000	25,000	—	125,000	118,000
"	-	De Lamar Mining	400,000	—	—	400,000	400,000
1892	-	Alaska Mexican	200,000	—	—	200,000	183,100
"	-	Coronandel Gold	120,000	15,000	—	135,000	156,974
"	-	Montana	660,000	—	—	660,000	624,272
				Former Co. paid to 1891 Dividend £537,057			
1893	-	Barima	72,000	—	—	72,000	72,000
"	-	Nundydroog	220,000	22,000	—	242,000	296,000
"	-	Ouro Preto	80,000	60,000	—	140,000	140,000
"	-	Victor	200,000	—	—	200,000	200,000
1895	-	Jumper Gold Syndicate	100,000	—	—	100,000	139,600
1896	-	Central Development Syndicate	5,000	—	—	5,000	4,150
"	-	Grand Central Mining Company	250,000	50,000	—	300,000	250,000
"	-	Mikado Gold	45,000	35,000	—	80,000	45,000
1897	-	Alaska Goldfields	100,000	200,000	—	300,000	275,000
"	-	Carlyle Consolidated Gold	150,000	—	—	150,000	123,795
"	-	El Mundo (Mexico) Gold	100,000	—	—	100,000	100,000
"	-	Idaho Exploring	100,000	—	—	100,000	82,624
"	-	Queen Bess Proprietary	120,000	—	—	120,000	100,000
1898	-	Le Roi Mining	1,000,000	—	—	1,000,000	1,000,000
"	-	Lillie (Cripple Creek)	225,000	—	—	225,000	225,000
"	-	St. David's Gold and Copper	60,000	—	—	60,000	60,000
"	-	Yukon Mining and Dredging	200,000	—	—	200,000	200,000
"	-	Ymir Gold	200,000	—	—	200,000	200,000
1899	-	McDonald's Bonanza	450,000	—	—	450,000	433,475
"	-	O'Kanogan Free Gold Mines	16,000	—	—	16,000	16,000
"	-	Stratton's Independence	1,100,000	—	—	1,100,000	1,100,000
"	-	Tomboy Gold Mines	300,000	—	—	300,000	300,000
		Totals	9,965,198	920,000	70,948	10,814,250	10,759,023

DIVIDEND MINES, 1856 TO 1900.

Total Divi- dends to May, 1900.	Equal to % per annum after year of Regis- tration.	Premiums on Shares.	Deben- tures.	List Prices of Shares, May, 1900.	Vendor.	Average from date of Registration.	
						Paid-up Capital.	Dividends per annum.
£	%	£	£	£	£	£	£
104,907	3·131	—	158,360	—	—	278,946	8,734
266,437	14·791	—	—	—	—	128,662	19,031
5,266	·184	—	—	—	—	86,367	159
981,671	6·217	—	—	—	—	526,250	32,722
896,400	11·448	—	—	—	—	270,000	30,910
33,375	1·588	—	4,000	—	—	75,000	1,192
3,050	·175	—	—	—	—	66,619	117
96,562	6·042	1,099	—	—	75,747	76,099	4,598
1,348,958	22·902	195,000	—	—	63,750	294,500	67,448
817,750	21·261	—	—	—	20,000	192,305	40,887
7,500	1·535	—	—	—	—	27,222	417
11,334	4·980	—	400	—	—	12,630	629
560	·125	—	—	—	21,250	26,204	33
1,142,500	43·201	66,370	—	—	127,000	240,417	103,864
20,915	·815	—	2,950	—	—	233,061	1,901
685,000	6·850	—	—	—	1,000,000	1,000,000	68,500
30,000	2·981	18,000	—	—	—	111,777	3,333
480,000	13·333	—	—	—	350,000	400,000	53,333
102,600	7·414	3,100	—	—	120,000	172,975	12,825
30,656	2·882	22,500	—	—	50,000	133,865	3,832
85,837	1·718	—	—	—	—	624,272	10,729
3,600	·713	—	—	—	—	72,000	514
419,650	24·369	54,000	—	—	—	246,000	59,950
10,000	1·428	—	35,000	—	—	100,000	1,428
231,000	16·500	—	—	—	—	200,000	33,000
47,153	8·140	39,600	—	—	—	115,840	9,430
415	2·506	—	—	—	—	4,150	104
187,500	18·750	—	—	—	250,000	250,000	46,875
2,250	1·249	—	—	—	30,000	45,000	562
19,791	3·049	25,000	—	—	20,000	216,666	6,597
2,652	·714	—	—	—	65,000	123,795	884
2,500	·833	—	—	—	80,000	100,000	833
1,646	·664	—	—	—	—	82,624	549
5,000	1·666	—	—	—	85,000	100,000	1,666
25,000	1·250	—	—	—	950,000	1,000,000	12,500
44,531	9·895	—	—	—	224,993	225,000	22,265
12,000	10·000	—	4,666	—	55,000	60,000	6,000
58,000	14·500	—	—	—	170,000	200,000	29,000
10,000	2·500	—	—	—	199,993	200,000	5,000
9,847	2·271	—	—	—	410,000	433,475	9,847
800	5·000	—	—	—	—	16,000	800
440,000	40·000	—	—	—	1,000,000	1,100,000	440,000
15,000	5·000	—	—	—	299,993	300,000	15,000
8,699,513	11·487	424,669	205,376	—	—	10,167,721	1,167,998
Average.							

To 1884 . . .	%	£	£
„ 1897 . . .	10·010	5,595,171	560,086
„ 1899 . . .	6·502	1,038,075	67,500
„ 1899 . . .	15·291	3,534,475	540,412

INDIAN AND MISCELLANEOUS

Date of Registration.	NAME.	Nominal or Face value of Shares.	Amount paid up on each Share.	Average rate of Cash Dividends per ann. on paid-up value of Shares from date of Registration.	Last year's Dividends paid on Nominal value of Shares.
		£	£	%	%
1856	St. John del Rey	1	1	3.131	11.25
1864	Frontino and Boliviari	1	1	14.791	30
1867	Javali	100	886	184	4.063
1870	Sierra Butts	2	2	6.217	—
1871	Richmond Consolidated	5	5	11.448	5
1872	Western Andes	5	5	1.588	—
1874	Antioquia Frontino	1	1	.175	10
1879	Columbian Hydraulic	1	1.014	6.042	5
1880	Mysore Gold	500	890	22.902	140
„	Ooregum	—	—	—	30
„	„ { Fully paid Ordinary	1	769	21.261	20
1882	Orita Gold	1	1	1.535	—
„	Sucre Mine	1	1	4.980	—
1883	Columbian Mines Corporation	1	1	.125	—
1889	Champion Reef	500	651	43.201	125
„	Chiapas	1	1	.815	—
1890	Alaska Treadwell	5	5	6.850	6
1891	Darien Gold	1	1.180	2.981	—
„	De Lamar Mining	1	1	13.333	2.50
1892	Alaska Mexican	1	1.017	7.414	8
„	Coromandel Gold	1	1.167	2.862	10.40
„	Montana	1	1	1.718	2.50
1893	Barima	1	1	.713	—
„	Nundydroog	1	1.223	24.369	30
„	Ouro Preto	1	1	1.428	10
„	Victor	1	1	16.500	—
1895	Jumper Gold Syndicate	1	1.396	8.140	—
1896	Central Development Syndicate	50	50	2.506	—
„	Grand Central Mining Co.	1	1	18.750	30
„	Mikado Gold	1	1	1.249	{ 5 } { 10 }
1897	Alaska Goldfields	1	1.100	3.049	5
„	Carlyle Consolidated Gold	1	1	.714	1.25
„	El Mundo (Mexico) Gold	1	1	.833	2.50
„	Idaho Exploring	250	250	.664	8
„	„ { Pref. Ord.	—	—	—	—
„	Queen Bess Proprietary	1	1	1.666	5
1898	Le Roi Mining	5	5	1.250	5
„	Lillie (Cripple Creek)	1	1	9.895	12.50
„	St. David's Gold and Copper	1	1	10	20
„	Yukon Mining and Dredging	200	200	14.500	21
„	Ymir Gold	1	1	2.500	5
1899	McDonald's Bonanza	1	1	2.271	10
„	O'Kanogan Free Gold Mines	-2½	-2½	5	.25
„	Stratton's Independence	1	1	40	30
„	Tomboy Gold Mines	1	1	5	5

DIVIDEND-PAYING MINES.

Average List Prices of Shares from 1887 to 1900.	LIST PRICES OF SHARES.				Last Dividend % on average List Price of Shares.
	1897.	1898.	1899.	1900.	
£	£	£	£	£	%
1·187	·975—1·025	·825—·875	1·425—1·475	1·425—1·475	9·47
1·890	1·50—1·625	2·125—2·250	1·809—1·937	1·875—2·000	15·84
·050	—	·/6—1/6	·/6—1/6	·/6—1/6	8·12
·124	—	·062—·186	—	—	—
·187	·062—·187	·125—·250	—	—	—
·343	·375—·500	·375—·500	·250—·375	·125—·250	72·88
—	—	—	—	—	—
·937	—	·875—1·000	—	—	10·67
·374	·250—·375	·312—·437	·437—·562	·250—·375	13·36
5·562	4·937—5·062	5·125—5·250	5·437—5·562	6·500—6·625	12·58
4·109	3·125—3·250	3·937—4·062	4·125—4·375	4·875—5·125	7·30
3·703	3·75—3·875	3·375—3·500	3·562—3·687	3·875—4·000	5·40
—	—	—	—	—	—
—	—	—	—	—	—
5·172	4·437—4·562	4·875—5·000	5·000—5·125	6·125—6·250	12·08
·/9	—	—	—	·/6—1/·	—
4·750	4·125—5·375	4·50—5·00	4·50—4·75	4·75—5·00	6·31
—	—	—	—	6·75—7·00	—
—	—	—	—	7·25—7·50	—
—	—	—	—	13·00—13·50	—
·212	·200—·250	·150—·200	·225—·275	·175—·225	11·79
1·078	1·25—1·50	1·125—1·250	·937—1·062	·625—·875	7·42
2·093	3·375—3·50	2·937—3·062	1·000—1·125	·809—·937	4·96
·272	·200—·250	·225—·275	·400—·425	·175—·225	9·19
—	—	—	—	—	—
3·390	3·312—3·437	3·562—3·687	3·062—3·186	3·375—3·500	8·84
·875	1·000—1·250	·750—1·000	·500—·750	—	11·42
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
1·140	·687—·812	1·500—1·625	1·375—1·500	·750—·875	26·31
2·999	—	2·937—3·062	—	—	1·66
1·187	—	1·437—1·562	1·062—1·185	·875—1·000	—
·150	—	·150—·200	·100—·150	—	8·33
·858	—	·852—·937	·750—·892	—	2·91
·078	—	·100—·150	·050—·025	·050—·100	25·6
—	—	—	·100—·050	—	—
·686	—	—	·687—·809	·500—·750	7·2
7·156	—	—	8·000—8·125	6·187—6·312	3·4
·437	—	—	·250—·500	·375—·625	28·6
3·625	—	—	—	3·50—3·75	5·5
—	—	—	—	—	—
1·500	—	—	1·250—1·375	1·625—1·750	3·3
·968	—	—	1·000—1·125	·809—·937	10·3
—	—	—	—	—	—
2·999	—	—	—	2·937—3·062	10·0
—	—	—	—	—	—

INDIAN AND MISCELLANEOUS

Date of Registration.	No.	NAME.	CAPITAL.				
			Nominal, date of Registration.	Additions to.	Reductions of.	Total in May, 1900.	Total paid-up Capital, May, 1900.
			£	£	£	£	£
1864	-	Mining Shares Investment	250,000	—	147,660	102,340	83,047
1888	-	Mines Contract	25,000	176,250	—	201,250	59,845
1892	-	Mining Investment Company of Glasgow	10,000	20,000	—	30,000	30,000
1894	-	London Mining Investment Corporation	1,000	—	—	1,000	600
„	-	New Austral	400,000	—	—	400,000	200,000
1895	-	British Columbia Development	10,000	10,000	—	20,000	20,000
„	-	Development and Finance Company	250,000	—	—	250,000	119,782
„	-	Explorers' Finance Co.	50,000	—	—	50,000	9,469
„	-	Gold Lands Corporation	255,000	—	—	255,000	117,500
„	-	Golden Wealth	50,000	—	—	50,000	10,000
„	-	London-Paris Securities	500,000	375,000	—	875,000	500,000
„	-	London United Investment Mines and Banking Corporation	200,000	—	—	200,000	59,079
„	-	Southern Development	250,000	—	—	250,000	84,180
„	-	Universal Corporation	50,000	—	—	50,000	25,500
„	-	United Goldfields (<i>now</i> London United Investment Company)	500,000	—	—	500,000	45,514
1896	-	Exploration Company	200,000	—	—	200,000	59,079
„	-	New Goldfields of British Columbia	1,250,000	—	—	1,250,000	1,050,000
„	-	Occidental Syndicate	250,000	—	—	250,000	69,143
„	-	British America Corporation	10,000	20,000	—	30,000	24,000
1897	-	Colonial Estates and Investment	1,500,000	—	—	1,500,000	1,500,000
„	-	Consolidated Mines Selection	84,000	—	—	84,000	78,212
„	-	Klondyke Bonanza	300,000	—	—	300,000	300,000
„	-	London and Vancouver Finance	150,000	—	—	150,000	55,250
„	-	Union Financial Syndicate	100,250	—	—	100,250	12,910
„	-	Yukon Trading, Mining, and Exploration	30,000	—	—	30,000	12,775
1898	-	Westralian De Kaap	200,000	—	—	200,000	60,000
1899	-	Gold Mines Trust and Finance	60,000	—	—	60,000	63,000
		Totals	50,000	—	—	50,000	10,500
		Totals	6,985,250	601,250	147,660	7,438,840	4,659,385

DIVIDEND FINANCE.

Total Dividends to May, 1900.	Equal to % per annum after year of Registration.	Premiums on Shares.	Debentures.	List Prices of Shares, May, 1900.	Vendor.	Average from date of Registration.	
						Paid-up Capital.	Dividends per annum.
£	%	£	£	£	£	£	£
25,442	1·519	—	—	—	—	83,047	1,262
70,155	9·760	—	—	—	—	59,845	5,846
12,250	7·655	—	—	—	—	20,000	1,531
1,380	38·333	—	—	—	—	600	230
42,950	3·579	—	—	—	—	200,000	7,158
20,937	23·261	—	—	—	—	18,000	4,187
5,989	1·000	—	—	—	—	119,782	1,198
423	·887	—	—	—	—	9,469	84
22,500	3·829	—	—	—	—	117,500	4,500
500	1·000	—	—	—	—	10,000	100
18,750	·750	—	—	—	—	500,000	3,750
2,854	·966	—	—	—	—	59,079	571
23,149	5·500	—	—	—	—	84,180	4,629
8,925	7·000	—	—	—	—	25,500	1,785
9,102	4·000	—	—	—	—	45,514	1,820
2,854	·966	—	—	—	—	59,079	571
625,000	14·880	300,000	—	—	—	1,050,000	156,250
13,829	5·000	—	—	—	—	69,143	3,457
1,800	1·875	—	—	—	—	24,000	450
150,000	3·333	—	—	—	—	1,500,000	50,000
410	·175	—	—	—	—	78,212	137
90,000	10·000	—	—	—	—	300,000	30,000
5,295	3·194	—	—	—	—	55,250	1,765
2,532	6·537	—	—	—	—	12,910	844
22,498	58·700	—	—	—	—	12,775	7,499
15,600	8·666	—	—	—	—	60,000	5,200
3,000	2·380	—	—	—	—	63,000	1,500
5,000	47·619	—	—	—	—	10,500	5,000
1,203,124	6·483 Average.	300,000	—	—	—	4,647,385	301,324

To 1894	.	.	%	£	£
„ 1897	.	.	4·409	363,492	16,027
„ 1899	.	.	6·621	4,210,393	278,797
	.	.	8·843	73,500	6,500

TABLES NOS. XII. TO XXIII., RELATING TO YIELDS OF
GOLD-MINING COMPANIES, giving:—

Date of Registration.

Name of Company.

Year. Ore Milled. Tons.

Average yield per ton from Milling, in Bullion or Fine Gold.

“	“	“	“	Concentrates	“	“
“	“	“	“	Tailings	“	“
“	“	“	“	Slimes	“	“

Total yield from all sources, in Bullion or Fine Gold.

SOUTH AFRICAN MINES.

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwts.	tons.	dwts.
1892 } R.C. 1897 }	Albion (Transvaal)	1898	10,450	5.502	—	—
1893 } R.C. 1895 }	Angelo	1897	64,232	10.262	—	—
		1898	95,074	9.485	—	—
		1899	120,160	9.822	—	—
1886	Aurora	1890	7,900	9.09	—	—
		1891	11,849	8.63	—	—
		1892	28,534	6.72	—	—
		1893	34,424	5.58	—	—
		1894	12,023	5.09	—	—
		1895	3,131	5.99	—	—
1889 } R.C. 1895 }	Aurora West United	1892	37,537	6.72	—	—
	9 months	1893	36,845	5.61	—	—
		1899	41,342	5.623	—	—
1888 } R.C. 1895 }	Balmoral	1897	30,485	4.995	—	—
		1898	74,881	3.993	—	—
		1899	Suspended pending arrangements		—	—
1887 } R.C. 1895 }	Bantjes	—	Developing ore reserves		—	—
1887 } R.C. 1895 }	Banket Gold	1895	5,539	5.73	—	—
1885 } R.C. 1892 }	Barrett (De Kaap)	1896	3,553	2.70	Ore and	tailings
		1896	1,100	7.22	—	—
		1897	31,018	7.206	—	—
		1898	29,840	6.302	—	—
	8 months	1899	28,571	5.467	—	—
1894	Bonanza	1896	19,792	18.338	—	—
		1897	63,129	19.141	—	—
		1898	63,115	18.764	—	—
	8 months	1899	47,621	17.718	—	—
1889	Buffelsdoorn Estate	1893	7,536	11.31	—	—
		1895	116,708	5.75	—	—
		1896	114,313	3.81	—	—
		1897	41,737	3.190	—	—
		1898	136,725	2.575	—	—
	8 months	1899	68,761	2.323	—	—

APPENDIX—TABLE XII.

NOTE.—Short tons of 2000 lbs. are generally used.

TAILINGS.		SLIMES.		Total average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	YRS.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YRS.
—	—	—	—	—	—	—	—	—
47,937	8·148	—	—	16·343	—	Dividend-paying	—	—
75,278	8·153	947	4·392	16·139	·871	—	15·88	3
92,489	7·298	—	—	15·440	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
32,057	4·089	—	—	8·793	—	—	—	—
21,960	3·129	—	—	7·206	—	—	—	—
52,810	2·829	—	—	6·244	·886	—	—	—
for further funds		—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
8,096	4·59	—	—	—	—	—	—	—
15,061	5·10	—	—	—	—	Dividend-paying	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
3,985	—	Ore and	tailings	6·754	—	—	7·08	4
12,058	16·694	—	—	28·535	—	Dividend-paying	—	—
47,830	13·668	—	—	29·516	—	—	—	—
61,993	10·579	—	—	29·155	·735	—	—	—
47,621	9·885	—	—	27·602	—	—	28·96	4
—	—	—	—	—	—	—	—	—
95,348	4·25	—	—	9·062	—	—	—	—
86,073	5·05	—	—	7·615	—	—	—	—
32,942	4·578	—	—	6·804	—	—	—	—
109,652	4·000	—	—	5·783	·779	—	—	—
66,047	4·008	—	—	6·173	—	—	8·94	6

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
			tons.	dwts.	tons.	dwts.	
1887	City and Suburban . . .	1891	31,683	7·833	—	—	
		1892	36,459	15·979	—	—	
		1893	49,805	15·170	—	—	
		1894	109,849	9·071	565	65·982	
		1895	196,040	7·538	—	—	
		1896	202,850	6·835	—	—	
		1897	226,863	8·000	—	—	
		1898	218,116	8·073	—	—	
		8 months	1899	153,846	8·909	—	—
		1888 } R.C. 1896 }	Consolidated Main Reef . . .	1888	9,716	5·294	—
1892	34,136			5·747	—	—	
1893	13,114			6·640	—	—	
1894	25,607			4·922	—	—	
1898	68,496			7·724	—	—	
9 months	1899			54,800	6·720	—	—
R.C. 1895	Consort Consolidated . . .	—	3,667	9·239	—	—	
1892	Crown (Deep)	1897	71,243	7·023	460	17·695	
		1898	268,203	6·529	—	—	
		9 months	1899	222,731	6·090	—	—
1888	Crown Reef	1894	187,504	7·80	—	—	
		1895	209,993	7·84	—	—	
		1896	198,236	8·035	6,140	28·648	
		1897	188,995	9·659	13,287	22·275	
		1898	194,454	9·233	—	—	
		9 months	1899	160,674	9·274	—	—
1895	Driefontein Consolidated . . .	1898	118,747	5·829	—	—	
		9 months	1899	130,658	6·315	—	—
1895	Durban Roodepoort (Deep)	1898	42,536	8·317	—	—	
		9 months	1899	78,748	8·805	—	—
R.C. 1888	Durban Roodepoort Gold . . .	1889	10,155	29·646	—	—	
		1890	15,590	20·543	—	—	
		1891	40,052	11·551	—	—	
		1892	59,559	10·458	—	—	
		1893	78,650	9·633	—	—	
		1894	77,745	9·890	—	—	
		1895	101,380	9·345	—	—	
		1896	109,735	8·863	—	—	
		1897	122,825	8·944	—	—	
		1898	122,750	9·767	—	—	
		9 months	1899	91,030	10·181	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total average Yield of Bullion per Ton. of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	yrs.
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
24,408	2·000	—	—	19·187	—			
105,310	3·569	—	—	12·830	—			
174,414	4·190	—	—	11·384	—			
156,639	4·920	—	—	10·634	—			
177,889	4·848	—	—	11·784	—			
175,935	4·847	—	—	11·983	·868			
121,692	5·427	—	—	13·202	—	—	12·46	7
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
13,200	3·742	—	—	6·851	—			
44,339	5·269	12,616	1·792	11·409	·873			
52,898	3·833	—	—	10·420	—	—	10·96	2
—	—	—	—	—	—	—	—	—
56,755	7·965	—	—	13·483	—	Dividend-paying		
221,604	6·313	42,167	2·305	11·995	·817	—		
171,436	5·006	43,755	1·832	10·304	—	—	11·50	3
211,116	4·12	—	—	12·858	—	Dividend-paying		
158,917	4·89	—	—	12·384	—			
120,877	5·935	—	—	13·357	—			
165,899	5·191	—	—	15·783	—			
149,809	5·102	34,209	2·609	14·406	·844			
132,870	5·949	24,105	3·502	14·719	—	—	13·86	6
92,211	6·050	—	—	10·528	·863	Dividend-paying		
106,926	6·182	—	—	11·375	—	—	10·97	2
26,953	5·870	9,736	2·163	12·532	·861			
54,805	5·183	23,739	2·035	13·025	—	—	—	—
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
79,765	5·704	—	—	15·418	—			
101,245	4·456	—	—	15·694	—			
79,470	5·485	—	—	13·556	—			
71,090	5·233	—	—	12·241	—			
82,597	3·933	—	—	11·590	—			
81,577	3·916	—	—	12·378	·880			
61,011	4·985	—	—	13·522	—	—	13·24	7

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwt.	tons.	dwt.
R.C. 1895	East Orion	1890	12,762	6.205	—	—
		1891	6,980	9.544	—	—
		1892	17,756	6.874	—	—
		1893	10,312	6.225	—	—
		1894	10,307	6.219	—	—
R.C. 1895	Eastleigh	1894	39,960	2.522	—	—
		1895	53,175	3.440	—	—
		1896	34,398	3.109	—	—
		1897	48,100	2.129	—	—
		1898	14,550	2.525	—	—
		1899	Mine shut down,		April, 1898.	
1889 } R.C. 1894 }	Elandslaagte Gold	1895	13,189	3.806	—	—
		1895	16,385	3.298	—	—
		1896	15,087	2.333	—	—
		1896	2,875	7.250	Treated by Dry	
1898	Ferreira (Deep) 4 months	1899	37,330	13.640	—	—
1887	Ferreira Gold	1891	55,097	16.821	—	—
		1892	49,250	14.352	—	—
		1893	47,376	18.565	—	—
		1894	47,959	21.912	—	—
		1895	61,254	19.685	—	—
		1896	120,772	16.446	—	—
		1897	125,326	15.662	—	—
		1898	131,713	14.257	—	—
	8 months	1899	85,183	14.832	2,225	110.660
1885 } R.C. 1894 }	Forbes Reef	1894	42,696	1.211	—	—
		1895	23,293	.862	—	—
		1896	21,913	1.175	—	—
R.C. 1895	French Rand	1895	12,378	5.740	—	—
		1898	24,152	7.215	—	—
	4 months	1899	76,297	6.614	—	—
1893	Geldenhuis (Deep)	1895	24,642	3.520	—	—
		1896	144,059	4.854	—	—
		1897	198,551	6.767	—	—
		1898	284,700	7.125	—	—
	9 months	1899	226,754	7.821	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	1000ths
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YRS.
—	—	—	—	—	—		—	—
—	—	—	—	—	—		—	—
—	—	—	—	—	—		—	—
—	—	—	—	—	—		—	—
28,573	5·603	—	—	—	—		—	—
33,700	7·780	—	—	—	—		—	—
22,970	8·188	11,952	5·836	10·543	—		—	—
38,620	6·363	10,365	5·250	8·369	—		—	—
10,920	7·190	—	—	8·985	·748	Including slimes, weight not stated.	—	—
—	—	—	—	—	—		—	—
10,610	3·379	—	—	—	—		—	—
13,330	3·713	—	—	—	—		—	—
13,050	2·894	—	—	—	—		—	—
process.	—	—	—	—	—		—	—
35,027	6·478	—	—	19·719	—		—	—
—	—	—	—	—	—	Dividend-paying	—	—
—	—	—	—	19·587	—		—	—
—	—	—	—	23·503	—		—	—
40,897	6·601	—	—	32·302	—		—	—
35,917	8·670	—	—	29·120	—		—	—
86,649	7·773	—	—	25·255	—		—	—
95,553	6·952	—	—	20·963	—		—	—
93,800	7·649	20,909	4·008	23·049	·879		—	—
60,200	6·769	5,111	18·121	23·594	—		23·754	7
—	—	—	—	—	—		—	—
—	—	—	—	—	—		—	—
—	—	—	—	—	—		—	—
8,385	3·160	—	—	8·000	—		—	—
16,665	4·810	—	—	10·529	·889		—	—
59,175	6·018	—	—	11·282	—		11·10	2
12,420	4·100	—	—	5·550	—	Dividend-paying	—	—
98,600	4·285	—	—	7·778	—		—	—
162,470	5·106	—	—	10·945	—		—	—
212,590	5·305	66,472	1·280	11·385	·842		—	—
166,274	4·537	62,055	1·690	11·611	—		10·58	5

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.			
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.		
1887	Geldenhuis Estate . . .	1888	tons.	dwts.	tons.	dwts.		
			4,278	21·078	—	—		
			1889	1,386	17·878	—	—	
			1891	29,964	20·774	—	—	
			1892	78,053	12·228	—	—	
			1893	83,048	17·925	—	—	
			1894	116,220	7·509	—	—	
			1895	151,576	6·749	—	—	
			1896	178,439	6·005	5,098	15·166	
			1897	194,425	7·547	11,560	12·624	
			1898	208,367	7·717	—	—	
			9 months	1899	168,445	7·723	13,160	14·550
1889	Geldenhuis Main Reef . . .	1890	8,341	17·479	—	—		
			1891	6,179	11·668	—	—	
			1892	15,108	6·877	—	—	
			1893	9,384	7·282	—	—	
			1894	29,993	6·610	—	—	
			1895	39,636	8·420	—	—	
			1896	35,018	7·344	—	—	
			1897	39,571	6·202	—	—	
			1898	21,772	4·729	—	—	
			8 months	1899	22,871	5·687	—	—
1887	George Goch	1890	9,022	11·416	—	—		
			1891	25,224	8·485	—	—	
			1892	28,325	7·430	—	—	
			1893	20,730	6·878	—	—	
			1894	62,108	5·880	—	—	
			1895	78,109	6·090	—	—	
1887	George Goch (Metropoli- tan Co.)	1888	1,989	9·391	—	—		
			1889	2,425	7·010	—	—	
			1890	3,120	8·903	—	—	
			1892	29,713	5·150	—	—	
			1894	33,689	7·160	—	—	
			1895	46,903	5·860	—	—	
			1896	103,515	4·879	—	—	
			1897	108,151	4·035	—	—	
			(New Goch)	1898	98,880	3·580	—	—
			8 months	1899	70,902	5·167	1,472	99·510
1892	Ginsberg	1894	10,212	7·630	—	—		
			1895	14,697	10·250	—	—	
			1896	21,529	8·602	—	—	
			1897	61,372	8·015	—	—	
			1898	63,315	7·182	—	—	
			9 months	1899	57,202	7·069	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	YTS.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YTS.
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
68,921	4·277	—	—	10·526	—			
119,809	3·601	—	—	9·724	—			
112,173	3·322	—	—	8·527	—			
125,480	3·869	—	—	10·795	—			
136,512	5·007	52,158	3·599	13·137	·826			
110,170	4·969	55,113	2·537	12·941	—	—	9·16	7
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
27,850	4·350	—	—	10·664	—			
25,513	6·000	—	—	12·303	—			
22,020	5·146	—	—	10·580	—			
25,092	5·709	—	—	9·834	—			
14,500	3·776	—	—	7·245	·820			
15,860	3·588	—	—	8·176	—	—	9·98	7
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
49,338	3·790	—	—	8·900	—			
69,215	4·860	—	—	10·406	—	Both mines together		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
6,300	4·620	—	—	8·039	—			
38,694	4·030	—	—	9·183	—			
24,486	4·373	—	—	8·830	—	Both mines together		
75,906	3·851	—	—	6·743	—			
65,885	4·067	—	—	6·659	·802			
46,960	4·256	—	—	10·052	—	—	—	—
7,576	4·960	—	—	—	—	Dividend-paying		
11,870	5·110	—	—	—	—			
14,344	6·521	—	—	12·947	—			
44,565	5·315	—	—	11·874	—			
42,536	5·521	—	—	11·210	·887			
37,925	5·553	—	—	10·751	—	—	11·65	6

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
			tons.	dwts.	tons.	dwts.	
1881 } R.C. 1889 }	Glencairn	1892	38,120	10·102	—	—	
		1893	38,937	8·174	—	—	
		1894	65,729	7·930	—	—	
		1895	96,520	7·810	—	—	
		1896	87,275	5·227	—	—	
		1897	84,938	5·032	—	—	
		1898	191,825	4·989	—	—	
		9 months	1899	145,146	4·920	—	—
		1895	Glen (Deep)	1898	35,252	6·940	—
9 months	1899			122,510	7·354	—	—
1895	Glynn's Lydenberg	1897	9,833	8·343	—	—	
		1898	20,221	8·035	—	—	
		9 months	1899	19,006	8·116	6,856	10·104
R.C. 1897	Graskop	1896	2,904	10·516	—	—	
		1897	—	—	—	—	
		1898	2,835	15·322	—	—	
1888	Great Britain	1890	908	1·409	—	—	
		1891	5,410	3·142	—	—	
		1891	3,030	2·780	—	—	
1887	Henry Nourse	1890	7,698	12·666	—	—	
		1891	8,106	14·332	—	—	
		1892	11,941	14·871	—	—	
		1893	19,749	15·524	—	—	
		1894	25,104	16·650	—	—	
		1895	47,417	13·100	—	—	
		1896	92,103	11·725	—	—	
		1897	101,708	12·323	—	—	
		1898	106,790	11·772	—	—	
		9 months	1899	94,543	10·441	—	—
1886	Johannesburg Pioneer	1889	6,455	17·772	—	—	
		1892	14,306	16·317	—	—	
		1893	17,607	10·306	—	—	
		1894	19,910	11·001	—	—	
		1895	26,128	13·351	—	—	
		1896	33,194	14·557	—	—	
		1897	36,572	16·087	—	—	
		1898	35,622	22·011	—	—	
		9 months	1899	29,979	18·001	—	—

APPENDIX—TABLE XII.

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	Yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	Yrs.
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
75,109	5·570	—	—	14·551	—			
59,749	6·200	—	—	11·651	—			
60,480	3·807	—	—	7·868	—			
53,530	4·177	—	—	7·665	—			
131,585	4·567	—	—	8·139	·855			
100,203	5·199	—	—	8·509	—	—	9·20	7
20,616	8·237	9,420	4·000	12·825	·813	Dividend-paying		
81,145	6·307	38,255	2·027	12·165	—	—	12·30	2
5,902	7·356	—	—	12·759	—	Dividend-paying		
11,566	7·388	—	—	14·799	·921			
13,526	8·694	—	—	17·949	—	—	15·60	3
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
25,100	7·240	—	—	23·211	—			
32,180	7·410	—	—	18·205	—			
62,776	7·243	—	—	16·662	—			
74,740	7·755	—	—	18·022	—			
77,705	8·407	—	—	17·930	·836			
66,240	7·003	11,200	3·287	15·738	—	—	17·76	7
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
8,560	8·923	—	—	16·274	—			
29,418	7·961	—	—	21·613	—			
31,886	8·905	—	—	23·852	—			
25,346	10·815	—	—	29·706	·804			
19,100	8·127	—	—	23·213	—	—	21·06	7

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
1886	Jubilee Gold	1890	tons.	dwts.	tons.	dwts.	
			10,880	22·663	—	—	
			1891	11,965	15·520	—	—
			1892	18,037	12·836	—	—
			1893	43,673	11·345	—	—
			1894	38,231	11·280	—	—
			1895	56,469	8·624	—	—
			1896	59,881	7·178	—	—
			1897	59,277	7·603	—	—
			1898	63,419	7·080	—	—
8 months		1899	46,582	6·340	—	—	
1894	Jumpers (Deep)	1898	123,433	7·655	—	—	
		9 months	1899	133,739	6·745	—	—
1887	Jumpers Gold	1888	10,261	22·841	—	—	
			1889	30,505	14·278	—	—
			1890	70,944	8·522	—	—
			1891	45,210	7·484	—	—
			1892	48,452	11·001	—	—
			1893	89,527	8·630	—	—
			1894	107,952	8·830	—	—
			1895	116,058	8·845	—	—
			1896	108,720	7·174	—	—
			1897	137,890	6·253	4,165	33·708
8 months		1898	142,440	6·822	—	—	
		1899	88,800	6·063	4,488	16·367	
1888 } R.C. 1898 }	Klerksdorp Gold	1898	6,013	3·721	—	—	
		1899	Mine shut down,		October, 1899,		
1895	Lancaster	1898	96,517	7·490	—	—	
		9 months	1899	106,601	6·510	—	—
1889	Langlaagte, Block B	1891	66,661	4·407	—	—	
			1892	98,089	4·968	—	—
			1893	64,064	6·137	—	—
			1894	75,731	5·769	1,474	34·681
			1895	101,583	5·480	—	—
			1896	92,773	5·027	2,129	36·101
			1897	115,790	5·303	2,328	39·209
			1898	131,160	4·920	—	—
8 months		1899	69,529	3·973	1,090	36·972	
1895	Langlaagte (D'p) 7 months	1899	107,995	5·973	—	—	

APPENDIX—TABLE XII.



MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	Yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	Yrs.
—	—	—	—	—	—	Dividend-paying	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
15,826	4·857	—	—	13·291	—	—	—	—
22,000	5·361	—	—	10·713	—	—	—	—
36,499	3·652	—	—	9·569	—	—	—	—
34,836	4·804	—	—	10·427	—	—	—	—
38,623	4·588	—	—	9·874	·866	—	—	—
31,706	4·310	—	—	9·274	—	—	10·94	7
84,601	6·688	11,689	1·865	12·634	·838	Dividend-paying	—	—
92,970	5·890	35,589	1·692	11·290	—	—	11·92	2
—	—	—	—	—	—	Dividend-paying	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	10·248	—	—	—	—
—	—	—	—	11·651	—	—	—	—
93,771	2·754	—	—	9·551	—	—	—	—
81,245	2·873	—	—	8·965	—	—	—	—
86,516	3·553	—	—	9·964	·861	—	—	—
59,062	3·519	—	—	9·231	—	—	10·06	7
9,180	2·906	—	—	8·159	·706	—	—	—
owing to the war	—	—	—	—	—	—	—	—
64,395	5·197	—	—	10·968	·840	Dividend-paying	—	—
81,165	5·489	—	—	10·698	—	—	10·82	2
—	—	—	—	—	—	Dividend-paying	—	—
—	—	—	—	—	—	—	—	—
68,100	2·046	—	—	—	—	—	—	—
84,710	2·637	—	—	9·381	—	—	—	—
61,720	2·315	—	—	7·693	—	—	—	—
49,990	2·127	—	—	7·002	—	—	—	—
64,370	2·983	—	—	7·750	—	—	—	—
76,950	3·335	—	—	7·511	·795	—	—	—
42,750	3·858	—	—	6·925	—	—	7·28	9
77,958	3·957	20,920	1·586	9·137	—	—	9·137	1

SOUTH AFRICAN

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
1888	Langlaagte Estate Gold .	1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 8 months 1899	tons.	dwts.	tons.	dwts.
			53,378	22·812	—	—
			69,178	16·406	—	—
			71,038	14·488	—	—
			185,492	7·545	—	—
			222,732	5·909	—	—
			259,016	6·691	—	—
			245,439	7·334	—	—
			235,529	6·221	—	—
			305,414	5·591	7,763	49·524
274,027	6·280	—	—			
208,175	5·007	5,044	64·766			
1897	Langlaagte Proprietary .	1898	47,518	3·807	—	—
		1899	Lessee gave up working,		—	Nov.,
1889	Langlaagte Royal Gold .	1891	17,661	9·940	—	—
		1892	42,870	8·466	—	—
		1893	40,478	8·141	—	—
		1894	67,886	6·230	—	—
		1895	54,565	3·898	—	—
		1896	83,689	3·893	—	—
		1897	Mine shut down,		Nov.,	1896,
		1898	—	—	—	—
		1899	—	—	—	—
1894	Langlaagte Star . . .	1892	33,842	4·858	—	—
		1893	18,357	4·612	—	—
		1896	22,828	3·650	1,192	12·047
		1897	Suspended for development.		—	—
		1898	61,897	6·631	—	—
		8 months 1899	50,400	5·076	871	39·885
1888	Langlaagte United . . .	1893	35,920	5·913	—	—
		1894	15,727	6·128	—	—
		1895	36,043	4·642	—	—
1883 } R.C. 1892 }	Lisbon Berlyn . . .	1893	5,507	1·361	—	—
		1896	5,970	·532	—	—
		1897	12,875	2·991	—	—
		9 months 1898	10,350	Tailings	and	Ore
			5,917	4·840	—	—
1899	21,582	12·230	—	—		

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
1890	Le Champ D'Or (French).		tons.	dwts.	tons.	dwts.
		1891	6,072	23·873	—	—
		1892	30,376	11·186	—	—
		1893	17,896	6·394	—	—
		1894	48,187	12·593	—	—
		1895	63,056	10·988	—	—
		1896	55,808	7·245	—	—
		1897	36,940	8·660	—	—
		1898	68,800	8·605	—	—
		9 months	1899	60,170	8·331	—
1887	May Consolidated . . .	1890	19,038	15·852	—	—
		1891	67,077	8·020	—	—
		1892	65,498	8·656	—	—
		1893	60,298	8·277	—	—
		1894	71,065	7·135	—	—
		1895	110,965	6·975	—	—
		1896	130,050	5·994	—	—
		1897	132,148	5·694	—	—
		1898	107,221	7·783	—	—
		9 months	1899	139,013	7·498	—
1888	Meyer and Charlton . . .	1890	22,132	14·057	—	—
		1891	18,618	22·150	—	—
		1892	23,513	16·279	—	—
		1893	34,197	15·983	—	—
		1894	44,961	11·380	—	—
		1895	63,358	8·864	—	—
		1896	101,407	6·362	—	—
		1897	109,040	5·707	—	—
		1898	110,609	5·894	—	—
		8 months	1899	76,510	6·399	—
1888	Meyer and Leeb	1891	7,800	4·845	—	—
		1892	15,765	5·581	—	—
		1893	15,526	5·115	—	—
		1894	18,590	6·023	—	—
		1895	5,603	7·513	—	—
1895	Minerva	1895	5,490	3·074	—	—
		1896	27,645	2·211	—	—
		1897	16,633	1·754	—	—
1884	Moodie's Gold	1895	8,181	17·736	—	—
		1896	13,758	10·089	—	—
		1896	15,404	11·538	—	—
		1897	12,070	10·841	—	—
		1898	11,633	11·651	—	—
		4 months	1899	3,431	5·537	—

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwt.	tons.	dwt.
1893	New Ariston	1895	15,127	3·612	—	—
		1898	10,346	2·648	—	—
	6 months	1899	7,801	2·181	—	—
1887 } R.C. 1890 }	New Chimes	1888	1,040	17·942	—	—
		1889	5,824	17·999	—	—
		1890	1,600	19·087	—	—
		1891	10,686	13·668	—	—
		1892	45,731	12·413	—	—
		1893	33,641	8·626	—	—
		1894	48,086	9·903	—	—
		1895	44,224	9·774	—	—
		1896	42,451	{ 8·135 7·186 }	433	70·531
		1897	Mine closed 1897,	ore being poor.	—	—
		1898	—	—	—	—
		1899	—	—	—	—
1889	New Comet	1895	15,038	6·570	—	—
		1896	44,844	5·442	—	—
		1897	69,010	6·738	—	—
		1898	77,065	6·306	—	—
		1899	106,675	6·159	—	—
1891	New Cœsus	1889	4,242	17·859	—	—
		1890	5,133	17·759	—	—
		1891	7,971	10·151	—	—
		1892	26,671	8·628	—	—
		1895	50,072	6·112	—	—
		1896	69,289	5·558	—	—
		1898	7,027	3·583	—	—
	8 months	1899	57,863	5·160	—	—
1889 {	New Heidelberg, Roodepoort }	1896	—	—	—	—
		1897	32,940	3·306	—	—
1887	New Heriot	1888	7,697	12·789	—	—
		1889	8,570	18·704	—	—
		1890	11,332	10·229	—	—
		1893	21,455	13·133	—	—
		1894	59,859	11·780	—	—
		1895	89,969	9·990	—	—
		1896	92,799	9·598	—	—
		1897	109,526	8·198	—	—
		1898	104,171	8·139	—	—
			9 months	1899	80,350	8·289

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	yts.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	yts.
11,100	9·421	—	—	10·525	—			
7,250	6·375	—	—	7·115	·793			
6,300	5·184	—	—	6·368	—	—	—	—
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	12·964	—			
31,998	3·053	—	—	11·103	—			
29,758	3·007	—	—	12·188	—			
27,276	2·279	—	—	8·653	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
11,340	4·910	—	—	10·279	—	Dividend-paying		
33,985	4·263	—	—	8·673	—			
53,428	5·411	—	—	10·928	—			
62,958	5·045	426	4·037	10·525	·875			
85,550	4·562	—	—	9·818	—	—	10·10	5
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
35,310	1·869	—	—	7·430	—			
48,810	2·018	—	—	6·980	—			
5,115	2·416	—	—	5·342	·878			
38,587	2·577	—	—	6·879	—	—	6·74	4
—	—	—	—	—	—			
28,400	3·014	—	—	5·905	—	—	—	—
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	21·234	—			
38,715	7·353	—	—	16·536	—			
58,189	8·082	—	—	15·219	—			
62,535	7·781	—	—	14·842	—			
72,925	7·682	—	—	13·313	—			
78,014	6·899	8,392	1·594	13·527	·810			
61,980	5·848	13,819	2·444	13·221	—	—	14·54	7

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
			tons.	dwts.	tons.	dwts.	
R.C. 1890 } 1893 }	New Kleinfontein . . .	1893	9,941	9·613	—	—	
		1894	34,622	8·000	—	—	
		1895	67,985	6·862	—	—	
		1896	7,132	8·233	—	—	
		1897	101,336	6·642	—	—	
		1898	147,214	6·094	—	—	
		8 months	1899	114,822	6·404	—	—
		1889	New Midas Estate . . .	1896	19,083	6·038	—
1897	43,566			3·230	—	—	
R.C. 1888 } 1895 }	New Modderfontein . . .	1892	2,250	15·120	—	—	
		1893	5,328	11·250	—	—	
		1894	5,107	13·311	—	—	
		1896	59,630	4·853	—	—	
		1897	77,615	5·731	—	—	
		1898	62,312	8·965	—	—	
		9 months	1899	59,604	6·886	—	—
		1887	New Primrose	1890	21,129	11·541	—
1891	45,814			10·075	—	—	
1892	99,371			9·149	—	—	
1893	142,064			8·105	—	—	
1894	155,210			8·749	—	—	
1895	277,600			6·790	—	—	
1896	268,428			5·308	—	—	
1897	278,015			5·065	—	—	
1898	263,024			5·093	—	—	
9 months	1899			198,230	5·521	—	—
R.C. 1892	New Rietfontein Estate .	1890	2,547	11·056	—	—	
		1893	24,048	23·427	—	—	
		1894	28,537	10·788	—	—	
		1895	41,515	9·150	—	—	
		1896	42,374	7·248	—	—	
		1897	Mine shut down for development.				
		1898	46,845	4·759	—	—	
		8 months	1899	35,027	6·524	—	—
R.C. 1891 } 1894 }	New Spes Bona	1891	14,790	6·216	—	—	
		1893	22,289	7·881	—	—	
		1894	23,265	5·625	—	—	
		1897	60,248	4·602	—	—	
		1898	61,359	3·942	—	—	
		1899	17,562	3·171	—	—	

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	
—	—	—	—	—	—	Dividend-paying		
27,930	3·271	—	—	10·639	—			
51,470	3·274	—	—	9·341	—			
8,865	2·930	—	—	10·193	—			
69,302	2·863	—	—	8·600	—			
105,350	3·088	—	—	8·305	·858			
79,968	3·455	—	—	8·111	—	—	8·94	7
10,489	10·782	—	—	11·965	—			
23,310	4·710	—	—	5·522	—	—	—	—
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
35,483	3·053	—	—	6·670	—			
50,458	3·249	—	—	7·843	—			
46,638	3·839	—	—	11·869	·844			
41,665	3·338	—	—	9·187	—	—	8·84	4
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
117,816	3·636	—	—	11·510	—			
179,998	4·712	—	—	9·850	—			
165,594	4·663	—	—	8·185	—			
174,299	5·260	—	—	8·363	—			
179,764	5·774	—	—	9·075	·840			
138,335	5·610	—	—	9·437	—	—	9·45	7
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
36,984	4·072	—	—	12·777	—			
34,270	4·107	—	—	10·572	—			
—	—	—	—	—	—			
32,270	3·776	—	—	7·514	·801			
24,901	3·936	—	—	9·323	—	—	8·92	2
—	—	—	—	—	—			
—	—	—	—	—	—			
23,190	3·931	—	—	—	—			
38,570	5·139	—	—	7·893	—			
45,860	4·929	—	—	7·647	·816			
—	—	—	—	—	—	—	7·78	5

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwts.	tons.	dwts.
R.C. 1891	New Unified	1893	73,831	4.465	—	—
		1894	20,524	4.471	—	—
		1898	9,641	4.963	—	—
		8 months 1899	37,164	5.008	—	—
1896	Niekerk	1898	{ 500 534	{ 10.470 11.254	—	—
1894	Nigel (Deep) 7 months	1899	20,896	8.804	—	—
1888	Nigel Gold	1890	6,657	40.862	—	—
		1892	18,030	29.473	—	—
		1893	22,273	22.856	—	—
		1894	25,510	22.021	—	—
		1895	29,294	14.578	—	—
		1896	27,449	8.954	—	—
		1897	14,335	7.910	—	—
		9 months 1898	49,368	7.694	—	—
1899	41,175	8.871	—	—		
1889	Nooitgedacht	1899	14,954	4.604	—	—
R.C. 1894	North Randfontein	1896	4,503	7.546	—	—
		1897	66,405	5.251	150	44.533
		1898	72,938	4.386	—	—
1894	Nourse (Deep)	1897	9,428	8.235	—	—
		1898	104,161	6.662	—	—
		10 months 1899	110,718	6.953	—	—
1891	Orion Gold	1892	22,191	6.469	—	—
		1893	36,418	4.568	—	—
		1894	54,850	5.377	—	—
		1895	54,185	5.857	—	—
		1896	12,211	2.376	—	—
1888 } R.C. 1891 }	Paarl Central	1892	21,623	6.361	—	—
		1894	45,372	7.808	—	—
		1895	55,757	7.312	—	—
		1896	6,607	6.532	—	—
		1897	80,317	5.698	—	—
		1898	77,104	4.901	—	—
		9 months 1899	49,602	5.980	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	Yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	Yrs.
—	—	—	—	—	—		—	—
6,460	3·839	—	—	7·443	·858		—	—
27,160	3·327	—	—	7·440	—	—	8·14	2
—	—	—	—	—	—	—	—	—
14,477	10·496	4,664	4·864	17·160	—	—	17·16	1
—	—	—	—	—	—	Dividend-paying	—	—
—	—	—	—	55·781	—		—	—
—	—	—	—	41·311	—		—	—
22,638	20·726	—	—	40·414	—		—	—
25,396	13·201	—	—	27·898	—		—	—
19,984	11·871	—	—	17·597	—		—	—
12,614	9·790	—	—	16·524	—		—	—
38,002	10·858	—	—	16·121	·826		—	—
30,955	11·580	—	—	17·577	—	—	23·90	7
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—		—	—
49,132	3·107	—	—	7·650	—		—	—
45,120	2·444	—	—	6·540	·795	{ Closed, scarcity of labour }	—	—
4,753	9·328	—	—	12·938	—	Dividend-paying	—	—
26,544	6·944	19,095	2·330	12·398	·840		—	—
77,643	6·553	31,092	2·446	12·236	—	—	12·34	3
—	—	—	—	9·979	—		—	—
—	—	—	—	9·883	—		—	—
29,124	13·364	—	—	12·473	—		—	—
27,665	13·038	—	—	12·514	—		—	—
8,360	10·634	—	—	9·656	—	{ Wound up, mine unpayable }	—	—
—	—	—	—	—	—		—	—
—	—	—	—	10·039	—		—	—
37,938	4·808	—	—	10·584	—		—	—
11,841	3·173	—	—	—	—		—	—
58,054	4·418	—	—	8·891	—		—	—
53,974	4·614	—	—	8·168	·802		—	—
36,176	4·134	—	—	8·995	—	—	9·46	6

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwts.	tons.	dwts.
R.C. 1889 } 1894 }	Pigg's Peak	1891	947	90·855	—	—
		1896	2,100	2·400	—	—
		1896	1,400	2·413	—	—
		1897	13,423	2·614	—	—
		8 months 1899	2,480	With Tailings.	—	—
1895	Porges Randfontein	1892	16,875	7·805	—	—
		1893	54,652	8·530	—	—
		1894	81,194	8·573	—	—
		1895	75,465	9·841	—	—
		1896	21,763	7·641	610	7·508
		1897	96,851	7·434	1,175	64·851
		1898	88,888	7·133	—	—
		8 months 1899	65,480	7·612	965	74·176
1888	Princess Estate	1891	36,610	4·791	—	—
		1892	37,178	4·505	—	—
		1894	30,533	9·246	—	—
		1895	32,944	9·522	—	—
		1896	42,289	9·213	—	—
		1897	57,086	8·668	—	—
		1898	73,642	6·679	—	—
		9 months 1899	59,364	6·264	—	—
1895	Rand Nigel	1897	9,562	6·224	—	—
		1898	4,102	5·650	—	—
1896	Rietfontein, A	1897	37,110	11·161	—	—
		1898	97,356	8·077	—	—
		8 months 1899	62,341	6·495	—	—
1895	Rip Gold	1898	1,208	3·344	—	—
1894	Robinson (Deep)	1898	77,586	10·965	—	—
		9 months 1899	124,380	8·661	—	—
1887	Robinson Gold	1888	6,684	78·656	—	—
		1889	28,120	53·371	—	—
		1890	44,478	32·295	—	—
		1891	60,210	22·931	—	—
		1892	101,061	19·552	—	—
		1893	94,842	21·978	—	—
		1894	107,930	20·561	—	—
		1895	140,655	17·079	—	—
		1896	177,500	15·808	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	Yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
18,695	3·124	—	—	6·967	—		8·92	3
—	—	—	—	4·386	—			
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	10·954	—			
54,390	—	—	—	10·378	—			
44,944	—	—	—	11·951	—			
12,548	—	—	—	9·767	—			
66,375	2·887	—	—	10·200	—			
66,694	2·671	—	—	11·116	·799		10·96	5
50,881	2·782	—	—	10·873	—			
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
21,609	3·610	—	—	11·801	—			
33,915	4·355	—	—	14·003	—			
10,310	3·986	—	—	11·084	—			
44,151	4·542	—	—	12·181	—			
52,196	4·184	—	—	9·617	·848		11·26	6
43,406	4·977	—	—	9·873	—			
6,366	6·729	—	—	10·706	—			
2,590	6·131	—	—	9·522	·789			
26,639	5·042	—	—	14·781	—	Dividend-paying		
69,780	4·342	—	—	11·189	·846			
49,172	4·093	—	—	9·724	—		11·78	3
25,032	9·102	—	—	—	—			
52,604	9·306	20,569	3·080	18·194	·818	Dividend-paying		
86,201	7·062	30,760	2·743	14·235	—		15·74	2
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	31·208	—			
—	—	—	—	28·653	—			
—	—	—	—	28·005	—			
69,025	5·856	—	—	26·941	—			
75,825	5·844	—	—	22·353	—			
158,150	6·029	—	—	21·178	—			

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtain'd.	Average Yield per Ton.
			tons.	dwt.s.	tons.	dwt.s.
1887	Robinson Gold (<i>cont.</i>)	1897	180,410	13.994	—	—
		1898	184,081	13.947	—	—
		9 months 1899	167,100	13.057	—	—
1895	Robinson Randfontein	1897	9,405	9.524	59	41.700
		1898	67,295	7.308	—	—
		8 months 1899	56,629	6.482	1,129	39.504
1892	Roodepoort (Deep Level)	1896	39,455	6.849	387	75.710
1895	Roodepoort Central (Deep)	4 months 1899	29,679	5.963	—	—
1887	Roodepoort Gold	1893	4,487	4.372	—	—
		1895	—	—	—	—
		1896	23,941	5.557	60	53.333
		1897	39,342	5.332	—	—
		1898	38,053	4.933	—	—
		5 months 1899	15,619	3.844	—	—
1887	Roodepoort United	1890	25,344	9.076	—	—
		1891	26,584	5.716	—	—
		1893	25,917	7.662	—	—
		1894	46,342	9.146	—	—
		1895	76,977	10.395	—	—
		1896	87,226	8.383	—	—
		1897	86,245	3.390	—	—
		1898	86,267	8.456	—	—
		8 months 1899	53,944	9.783	—	—
		1887 } R.C. 1895 }	Roodepoort West	1898	3,425	4.484
8 months 1899	13,583			4.611	—	—
1894	Rose (Deep)	1897	38,072	7.911	—	—
		1898	248,740	7.369	—	—
		9 months 1899	255,600	6.724	—	—
1886	Salisbury Gold	1890	7,126	23.603	—	—
		1891	10,638	21.350	—	—
		1892	16,638	18.457	—	—
		1893	24,786	15.548	—	—
		1894	25,146	11.624	—	—
		1895	46,432	9.307	—	—
		1896	58,257	6.848	—	—
		1897	59,203	6.275	—	—
		1898	61,377	7.032	—	—
		8 months 1899	49,262	5.676	—	—

APPENDIX—TABLE XII.

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton. of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	YRS.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YRS.
192,158	5·223	—	—	21·002	—			
131,911	6·487	85,366	3·872	21·953	·874			
116,130	5·951	55,008	3·821	19·581	—	—	22·374	7
8,095	3·804	—	—	13·061	—			
49,678	3·267	—	—	10·637	·796			
41,340	3·675	—	—	9·952	—	—	11·16	3
27,631	2·524	—	—	9·360	—	—	—	—
17,622	4·573	—	—	8·679	—	—	—	—
—	—	—	—	—	—			
6,735	3·132	—	—	—	—			
17,900	3·300	—	—	8·174	—			
33,450	2·470	—	—	7·432	—			
25,015	2·801	—	—	6·796	·874			
9,590	2·848	—	—	5·593	—	—	7·12	4
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
75,486	3·681	—	—	—	—			
56,848	4·882	—	—	14·000	—			
15,212	4·205	—	—	10·639	—			
57,396	4·006	—	—	11·548	—			
58,315	3·910	—	—	11·099	·854			
39,492	4·904	—	—	13·374	—	—	12·26	7
2,370	2·624	—	—	6·300	·878			
9,087	2·817	—	—	6·496	—	—	6·44	2
28,339	6·488	—	—	12·741	—	Dividend-paying		
185,211	6·257	53,478	2·641	12·589	·830			
194,456	5·784	62,241	2·689	11·780	—	—	12·21	3
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	23·340	—			
—	—	—	—	25·033	—			
—	—	—	—	20·056	—			
16,250	7·517	—	—	16·482	—			
22,935	4·887	—	—	11·721	—			
36,476	3·366	—	—	8·956	—			
32,328	3·052	—	—	7·941	—			
37,902	3·642	—	—	9·281	·864			
33,669	2·492	—	—	7·380	—	—	10·52	7

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
			tons.	dwts.	tons.	dwts.	
1887	Sheba Gold (Lydenburg) .	1889	14,250	68·437	—	—	
		1892	31,850	22·546	—	—	
		1893	44,955	14·671	—	—	
		1895	22,410	24·542	—	—	
		1896	39,130	33·733	700	177·628	
		1897	51,205	22·227	1,234	143·144	
		1898	106,294	6·851	—	—	
		9 months	1899	93,842	5·400	27,049	8·913
1887		Simmer and Jack . . .	1888	5,040	11·638	—	—
	1889		17,336	14·482	—	—	
	1890		41,805	10·343	—	—	
	1891		85,135	9·030	—	—	
	1892		96,954	7·868	—	—	
	1893		103,798	7·496	—	—	
	1894		112,489	8·085	—	—	
	1895		137,821	9·061	—	—	
	1896		156,930	8·009	1,885	78·939	
	1897		164,065	5·922	—	—	
	1898		421,870	6·124	—	—	
	9 months	1899	391,779	6·472	—	—	
1897	South Randfontein . . .	1898	40,077	11·276	—	—	
		8 months	1899	61,413	9·909	840	83·428
1893	Spitzkop	1897	12,492	1·384	—	—	
		1898	9,983	3·530	—	—	
1887	Stanhope Gold	1888	3,820	21·769	—	—	
		1891	17,600	12·397	—	—	
		1892	19,565	13·920	—	—	
		1893	22,728	9·701	—	—	
		1894	22,090	9·237	—	—	
		1895	21,537	7·536	—	—	
		1896	15,951	6·995	—	—	
		1897	28,913	5·786	—	—	
		1898	17,320	5·381	—	—	
		9 months	1899	14,240	6·481	—	—
R.C. 1889 } 1893 }	Sutherland Reef	1896	5,326	4·003	—	—	
R.C. 1882 } 1895 }		Transvaal Gold, Lydenburg (Gold Exploration Co.'s Mine)	1891	7,840	33·870	—	—
	1892		8,232	30·009	—	—	
	1893		9,365	24·164	—	—	
	1895		28,321	14·386	—	—	
	1896		33,526	13·911	—	—	

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	Yrs.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	Yrs.
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
4,550	—	—	—	—	—			
40,750	—	—	—	—	—			
33,550	—	—	—	49·141	—			
31,230	10·314	—	—	32·220	—			
66,506	4·716	—	—	11·936	·857			
54,500	4·747	—	—	10·726	—	—	21·38	6
—	—	—	—	—	—	Dividend-paying,		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	7·973	—			
—	—	—	—	7·644	—			
93,000	3·215	—	—	10·974	—			
128,800	3·885	—	—	13·409	—			
90,234	5·877	—	—	12·337	—			
94,200	5·377	—	—	9·175	—			
290,850	3·964	68,444	1·944	9·199	·821			
296,798	4·372	75,436	1·610	10·150	—	—	10·18	7
33,359	3·167	—	—	14·965	·803			
47,960	3·587	—	—	13·852	—	—	14·30	2
11,096	4·306	—	—	5·209	—			
—	—	—	—	—	—			
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	12·791	—			
14,313	—	—	—	14·652	—			
13,639	—	—	—	11·878	—			
12,298	—	—	—	10·748	—			
20,436	3·806	—	—	8·477	—			
12,941	3·747	—	—	8·286	·761			
11,105	4·621	—	—	10·085	—	—	10·98	7
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
2,880	8·069	—	—	—	—			
19,418	13·218	—	—	—	—			
20,761	13·969	—	—	22·560	—			

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
			tons.	dwt.	tons.	dwt.
	Transvaal Gold (<i>cont.</i>) } (New Clewer Mine) . }	1894	15,393	7·468	—	—
		1895	13,826	7·571	—	—
		1895	7,793	10·093	—	—
		1897	35,950	8·839	—	—
		1898	116,547	7·572	—	—
		9 months	1899	103,422	6·700	—
1891	Treasury Gold . . .	1892	10,218	13·231	—	—
		1893	12,429	12·208	—	—
		1894	13,519	7·658	—	—
		1896	55,228	5·222	1,230	18·455
		1897	70,140	7·241	1,910	2·115
		9 months	1898	78,045	8·150	—
		1899	74,560	7·383	—	—
1888	United Ivy Reefs (Sheba)	1892	2,126	22·657	—	—
		1896	2,708	11·639	—	—
		1897	4,635	13·385	—	—
		1898	12,358	8·295	—	—
		8 months	1899	9,953	8·620	—
1896	United Reefs (Sheba) .	1897	{ 1,233	12·051	—	—
			{ 4,565	11·767	—	—
1891 } R.C. 1894 }	Van Ryn Gold . . .	1893	40,211	6·684	—	—
		1894	42,087	8·222	—	—
		1895	51,702	9·302	—	—
		1896	54,036	6·505	—	—
		1897	130,270	5·101	—	—
		9 months	1898	140,164	5·199	—
		1899	133,889	6·302	—	—
1894	Van Ryn West . . .	1897	5,668	3·719	—	—
		1897	68,608	5·163	—	—
1888 } R.C. 1890 }	Village Main Reef . . .	1892	10,049	13·870	—	—
		1893	11,500	10·685	—	—
		1894	40,818	12·777	—	—
		1895	Suspended for	Development.	—	—
		1896	—	—	—	—
		1897	—	—	—	—
		1898	131,577	11·720	—	—
	8 months	1899	117,878	11·235	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	YRS.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YRS.
10,130	10·824	—	—	14·592	—			
9,654	15·150	—	—	18·365	—			
3,026	15·796	—	—	16·227	—			
23,458	6·144	—	—	12·849	—			
76,879	7·550	—	—	13·082	·929			
63,243	5·540	35,797	4·435	11·720	—	—	12·75	3
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
13,153	4·310	—	—	—	—			
35,333	4·145	—	—	7·874	—			
49,365	5·724	—	—	11·327	—			
58,988	5·161	12,553	2·477	12·450	·830			
74,560	4·145	—	—	11·528	—	—	11·01	4
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
1,726	18·354	—	—	11·476	·805			
1,990	16·934	—	—	12·006	—	—	—	—
—	—	—	—	—	—			
798	4·310	—	—	12·521	—	—	—	—
—	—	—	—	—	—			
25,771	2·985	—	—	—	—			
61,213	3·386	—	—	—	—			
45,850	2·807	—	—	8·887	—			
89,400	3·021	—	—	7·174	—			
98,262	3·356	—	—	7·552	·846			
94,410	3·958	—	—	9·093	—	—	8·53	7
—	—	—	—	—	—			
42,308	2·433	—	—	6·664	—	—	—	—
—	—	—	—	16·286	—	Dividend-paying		
—	—	—	—	14·156	—			
27,213	3·537	—	—	15·135	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
97,170	6·971	19,930	3·001	17·415	·856			
100,700	6·792	17,645	3·288	17·530	—	—	17·47	2

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.	
			tons.	dwts.	tons.	dwts.	
1894	Violet Consolidated . . . 3 months	1897	11,257	4 258	—	—	
		1898	10,547	2 797	—	—	
1895	Vogelstruis Con. Estate . .	1896	8,975	4 568	—	—	
		1897	52,064	5 210	—	—	
		1898	—	—	—	—	
1886	Wemmer Gold	1888	5,437	23 056	—	—	
		1889	11,644	13 885	—	—	
		1890	8,860	15 842	—	—	
		1891	13,590	20 544	—	—	
		1892	21,958	15 048	—	—	
		1893	27,654	16 422	—	—	
		1894	55,427	12 277	—	—	
		1895	74,182	13 616	—	—	
		1896	74,945	10 842	1,807	597	
		1897	78,505	11 920	—	—	
		1898	81,263	13 029	—	—	
		9 months	1899	78,447	12 687	1,982	111 523
1893	West Rand	1890	10,923	4 374	—	—	
		1891	12,399	5 379	—	—	
		1894	24,362	4 771	—	—	
		1897	37,911	4 526	—	—	
		1898	47,152	4 556	—	—	
		9 months	1899	45,984	3 231	—	—
—	West Rand Central 9 months	1898	11,375	4 687	—	—	
		1899	22,565	6 319	—	—	
1895	Windsor	1897	10,729	5 029	—	—	
		1898	48,151	5 912	—	—	
		9 months	1899	43,383	3 738	—	—
1886	Witwatersrand Gold	1891	18,687	4 577	—	—	
		1896	23,892	6 567	—	—	
		1897	154,169	5 581	—	—	
		1898	182,829	6 043	—	—	
		9 months	1899	132,847	5 306	—	—
1887	Wolhuter	1892	24,850	8 928	—	—	
		1893	53,859	9 301	—	—	
		1894	41,683	10 094	—	—	
		1895	70,043	8 154	—	—	
		1896	139,273	6 638	—	—	
		1897	160,745	7 041	—	—	
		1898	161,633	6 161	—	—	
		9 months	1899	117,073	5 197	—	—

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATE	
			Milled.	Average Yield per Ton of 2000 lbs.	Obtained.	Average Yield per Ton.
1895	Woodbine 8 months	1896	tons. 2,225	dwts. 9·578	—	—
		1898	7,752	5·108	—	—
		1899	9,499	4·863	—	—
1887	{ Worcester Exploration Gold }	1888	3,300	33·670	—	—
		1889	6,860	22·862	—	—
		1890	13,356	17·178	—	—
		1891	15,102	15·540	—	—
		1892	26,074	12·806	—	—
		1893	24,241	14·126	—	—
		1894	23,665	22·879	—	—
		1895	26,433	15·735	—	—
		1896	43,293	10·721	—	—
		1897	56,614	7·811	—	—
		1898	57,142	8·324	—	—
	9 months	1899	40,638	8·297	1,393	6·30
1895	York 9 months	1898	55,182	6·541	—	—
		1899	43,378	5·114	—	—

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold.	REMARKS.	Average Yield.	
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.				dwts.	YRS.
tons.	dwts.	tons.	dwts.	dwts.	1000ths		dwts.	YRS.
—	—	—	—	13·222	—			
4,338	3·185	—	—	6·891	·801			
7,441	2·488	—	—	6·813	—	—	6·84	2
—	—	—	—	—	—	Dividend-paying		
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	—	—			
—	—	—	—	11·073	·784	{ With Tailings, Con- centrates, and Slimes }		
21,267	4·988	—	—	13·089	—	—	12·38	7
43,335	4·194	—	—	9·835	·800			
32,805	4·727	—	—	8·691	—	—	9·26	2

RHODESIAN, ETC.,

Date of Registration.	NAME OF COMPANY.	Year.	ORE.	
			Milled.	Average Yield per Ton of 2000 lbs.
1896	Anterior (Matabele)	3 months	tons.	dwts.
		3 "	2,820	15·494
		4 "	2,335	15·186
		1900	4,103	13·005
1897	Bonsor7 "	1899	15,971	9·675
1895	Consolidated Belingwe 2 "	1899	466	13·133
1896	Criterion2 "	1899	716	13·268
		3 "	1,178	10·611
1897	Dunraven7 "	1899	13,735	11·903
1898	Filabusi2 "	1899	462	14·458
		1900	335	5·014
1897	Geelong11 "	1899	22,404	10·178
		1900	11,682	6·194
1895	Premier Tati2 "	1899	3,360	3·833
		1900	5,720	4·388
1896	Selukwe12 "	1899	30,044	13·541
		1900	18,261	12·385
1898	West Nicholson4 "	1900	3,971	10·048
1895	Gold Reefs of West Africa	1898	3,505	24·833
1882	Wassau	1890	2,515	9·343
		1891	2,747	11·780
		1892	2,190	18·740
		1893	2,753	31·863
		1894	3,384	22·151
		1895	3,165	24·467
		1896	4,027	34·561
		1897	5,799	25·021
		1898	4,162	22·229

SOUTH AFRICAN MINES.

NAME.	—	—
Violet Consolidated	—	dwts. 4·185
Pigg's Peak	—	4·386
Minerva	—	4·854
Spitzkop	—	5·209
Albion	—	5·502
New Unidas Estate	—	5·522
Roodepoort Gold	—	5·593
New Heidelberg	—	5·905
Aurora	—	5·990
Langlaagte Royal	D.	6·103
Bufflesdoorn Estate	—	6·173
East Orion	—	6·219
Balmoral	—	6·244
New Ariston	—	6·368
Vogelstruis Consolidated Estate	—	6·440
Roodepoort West	—	6·496
New Randfontein	—	6·540
Van Ryn West	—	6·664
Langlaagte Proprietary	—	6·687
Barrett	D.	6·754
West Rand	—	6·797
Woodbine	—	6·813
New Croesus	D.	6·879
Langlaagte, Block B	D.	6·925
Windsor	D.	7·122
Langlaagte Star	—	7·310
Salisbury Gold	D.	7·380
New Unified	—	7·440
New Spes Bona	—	7·647
Witwatersrand Gold	D.	7·966
New Kleinfontein	D.	8·111
Klerksdorp Gold	—	8·159
Geldenhuis Main Reef	D. 1895	8·176
Langlaagte Estate	D.	8·435
Glencairn	D.	8·509
New Chimes	—	8·653
Roodepoort Central (Deep)	—	8·679
York	—	8·691
Aurora, West	D. 1892	8·793
Wolhuter	D.	8·909
Eastleigh	—	8·985
Paarl Central	—	8·995
Van Ryn Gold	D. 1896	9·093
Langlaagte (Deep)	—	9·137
New Modderfontein	—	9·187
Jumpers Gold	D.	9·231
Jubilee Gold	D.	9·274
New Reitfontein Estate	D. 1893	9·323
Roodepoort Deep Level	—	9·360
New Primrose	D.	9·437
Rand Nigel	—	9·522
Orion Gold	—	9·656

Average Total Yield of Bullion per Ton of Ore Milled in 1898-99.

NAME.	—	—
		dwts.
Reitfontein, A	D.	9·724
New Comet	D.	9·813
Princess Estate	D.	9·873
Robinson Randfontein	—	9·952
New Goch	—	10·052
Stanhope	D.	10·085
Simmer and Jack	D.	10·150
Crown (Deep)	D.	10·304
Consolidated Main Reef	—	10·420
Meyer and Charlton	D.	10·455
Lancaster	D.	10·698
Sheba Gold	D.	10·726
Ginsberg	D.	10·751
Porges Randfontein	D.	10·873
Lisbon Berlyn	—	10·935
West Rand Central	—	11·116
French Rand	—	11·282
Jumpers (Deep)	D.	11·290
Driefontein Consolidated	D.	11·375
Treasury Gold	D.	11·528
Geldenhuis (Deep)	D.	11·611
May Consolidated	D.	11·659
Transvaal Gold	D.	11·720
Rose (Deep)	D.	11·780
United Ivy Reef	—	12·006
Glen (Deep)	D.	12·165
Nourse (Deep)	D.	12·236
United Reefs	—	12·521
Geldenhuis Estate	D.	12·941
Durban Roodepoort (Deep)	D.	13·025
Worcester Exploration	D.	13·089
Le Champ D'Or	D.	13·183
City and Suburban	D.	13·202
New Heriot	D.	13·221
Roodepoort United	D.	13·374
Durban Roodepoort	D.	13·522
South Randfontein Gold	D.	13·852
Robinson (Deep)	D.	14·235
Crown Reef	D.	14·719
Angelo	D.	15·440
Henry Nourse	D.	15·738
Nigel (Deep)	—	17·160
Village Main Reef	D.	17·530
Nigel Gold	D.	17·577
Glynn's Lydenberg	D.	17·949
Wemmer Gold	D.	18·054
Robinson Gold	D.	19·581
Ferreira (Deep)	—	19·719
Johannesburg Pioneer	D.	23·213
Ferreira Gold	D.	23·594
Bonanza	D.	27·602

AUSTRALIAN MINES.

Date of Registration.	NAME OF COMPANY.	Years.
1892	Aladdin's Lamp	1895 1896
1894	Associated Gold Mines of Western Aus- tralia }	1898 1899
1896	Australia United	1898
1897	Baker's Creek 6 months 6 months	1896 1896 1898 1899
1897	Ballarat and Prince Oscar	1899
1896	Bayley's United	15 months 5 " 6 " 6 " 1897 1898
1896	Beacon Gold	— — 1896-8 Jan., 1898 July to Sept., 1898
R.C. 1897	Black Flag Proprietary	—
1895	Bon Accord	—
1889	Brilliant and St. George United	1892-7 1892 1893 1894 1895 1896 1897 1898 1899
1891	Brilliant Block	1892 1893 1894 1895 1896 1897

APPENDIX—TABLE XV.

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NOTE.—Long tons of 2240 lbs. generally used.

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
4,257	98·32	Dividend-paying
3,324	80·00	
32,650	19·46	Dividend-paying
16,758	60·58	
1,758	39·66	Dividend-paying once
7,741	18·84	Dividend-paying once
5,354	19·84	
12,540	16·02	
2,744	16·40	
1,033	20·76	
596	1060 00	Dividend-paying
1,014	280·00	
3,296	90·00	
3,707	21·80	Fine gold
1,385	25·76	
869	23·36	
400	35·44	Fine gold
431	38·24	Fine gold
7,326	29·36	
9,500	25·42	
1,319	12·46	
730	11·94	Fine gold
1,412	19·68	
67,602	29·14	Average—Dividend-paying
3,404	19·14	
11,346	23·26	
7,997	21·42	
16,295	34·96	
18,031	34·28	
10,529	26·84	
15,681	28·70	
17,125	27·46	{ Including yield from 15,960 tons Tailings, at 4·18 dwts. per ton.
3,723	15·52	Dividend-paying once
8,087	17·90	
13,322	22·78	
30,302	17·52	
27,281	13·70	
19,024	10·58	

Date of Registration.	NAME OF COMPANY.	Years.
	Brilliant Block (<i>cont.</i>)	1898
		1899
	Part	1900
1896	Brilliant Charters Towers	—
1895	Brilliant Extended	1896
1891	Brilliant Freeholds	1896
1886	Brilliant Gold	1898
	6 months	1899
1897	Britannia	1898
		1899
1896	Brock's Goldfields	—
1895	Brookman Brothers	1899
		Tributers
1895	Burbank's Birthday Gift	—
		—
		1895-6
		1896-7
1897	Burbank's Grand Junction	—
1898	Central and West Boulder	1899
1895	Cardiff Castle	—
		—
1895	Charters Towers Consolidated	—
		—
1895	Consolidated Murchison	--
	Up to Jan.	1898
	" Jan.	—
	" Feb.	—
	June, 1897, to Nov.	1898
1893	Craven's Caledonia	--
		—
	Tributers	—
		1898
		1899
1899	Craigimore	1900

MINES (continued).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
17,748	12.80	
9,209	9.74	
500½	8.94	
85	17.00	Shaft 2500 feet deep, vertical
14,034	11.54	Shaft 2000 feet deep, vertical
1,800	13.00	
34,032	22.72	Dividend-paying, including Concentrates and
14,102	20.16	Tailings
4,620	18.42	
6,082	17.00	
240	23.66	
1,647	9.64	
1,057	34.00	
1,500	80.00	Dividend-paying
—	60.00	Since
1,547	86.16	
4,366	45.50	
342	75.40	
9,322	17.76	
—	4.00	
—	6.00	
15	11.64	
34	23.52	
18,006	11.90	2000 tons Tailings. Yield 3.24 dwts.
19,303	17.12	
309	22.12	
503	20.14	
10,677	18.42	
812	26.78	
480	25.00	
327	33.46	
936	29.86	
1,169	25.00	
2,800	6.86	

Date of Registration.	NAME OF COMPANY.	Years.
1896	Crescent Gold	— — —
1895	Croydon Consols	— 1897 1898
1896	Cuddingwara	— — 1898
1898	Cumberland Niagara	1899
1886	Day Dawn Block and Wyndhams'	1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897
1895	Day Dawn P.C. Gold	1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898
1895	Dixie Gold	—
1894	Emerald Reward	1895 1897 —
1895	Emperor	—
1897	Fields' Find	1900
1897	Florence	—

MINES (*continued*).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
—	6·00	
5,278	2·38	Crescent Mine
1,140	6·24	Victory Mine
2,485	56·66	Dividends once
4,906	100·66	
1,821	45·26	
73	32·30	
407	25·54	
148	21·48	
3,055	12·72	Dividends once
13,663	32·18	Dividend-paying
24,120	30·52	
17,326	20·06	
31,216	15·00	
9,318	15·44	
15,842	28·46	
19,530	20·82	
1,484	14·00	
6,026	14·28	
2,391	20·84	
35,720	23·70	
22,138	21·94	
26,484	24·02	
29,254	18·34	
27,416	20·04	
14,602	18·74	
7,588	23·18	
6,038	28·38	
3,960	26·20	
2,391	20·44	
4,805	35·06	
4,767	25·10	
170	69·42	
1,968	24·00	
230	18·94	
1,968	24·00	
311	15·16	
10,757	13·92	
300	28·66	Suspended. Poor in depth

Date of Registration.	NAME OF COMPANY.	Years.
1896	Fraser South Extended	1899 1900
1898	Frederick the Great	—
1895	Gibraltar	1898 1899
1896	Golconda	— 1898 1898-9
1895	Great Boulder Main Reef	— Jan., 1898 During Jan. Sept., 1897 1898 1899 1899-1900
1895	Great Boulder Perseverance	— 1897 — 1898
1894	Great Boulder Proprietary	1895 1896 1897 1898 1899
1895 } 1899 }	Great Fingall Consolidated	1898
1895	Hands Across the Sea	1897-8
1894	Hannan's Brownhill	1898 — —
1896	Hannan's Croesus	1899
1894 } 1898 }	Hannan's Reward	1899
R.C. 1895	Harrierville Co.	—
1898	Hinemoa	—
1896	Howell's Consolidated.	1898

APPENDIX—TABLE XV.

MINES (continued).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons. 1,290	dwts. 23.44	
—	—	
2,951	5.28	
12,886	20.88	} Including Concentrates 345 tons at 172.40 dwts. per ton. Dividend once
23,742	8.96	
2,075	37.00	Dividend-paying
4,780	43.22	
2,079	43.48	
100	79.40	Dividend-paying
4,277	48.84	
730	32.86	
2,300	33.72	
8,509	33.82	
12,666	21.44	
17,267	17.58	At New Reduction Works
2,875	68.16	Dividends once
10,425	31.78	
1,712	66.76	36.70 dwts. average to smelters
13,599	41.16	
4,291	124.28	Dividend-paying
16,729	66.88	
29,473	56.52	
41,043	41.12	
51,835	28.32	
		Tons
		Dwts. per ton
		Tailings, 23,707 9.44
		Total per ton milled 32.64
10,677	18.42	
1,658	14.56	
6,036	107.94	Dividend-paying
736	25.70	
227	119.78	Smelted
2,398	12.98	
1,055	36.72	
156	46.00	
3,210	15.82	
10,774	11.38	Dividend-paying

Date of Registration.	NAME OF COMPANY.	Years.
1895	Ivanhoe Gold	— — 1897 1898 1899
1895	Jubilee Consols	1895 1897
1894 } 1897 }	Kalgoorlie Mint and Iron King	—
1897	Lachlan Goldfields	1899
1894	Lady Loch	1895 1899
1894	Lady Mary Amalgamated	—
1895	Lady Shenton	1898 1899
1896	Lake View Consols	1897-98 1899
	NOTE.—81,866 tons Oxidized Ore yield 0·690 per ton.	
	90 „ Concentrates „ 90·166 „	
	44,323 „ Sands „ 533 „	
	35,136 „ Slimes „ 332 „	
	1,403 „ Sulphides „ 3·198 „	
	2,620 „ Smelted „ 39·000 „	
	165,438 Av. 1·204 ozs. = 24·08 dwts.	
1896	Lindsay's Consolidated	—
1894	Londonderry Gold	— 1898
1895	Long Reef	1899
1896	Mallina	—
1895 } R.C. 1898 }	Menzies' Consolidated	1898 1899
	NOTE.—Ore Yield dwts. Tailings 5·26 dwts. — Av. 16·84	

MINES (continued).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
1,191	28·12	Dividend-paying
1,562	79·66	Tailings.
21,630	42·30	Tons. Yielding per ton.
28,765	29·92	14,829 at 12·38 dwts.
59,664	23·70	37,369 at 11·66 „
—	8·00	Tailings 7·00 dwts.
4,233	7·24	„ 13·12 „
958	53·60	
5,313	5·76	Dividend-paying
—	40·00	Tailings.
—	16·74	9·80
—	16·74	
8,043	68·86	Dividend-paying
9,226	48·56	
57,725	19·04	Dividend-paying.—Including Tailings and Con- centrates.
165,438	24·08	
5,953	12·54	
No data	22·00	
3,515	27·22	
4,932	15·36	
874	11·94	
7,161	19·72	Including Concentrates and Tailings
7,739	16·84	

Date of Registration.	NAME OF COMPANY.	Years.
1895	Menzies' Crusoe	— 1898 1899
	NOTE.—Ore Yield. Tailings '782 '741 — Av. 1·494	
1895	Menzies' Gold Reef Proprietary	— 1898
1895	Menzies' Golden Age	—
1896	Menzies' Lady Sherry	1897 1898
1889	Mill's Day Dawn United	1889 1890 1891 1892 1893 1894 1895 1896 1897 1898
1894	Mosman Gold	—
1894	Mount Charlotte	—
1895	Mount Jackson	— 1897 1899
1892	Mount Leyshon	1896
1895	Mount Magnet	— —
1896 } R.C. 1900 }	Mount Malcolm	1898
1895	Mount Margaret Reward	—

MINES (*continued*).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons. 4,926 7,765 5,368	dwts. 22·00 35·52 29·88	Including Concentrates and Tailings
3,181 4,750	33·00 31·46	Dividends once
50 145 245	139·62 89·00 96·32	No continuous payable reef found
201 51 222 897	29·44 33·32 15·12 31·52	
1,274 3,209 20,985 23,667 38,422 48,258 41,389 13,481 3,407 2,131	6·12 11·12 17·46 19·88 23·28 21·92 23·08 15·46 20·78 9·14	Dividend once
1,341	40·00	
34	14·36	
1,514 1,875 1,720	13·24 14·28 13·88	
15,944	2·36	
170 1,533	42·32 23·54	
6,631	19·12	
225	26·66	

Date of Registration.	NAME OF COMPANY.	Years.
1886	Mount Morgan	1887 1888 1889 1890 1891 1892 1893 1894 1895 To May, 1896 1896-7 1897-8 1898-9 ½ year, 1899-1900
1896	Mount Usher	1898 1899
1895	Murchison New Chum	1896
1895	Myall's United	—
1889	New Queen	1896 1896 1897 1898
1896	Ninety Mile Proprietary	— 1897
1895	North Boulder	— 1898 1899
1895	Oliver's Freehold	1899
1897	Peak Hill	1897 1898 1899
1887	Phœbe	— 1897 1898 1899
R.C. 1897	Polar Star	—

MINES (continued).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
13,071	88·78	Dividend-paying
17,241	105·12	
49,276	95·44	
76,215	65·32	
74,741	53·94	
59,789	41·58	
62,190	38·56	
65,076	31·42	
82,448	30·02	
91,597	30·48	
105,424	30·32	
153,297	22·28	
204,502	16·24	
118,658	14·74	
1,661	24·36	Dividend-paying
		Dwts. per ton.
		Ore . . . 36·14
		Tailings . . . 4·48
3,915	38·40	Including Tailings
3,524	55·90	
1,092	18·00	Dividend-paying
5,531	27·18	Dividends once
1,249	13·28	
711	14·50	
9,278	16·30	
90	40·00	
2,802	12·90	
1,265	44·74	Dividend-paying
7,265	35·80	
1,241	{ 11·70	Tons 645
	{ 6·70	Tons 596
6,598	13·44	
879	81·84	Dividend-paying
4,534	69·70	
10,922	57·64	
345	42·24	Dividend once
961	62·00	
3,421	32·10	
3,871	18·04	
83	80·00	
420	42·32	

Date of Registration.	NAME OF COMPANY.	Years.
1893	Premier Gold	1896 1897 1898 1899
1896	Princess (Murchison)	1898
1890	Queen Cross	1896 1896 1897 1897 1898 1899
1895	Queensland Menzies	— 1898 1899 — — 1900
1895	Robinson Gold	— — — 1898
1898	Sons of Gwalia Total milling to January	— 1899 1898 1899
1896	Vale of Coolgardie	—
1891	Victoria and Queen	— $\frac{1}{2}$ -year, 1897 ,, 1898 ,, 1899 ,, 1899 ,, 1900
1888 } R.C. 1892 }	Victoria Gold (Charters Towers) . . .	1894 1895 1896 1897 1898 $\frac{1}{2}$ -year, 1899 ,, 1899



APPENDIX—TABLE XV.

MINES (continued).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
2,240	41.16	Dividend-paying
4,375	22.40	
3,748	10.46	
5,815	11.04	
5,616	18.38	
816	57.96	Dividend once
1,808	59.48	
1,091	36.50	
2,144	39.62	
943	21.78	
525	14.86	
1,293	112.74	Dividend-paying
4,309	79.84	
1,219	71.56	
1,300	61.92	
2,067	53.10	
1,443	36.90	1000 tons treated by cyanide gave 25.84 dwts.
1,327	34.00	Dividend once
670	33.66	
6,542	27.20	
2,021	10.18	
3,847	29.46	
20,922	23.38	
18,024	22.34	
18,448	20.90	
10,184	13.02	
1,244	61.40	Dividend-paying
1,588	41.62	
2,388	38.40	
3,572	34.18	
2,527	24.96	
2,730	22.42	
2,714	24.20	
3,823	32.94	
8,083	39.48	
7,544	37.22	
7,186	35.02	
7,333	31.76	
3,455	30.00	
3,497	28.36	

Date of Registration.	NAME OF COMPANY.	Years.
1881 } R.C. 1893 }	Victory (Charters Towers)	1894 1895 1896 1897 $\frac{1}{2}$ -year, Oct., 1898 1899
1896	Webster's Find	1899
1899	Westralia Mount Morgan	1899 1900
1894	White Feather Reward	—
1898	White Feather Main Reef	1899

MINES (*continued*).

Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
tons.	dwts.	
3,823	32·94	Dividend-paying
8,083	39·48	
7,544	37·22	
7,186	35·02	
1,364	85·08	
{	1,401	Tailings, 1520
	1,238	" 4260
		" 4896
		Dwts. per ton. 3·56 4·42 5·36
1,862	20·24	
		Dividend-paying
		Tons.
2,245	23·42	Tailings, 1072
3,631	22·00	" 1972
		Dwts. per ton. 38·98 20·64
724	17·50	
9,476	20·22	Dividend-paying

AUSTRALIAN MINES.

NAME.	—	Dwts.
Mount Leyshon	—	2·36
Frederick the Great	—	5·28
Lachlan	D.	5·76
Cardiff Castle	—	6·
Crescent Gold	—	6·24
North Boulder	D.	6·70
Craigimore	—	6·86
Jubilee	—	7·24
Brilliant Block	—	8·94
Gibraltar	D.	8·96
Mill's Day Dawn	D.	9·14
Brookman Brothers	—	9·64
Robinson	D.	10·18
Premier	D.	11·04
Howells	D.	11·38
Brilliant Extended	—	11·54
Black Flag Proprietary	—	11·94
Mallina	—	11·94
Beacon Gold	—	12·46
Lindsays	—	12·54
Cumberland Niagara	—	12·72
Ninety Mile	—	12·90
Hannan's Crcesus	—	12·98
Brilliant Freehold	—	13·
Vale of Coolgardie	—	13·02
Olivers	—	13·44
Mount Jackson	—	13·88
Field's Find	—	13·92
Mount Charlotte	—	14·36
Hands Across the Sea	—	14·56
Mount Morgan	D.	14·74
Emperor	—	15·16
Long Reef	—	15·36
Hinemoa	—	15·82
New Queen	—	16·30
Baker's Creek	D.	16·40
Lady Loch	D.	16·74
Lady Mary	—	16·74
Menzies' Consolidated	—	16·84
Brilliant Charters Towers	—	17·
Britannia	—	17·
White Feather Reward	—	17·50
Great Boulder Main Reef	D.	17·58
Central and West Boulder	—	17·76
Mayall's United	D.	18·
Phcebe	—	18·04
Princess	—	18·38
Great Fingall	—	18·42
Consolidated Murchison	—	18·42
Mount Malcolm	—	19·12
Bon Accord	—	19·68

Average Total Yield of Bullion per Ton of Ore Milled, 1898-9.

NAME.	—	Dwts.
Brilliant Gold	D.	20·16
White Feather Main Reef	D.	20·22
Webster's Find	—	20·24
Ballarat and Prince Oscar	—	20·76
Sons of Gwalia	D.	20·90
Cuddingwarra	—	21·48
Westralia Mount Morgans	D.	22·
Bayley's United	D.	23·36
Fraser South	—	23·44
Charters Towers Consolidated	—	23·52
Mount Magnet	—	23·54
Brock's Goldfields	—	23·66
Day Dawn Block	D.	23·70
Ivanhoe	D.	23·70
Emerald Reward	—	24·
Lake View	D.	24·08
Victoria and Queen	D.	24·20
Craven's Caledonia	—	25·
Day Dawn	P.C.	25·10
Mount Margaret	—	26·66
Londonderry	—	27·22
Brilliant and St. George	D.	27·46
Great Boulder Proprietary	D.	28·32
Victoria Gold	D.	28·36
Florence	—	28·66
Menzies' Crusoe	—	29·88
Menzies' Gold Reefs	—	31·46
Menzies' Lady Sherry	—	31·52
Hannan's Reward	—	36·72
Queensland Menzies	D.	36·90
Mount Usher	D.	38·40
Australia United	D.	39·66
Mossman	—	40·
Great Boulder Perseverance	D.	41·16
Polar Star	—	42·32
Golconda	D.	43·48
Croydon Consols	—	45·26
Burbank's Birthday Gift	D.	45·50
Harrietville	—	46·
Victory Charters Towers	D.	48·26
Lady Shenton	D.	48·56
Kalgoorlie Mint	—	53·60
Murchison New Chum	—	55·90
Peak Hill	D.	57·64
Queen Cross	D.	59·48
Associated Gold Mines	D.	60·58
Dixie Gold	—	69·42
Burbank's Grand Junction	—	75·40
Aladdin's Lamp	D.	80·
Menzies' Golden Age	—	96·32
Hannan's Brownhill	D.	117·96

NEW ZEALAND MINES.

Date of Registration.	NAME OF COMPANY.	Year.	Ore Milled.	Average Yield of Bullion per Ton.	REMARKS.
1893	Achilles . . .	1893-4 1895-6 1896-7 1897-8	tons. 6,854 3,832 5,302 3,875	dwts. 8·18 16·54 18·98 10·48	
1894	Hauraki Gold . .	1895 1896 1897	1,617 4,425 4,277	409·28 122·54 55·14	Dividends once
1896	Kuranui Caledonian	—	388	31·34	
1896	May Queen Hauraki	—	849	29·88	
1895 } R.C. 1899 }	New Moanataiari .	—	550	16·32	
1898	Premier New Zealand	1899	2,580	13·94	
1896 {	Progress Mines of } New Zealand }	1898-9	32,630	8·62	{ Fine gold Dividend-paying
1895	Scotty's Hauraki .	—	40 30	19·50 18·66	
1895	Tokatea of Hauraki	—	16	55·00	
1887	Waihi Gold . . .	1894 1895 1896 1897 1898 1899	24,864 33,670 34,410 40,764 77,929 102,381	15·66 16·50 18·40 16·64 15·50 13·90	{ Dividend-paying Fine gold Fine gold bullion worth about £1·354 per oz. = 318 fine Fine gold Fine gold
1895	Waihi Silverton .	—	5,827 10,350	6·22 6·10	Fine gold
1895	Waitekauri Gold .	1897 1898 1899	15,165 23,346 23,518	12·72 11·40 14·06	Fine gold { Dividend-paying Fine gold Fine gold
1896 {	Westralian and } New Zealand Ex- } plorers . . . }	—	1,450	6·20	
1895	Woodstock Gold .	— 1897	1,352 9,718	20·00 14·80	Fine gold

NEW ZEALAND MINES.

Average Total Yield of Bullion per Ton of Ore Milled, 1898-9.

NAME.		Dwts.	REMARKS.
Waihi Silverton	—	6·10	Fine gold
Westralian and New Zealand Explorers	—	6·20	
Progress Mines of New Zealand	D	8·62	Fine gold
Achilles	—	10·48	
Waihi Gold	D	13·90	
Premier New Zealand	—	13·94	
Waitekauri	D	14·06	
Woodstock	—	14·80	Fine gold
New Moanataiari	—	16·36	
Scotty's Hauraki	—	18·66	
May Queen Hauraki	—	29·88	
Kuranui Caledonian	—	31·34	
Tokatea of Hauraki	—	55	
Hauraki Gold	D	55·14	

INDIAN MINES.

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton.	Obtained.	Average Yield per Ton.
			tons.	dwts.	tons.	dwts.
1896	Balaghat Gold . . .	1899	11,070	12·56	—	—
1889	Champion Reef . . .	1893	19,165	27·266	—	—
		1894	31,604	28·508	—	—
		1895	49,705	26·504	—	—
		1896	63,157	23·386	—	—
		1897	87,772	—	—	—
		1898	89,271	—	—	—
		1899	93,121	—	—	—
1892	Coromandel Gold . . .	1896	7,150	10·874	—	—
		1897-8	15,500	11·600	—	—
		1898-9	13,100	4·200	—	—
1886	Goldfields of Mysore . . .	1896	5,598	3·250	—	—
		1897	10,291	1·700	—	—
1880	Mysore Gold	1889	32,576	27·548	—	—
		1890	38,812	27·106	—	—
		1891	40,353	30·076	—	—
		1892	44,548	24·865	—	—
		1893	49,822	22·062	—	—
		1894	60,957	14·480	—	—
		1895	60,654	19·406	—	—
		1896	64,297	28·900	—	—
		1897	74,272	30·240	—	—
		1898	87,155	34·660	—	—
		1899	92,343	31·720	—	—
1895	Mysore Reefs (Kangundy)	1896	3,297	10·918	—	—
		1898	4,238	10·220	—	—
		—	2,596	8·780	—	—
	Total since working	—	14,915	10·240	—	—
1888 } R.C. 1894 }	Mysore West Consoli- dated	1894-5	1,323	13·256	—	—
		1896	8,640	15·346	—	—
1886 } R.C. 1898 }	Mysore West Gold . . .	1898-9	22,600	5·040	—	—
R.C. 1895	Nine Reefs	1895	3,370	7·690	—	—
		1899	11,290	8·120	—	—

INDIAN MINES (*continued*).

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton.	Obtained.	Average Yield per Ton.
1880	Nundydroog	1889	tons. 3,781	dwts. 32'408	tons. —	dwts. —
		1890	9,495	32'930	—	—
		1891	11,750	39'482	—	—
		1892	18,176	32'144	—	—
		1893	25,760	19'858	—	—
		1894	29,750	18'958	—	—
		1895	32,975	22'678	—	—
		1896	39,490	21'928	—	—
		1897	49,675	20'980	—	—
		1898	37,930	19'140	—	—
		1899	35,200	21'540	—	—
		1880	Ooregum	1888	2,119	36'668
1889	7,839			40'630	—	—
1890	12,929			41'250	—	—
1891	15,673			44'128	—	—
1892	24,041			40'922	—	—
1893	37,821			34'002	—	—
1894	44,754			25'528	—	—
1895	53,420			21'634	—	—
1896	63,888			17'268	—	—
1897	68,889			13'920	—	—
1898	67,942			13'180	—	—
1899	64,107			15'560	—	—

NOTE.—Long tons of 2240 lbs. generally used.

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold per Ton.	REMARKS.
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.			
tons.	dwt.	tons.	dwt.	dwt.	dwt.	
—	—	—	—	32·408	—	Dividend-paying
—	—	—	—	32·930	—	
1,508	5·252	—	—	40·014	—	
5,950	6·752	—	—	34·356	—	
6,989	6·166	—	—	21·532	—	
7,625	3·820	—	—	19·936	—	
7,775	3·934	—	—	23·606	—	
7,990	4·070	—	—	22·752	—	
33,941	2·500	—	—	22·700	—	
44,898	2·320	—	—	21·900	—	
50,677	2·260	—	—	24·800	—	
—	—	—	—	36·668	—	Dividend-paying
—	—	—	—	40·630	—	
—	—	—	—	41·250	—	
781	6·632	—	—	44·460	—	
16,699	5·564	—	—	44·786	—	
39,402	5·476	—	—	39·708	—	
50,529	4·472	—	—	30·578	—	
56,945	4·412	—	—	26·338	—	
59,461	3·502	—	—	20·528	—	
59,570	2·640	—	—	16·200	—	
55,076	2·800	—	—	15·460	—	
76,017	2·980	—	—	19·120	—	

INDIAN MINES.

Average Total Yield of Bullion per Ton of Ore Milled, 1898-9.

NAME.		Dwts.	REMARKS.
Goldfields of Mysore	—	3·	
Coromandel	D	4·92	
Mysore West Gold	—	5·04	
Nine Reefs	—	8·12	
Mysore Reefs	—	10·24	
Balaghat	—	13·64	
Mysore West Consol	—	15·34	
Ooregum	D	19·12	
Nundydroog	D	24·80	
Champion Reef	D	32·22	Standard gold
Mysore Gold	D	33·74	

MISCELLANEOUS

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.	
			Milled.	Average Yield per Ton.	Obtained.	Average Yield per Ton.
1892	Alaska Mexican Gold . . .	1895	79,439	12·12	—	—
		1896	101,702	13·08	—	—
		1897	158,005	9·00	—	—
		1898	162,457	11·90	—	—
		1899	166,054	—	—	—
1890	Alaska Treadwell . . .	1895	241,278	12·12	—	—
		1896	263,670	13·08	—	—
		1897	242,027	9·00	—	—
		1898	254,329	11·90	—	—
		1899	250,408	—	—	—
1883 {	Anglo-Mexican Mining } Co. }	1898	17,652	—	—	—
		1899	18,660	—	—	—
1874	Antioquia (Frontino) Co.	1895	1,476	12·12	—	—
		1896	1,478	13·08	—	—
		1896	1,922	9·00	—	—
		1897	1,283	11·90	—	—
1893	Barima Gold	—	2,636	19·04	—	—
1889	Chiapas Mining Co.	1895	15,316	13·636	—	—
		1896	14,581	9·80	—	—
R.C. 1887 } 1891 }	Darien Gold	1896	3,603	25·80	—	—
1891	De Lamar Mining Co.	1892	19,390	Short tons	—	—
		1893	26,853	”	—	—
		1894	35,053	”	—	—
		1895	40,603	”	—	—
		1896	41,117	”	—	—
		1897	40,453	”	—	—
		1898	42,789	”	—	—
1895	Dominion Gold	—	25	20·80	—	—
		—	43	21·394	—	—
R.C. 1896 } 1898 }	Faria Gold	1899	7,890	7·08	—	—
1864 {	Frontino and Bolivia } ½-year } ½-year }	1896	18,283	—	—	—
		1896	18,208	—	125	—

MINES.

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold per Ton.	REMARKS.
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.			
tons.	dwts.	tons.	dwts.	dwts.	dwts.	
—	—	—	—	—	2·848	Dividend-paying
—	—	—	—	—	2·416	
—	—	—	—	—	2·084	
—	—	—	—	—	2·270	
—	—	—	—	—	2·048	
—	—	—	—	—	2·600	Dividend-paying
—	—	—	—	—	2·970	
—	—	—	—	—	2·746	
—	—	—	—	—	2·276	
—	—	—	—	—	2·658	
—	—	—	—	—	19·46	Including Tailings
—	—	—	—	—	20·20	Do.
—	—	—	—	12·12	—	Dividend-paying
—	—	—	—	13·08	—	
—	—	—	—	9·00	—	
—	—	—	—	11·90	—	
—	—	—	—	19·04	—	
—	—	—	—	—	—	
—	3·83	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	Dividend-paying
—	—	—	—	—	12·524	{ Dividend-paying
—	—	—	—	—	14·168	{ Fine silver, 16·343 ozs. per ton
—	—	—	—	—	15·100	18·140 "
—	—	—	—	—	14·614	14·544 "
—	—	—	—	—	11·916	9·064 "
—	—	—	—	—	9·160	10·562 "
—	—	—	—	—	8·320	6·823 "
—	—	—	—	—	—	3·557 "
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	15·046	Dividend-paying
—	—	—	—	—	16·320	

Date of Registration.	NAME OF COMPANY.	Year.	ORE.		CONCENTRATES.		
			Milled.	Average Yield per Ton.	Obtained.	Average Yield per Ton.	
1864 {	Frontino and Bolivia— <i>continued</i> } ½-year } ½ year } " } " } " }	1897	15,592	—	62½	—	
		1897	22,728	—	120½	—	
		1898	21,962	—	95¾	—	
		1898	24,322	—	134¼	—	
		1899	20,425	—	69¾	—	
1896	Goldfields of Venezuela .	1899	13,106	15·38	—	—	
1867	Javali	—	3,496	2·688	—	—	
		—	3,650	5·068	—	—	
1893	Ouro Preto	1898	68,606	—	—	—	
		1899	69,400	—	—	—	
R.C. 1886 { 1898 {	Palmarejo and Mexican } Goldfields }	1899	18,540	—	—	—	
1867		Pestarena	1896	5,061	34·802	—	—
			1899	5,210	13·340	—	—
1830 } 1856 }	St. John del Rey	1895-6	58,868	12·974	—	—	
		1896-7	73,630	11·460	—	—	
		1897-8	82,761	12·340	—	—	
		1898-9	93,230	18·800	—	—	
1897	Sao Bento	—	534	4·980	—	—	
		—	288	10·060	—	—	
		—	885	11·080	—	—	
		—	743	13·440	—	—	
1892	Twin Lakes Placers .	—	Average	yield of gravel,	pence		

MINES (continued).

TAILINGS.		SLIMES.		Total Average Yield of Bullion per Ton of Ore Milled.	Value of Bullion in Fine Gold per Ton.	REMARKS.
Treated.	Average Yield per Ton.	Treated.	Average Yield per Ton.			
tons.	dwts.	tons.	dwts.	dwts.	dwts.	
—	—	—	—	—	16·240	
—	—	—	—	—	14·300	
—	—	—	—	—	13·460	
—	—	—	—	—	13·160	
—	—	—	—	—	12·900	
2,291	5·30	—	—	16·30	—	
—	—	—	—	—	—	Dividend-paying
—	—	—	—	—	—	
—	—	—	—	—	5·164	Dividend-paying
—	—	—	—	—	5·322	
16,380	—	—	—	—	11·100	
—	—	—	—	—	—	
—	—	—	—	—	9·480	
—	—	—	—	—	—	Dividend-paying
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	
—	—	—	—	—	—	
4·61 per	cubic	yard.	—	—	—	Dividends once

MISCELLANEOUS MINES.

Average Total Yield of Bullion per Ton of Ore Milled, 1888-9.

NAME.	—	Dwts.	—	—
Alaska Mexican	D.	2·048	Fine gold	Alaska
Alaska Treadwell	D.	2·658	„ „	„
Javali	D.	5·068	—	Central America
Ouro Preto	D.	5·322	—	Brazil
Faria Gold	—	7·080	—	„
De Lamar	D.	8·320	Fine gold	United States
Pestarena	—	9·480	—	Italy
Palmarejo and Mexican . .	—	11·100	—	Mexico
Antioquia (Frontino) . .	D.	11·900	—	Republic of Colombia
Frontino and Bolivia . .	D.	12·900	—	„ „
Sao Bento	—	13·440	—	Brazil
Goldfields of Venezuela . .	—	16·300	—	Venezuela
St. John del Rey	D.	18·800	—	Brazil
Barima	—	19·040	—	British Guiana
Anglo-Mexican	—	20·200	—	Mexico
Dominion Gold	—	21·394	—	Canada
Darien Gold	D.	25·800	—	Republic of Colombia

NOTE OF MINES PAYING DIVIDENDS

Date of Registration.	NAME.	Paid-up Capital, May, 1900.	Total Dividends paid to 1900.
	AFRICAN.	£	£
1889	Langlaagte Royal	180,000	72,000
1885	Barrett	261,215	21,000
1891	New Croesus	450,000	3,750
1889	Langlaagte, Block B	679,250	94,500
1895	Windsor	100,000	20,000
1886	Salisbury	188,856	90,300
1886	Witwatersrand	721,299	285,000
1894	New Kleinfontein	404,625	63,375
1889	Geldenhuis Main Reef	150,000	45,000
1888	Langlaagte Estate	613,362	1,410,780
1889	Glencairn	725,000	248,750
1887	Wolhuter	399,165	185,000
1887	Jumpers	193,845	311,500
1886	Jubilee	122,354	320,375
1887	New Primrose	376,612	741,446
1896	Rietfontein, A	417,500	71,437
1889	New Comet	496,250	28,125
1888	Princess Estate	229,334	31,500
	AUSTRALIAN.		
1897	Lachlan	75,000	73,000
1895	North Boulder	110,000	27,500
	NEW ZEALAND.		
1896	Progress	275,000	55,000
	INDIAN.		
1892	Coromandel	135,000	156,974
	MISCELLANEOUS.		
1892	Alaska Mexican	183,100	102,600
1890	Alaska Treadwell	1,000,000	685,000
1867	Javali	93,388	5,266
1893	Ouro Preto	140,000	10,000
1891	De Lamar	400,000	480,000

WITH LOW GRADE ORES.

Equal to % per annum after Year of Registration.	AVERAGE YIELD OF ORE MILLED.		
	During last Year, 1893-9.	For previous Years.	Years.
%	Dwts.	Dwts.	
—	6·103	6·74	6
·577	6·754	7·08	4
—	6·879	6·74	4
1·301	6·925	7·28	9
4·000	7·122	8·56	3
5·011	7·380	10·520	7
5·097	7·966	8·	4
1·872	8·111	8·940	7
—	8·176	9·980	7
20·445	8·435	9·780	7
4·145	8·509	9·20	7
6·631	8·909	10·48	7
14·249	9·231	10·06	7
30·406	9·274	10·94	7
30·274	9·437	9·45	7
4·277	9·724	11·78	3
·806	9·818	10·10	5
1·196	9·873	11·26	6
1·665	5·76	Very small quantity of ore	—
5·000	6·70	” ” ”	—
5·238	8·62	Fine 8·62	2
2·862	4·92	9·14	2
7·414	2·048 F	2·332	5
6·850	2·658 F	2·650	5
·184	5·068	Small quantity of ore	—
1·428	5·322	5·242	2
13·333	8·320 F	11·822	5



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