

TRINIDAD AND TOBAGO.

Council Paper No. 66 of 1928.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the year 1927.

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HONOURABLE COLONIAL SECRETARY,

I have the honour to submit for the information of His Excellency the Governor the following report on the work of the Mines Department for the year 1927.

2. I am glad to be able to report that the year under review has been marked by a continued increase in activity in the petroleum industry. This activity would have been, no doubt, on a much greater scale but for two factors: for some time past, the Trinidad Leaseholds, Ltd., found that its pipeline and refinery capacity was inadequate to deal with its own production from the fields at Fyzabad and Barrackpore and at the same time cope with the increased production of other companies whose output is purchased. Steps were taken to increase the pipeline capacity by replacing the existing 6-inch pipeline from Fyzabad to Pointe-a-Pierre by a 10-inch line (completed at the time of writing) and to greatly increase the refinery facilities at Pointe-a-Pierre. Unfortunately, in order to enable other Companies' oil to be purchased, it was necessary for the Trinidad Leaseholds, Ltd., to curtail its own production for a considerable part of the year. The other factor which has affected the oil industry has been the low prices ruling for petroleum products in the world's markets for the greater part of 1926, which restricted, to some extent at any rate, the operations of the Companies.

3. Since 1920 there has been a steady increase in the production of oil to which the year 1927 was no exception, the quantity of oil won being 408,993 barrels more than in 1926.

4. One new shipping depot was constructed during the year under review, viz.: that of the Trinidad Oil Fields Operating Company, Ltd., who installed a tank farm near La Brea and erected a pier at La Brea Point on which was laid the shipping line. Up to the present crude oil only has been exported by this Company.

As mentioned above the Trinidad Leaseholds, Ltd., during the past year commenced the installation of extensive additions to its refining plant and at the time of writing these additions are nearing completion.

5. As, is only to be expected in view of the increased production, the quantity of Petroleum products exported has shown a large increase compared with the previous years, the figures being 155,900,000 gallons as against 139,500,000 gallons for the year 1926. Owing to the low price of oil obtainable in the world's markets for these products during the greater part of the year I regret to have to record that the values of this export have not shown a corresponding increase. In spite of this fact, however, petroleum products are still greater in value than any other export as will be shown from the following table:—

	Value.	Percentage of total.
	£	
Petroleum products	1,783,000	32.8
Cocoa	1,671,883	30.7
Sugar, Molasses and Rum	784,900	14.4
Asphalt	464,458	8.5
Coconuts and Copra	179,193	3.3
Other exports not enumerated	557,271	10.3
Total domestic exports	5,440,795	100.0

6. The following table will show the number of feet drilled and the quantity of oil produced during 1927 as compared with the years 1925 and 1926:—

	YEAR ENDED 31ST DECEMBER, 1925.		YEAR ENDED 31ST DECEMBER, 1926.		YEAR ENDED 31ST DECEMBER, 1927.	
	Feet drilled.	Oil won Brls. of 35 galls.	Feet drilled.	Oil won Brls. of 35 galls.	Feet drilled.	Oil won Brls. of 35 galls.
Crown Lands	105,631	2,877,437	126,339	2,976,227	119,284	2,362,150
Private Lands	63,522	1,509,070	73,739	1,995,243	121,440	3,018,341
	169,153	4,386,507	200,078	4,971,470	240,724	5,380,491

7. The total number of wells drilled in the Colony to 31st December, 1927, is 1,312 of which 823 are on Crown Lands. During the year under review 158 new wells were drilled, of which 84 were on Crown Lands and 74 on private lands, an increase of 31 compared with 1926. In 116 of these wells oil was struck.

8. The number of Companies engaged in the winning of oil at the close of the year was 14 as against 17 at the end of 1926.

9. ROYALTY.—The Royalty collected in respect of oil won from Crown Land showed a decrease as compared with 1926 the figures being £39,965 3s. 7½d. and £54,950 3s. 3d. respectively.

This decrease is due to three factors :

- (a) Restriction of production by the Trinidad Leaseholds, Ltd., in order to purchase oil won by other Companies, referred to previously in this report.
- (b) The bringing to account of certain arrears of royalty during 1926.
- (c) The fact that a large payment on account of minimum rental due in 1927 was only brought to account during 1928.

10. WAYLEAVES.—The revenue obtained from wayleaves in respect of pipelines along the Trinidad Government Railway and the public roads of the Colony has shown an increase. The amounts for the years 1926 and 1927 are as follows :—

	<i>Trinidad Government Railway.</i>	<i>Roads.</i>
1926 ..	£ 9,121 11s. 8d.	£3,704 5s. 7d.
1927 ..	£10,381 0s. 5d.	£4,179 4s. 6d.

11. FEES.—Fees charged for crossing the foreshore, the Railway and the public roads amounted to £71.

12. Three leases and three licences were issued during the year as follows :—

Mining Lease to Apex (Trinidad) Oilfields, Ltd., over 52 acres the surface of which was alienated subsequent to 16th January, 1902—Reg. No. 653 of 1927.

Mining Lease to Trinidad Petroleum Development Company, Ltd., over 19,620 acres of Crown Lands.—Reg. No. 1983 of 1927.

Mining Lease to United British Oilfields of Trinidad, Ltd., over 1,101 acres the surface of which was alienated subsequent to 16th January, 1902, and 22 acres of Crown Land.—Reg. No. 2528 of 1927.

Prospecting Licence to Michael Hamel Smith over 59 acres the surface of which was alienated subsequent to 16th January, 1902.—Reg. No. 1240 of 1927.

Exploration Licence to Trinidad Leaseholds, Ltd., over 7,634 acres of Crown Land.—Reg. No. 806 of 1927.

Exploration Licence to Kern Trinidad Oilfields, Ltd., over 1,445 acres.—Reg. No. 2736 of 1927.

The Trinidad Central Oilfields, Ltd. asked to be allowed to relinquish the greater part of its holdings (64,434 acres) under mining lease dated 24th August, 1926 (Council Paper No. 100 of 1926) as from 9th November, 1927, and to retain an area not exceeding 7,000 acres. This request was acceded to and steps are now being taken for the execution of a new mining lease over the reduced area in the latest model form.

13. The various oil companies have regularly submitted to the department the returns required to be furnished by them. After being checked, these have been filed with the records of the department.

14. A large number of inspections have been carried out by the officers of the department in connection with the operations taking place on the fields and I have great pleasure in placing on record that close co-operation exists between the officials of the various companies and the department in carrying out the various ordinances and regulations.

15. ACCIDENTS.—The accidents which occurred during the period under review were with one exception such as are usually incident to mining operations of this nature and do not call for special comment. The exception mentioned was an accident which occurred at Well No. 178 of the United British Oilfields of Trinidad, Ltd.—after flowing for about six hours on being drilled in the oil from this well became ignited and four employees were severely burnt, one of them, an American driller, succumbing to his injuries. Enquiries revealed the fact that no breach of the Boring Regulations had been committed and that the ignition of the oil was purely accidental. A verdict of accidental death was returned by the Coroner.

SAN FERNANDO BRANCH OF THE DEPARTMENT.

16. This branch deals with the conservation of oil and gas and other related problems with which the department is concerned and during the whole of the period under review was under the charge of Mr. C. A. P. Southwell, M.C., B.Sc.

REVENUE FROM THE PETROLEUM INDUSTRY.

17. During the past year there has been a considerable amount of discussion in the press of the Colony regarding the contribution of the industry to the Colonial revenue. From the usual statistics published by the Government, it is impossible to differentiate between payments made through the Customs, Income Tax and similar departments, by the petroleum industry, other industries and the general public, and, as I am doubtful whether it is generally realized how great a proportion of the Colonial revenue is due to the presence of this industry, I requested the Petroleum Association of Trinidad to supply me with such figures as are available from the Companies' records. These contributions in respect of the year 1927, together with those from the asphalt industry, are as follows :—

HEAD.	Oil.	Asphalt.	Total.	Colonial Revenue from Yellow Book.
	£	£	£	£
1. Customs	56,000	68,183	124,183	676,400
2. Licences	59,402	536	59,938	511,246
3. Income Tax (Includes Est. for Employees)	78,923	9,208	88,131	161,538
4. Fees of Court and Office	6,953	908	7,861	154,601
5. Post Office	942	89	1,031	35,239
6. Government Railway and Telegraph	14,523	22	14,545	..
7. Rents of Government Property	2,833	..	2,833	1,717
8. Land Sales and Royalties	56,522	30,738	87,260	108,362
9. Coastal Steamer "Belize"	8	..	8	15,235
	276,106	109,684	385,790	1,664,338

18. It must also be realized that, apart from contributions of the oil companies to the general revenue by way of direct taxation, large sums are also obtained indirectly by the circulation of money in the Colony through the medium of salaries and wages, payments to contractors, and the purchase of stores and other materials in the Colony, &c. The following figures have been supplied to me by the Petroleum Association of Trinidad in respect of the petroleum and asphalt industries :—

HEAD.	Oil.	Asphalt.	Total.
	£	£	£
Salaries and Wages	632,606	96,060	728,666
Contractors' payments	145,944	2,274	148,218
Local purchases of materials	380,850	21,132	401,982
Legal and other fees and retainers	10,429	570	10,999
Other Local Expenditure (including Rents, Private Royalties, &c.)	190,639	13,109	203,748
	1,360,468	133,145	1,493,613

In forwarding these figures, the Association informed me that it was estimated that, under the following heads, the percentages of the total revenue that were attributable directly and indirectly to the presence of an oil industry in the Colony were:—

(a) Customs	23 per cent.
(b) Port and Harbour dues	38 do.
(c) Income Tax	49 do.
(d) Licence fees for timber cut on Crown lands		78 do.

The total estimated contribution (direct and indirect) of the petroleum industry is estimated by the Petroleum Association of Trinidad, to be 21 per cent. of the Colony's revenue.

PREVENTION OF ACCIDENTS ORDINANCE, CAP. 157.

19. During the period under review 94 factories in Trinidad and 17 in Tobago were worked. Regular visits were paid to the various factories and I am pleased to be able to report that the provisions of the Ordinance were carefully observed.

QUARRIES.

20. The number of quarries worked during the period under review was 81 as compared with 82 in 1926. From inspections made, they have, in most cases, been found to be worked in a careful manner, but, with few exceptions, they are relatively unimportant.

PETROLEUM ORDINANCE, CAP. 145.

21. The premises in which the various products of petroleum are stored have been carefully inspected, and it is satisfactory to note that as a rule great care has been undertaken to ensure safety.

ASPHALT INDUSTRY ORDINANCE, CAP. 147.

22. No asphalt has been dug on the village lots at La Brea since 1914.

APPENDICES.

23. Appendix A shows the list of oil companies operating in the Colony during the year 1927.

24. In Appendix B will be found the daily average number of persons employed in oilfields and quarries and the quantity and value of minerals obtained during the period under review.

25. A comparative statement of the oil produced, refined and exported is shown in Appendix C.

26. Appendix D consists of a series of charts depicting in graphical form the progress made in various industries during the past few years.

27. Appendix E shows the relation of Mineral Exports to Agricultural Exports.

STAFF.

28. Mr. H. W. Reid, B.sc., was appointed to the post of Deputy Inspector of Mines as from 29th August and arrived in the Colony on 10th September.

Mr. B. A. Spence, Draughtsman, was promoted to the post of Chief Forest Ranger as from 1st May. Since then the post has been temporarily filled by the appointment of Mr. C. Harding.

I was on leave of absence out of the Colony from 22nd March to 23rd September. During the period 23rd March to 3rd May, Mr. D. M. Hahn, M.I.C.E., Assistant Director of Public Works, acted as Inspector of Mines in addition to performing the duties of his own office. When this officer went on leave Mr. N. Betancourt, Assistant Inspector of Mines, acted as Inspector of Mines until the arrival of Mr. Reid in the Colony on the 10th September.

I wish to place on record my appreciation of these officers' services in carrying on the work of the department during my absence and of the staff generally for their able and loyal assistance.

A. P. CATHERALL,
Inspector of Mines.

APPENDIX A.

No.	Companies.	Nature of tenure of lands on which operations took place.	Disposal of Oil.	Remarks.
1	Trinidad Leaseholds, Ltd.	Crown Lands under lease. Private lands . . .	Fyzabad, Barrackpore, Guayaguayare. Barrackpore	Pumped to the Company's refinery at Pointe-à-Pierre, and there refined. Most of the production is exported in bulk. The most important Company in the Colony. Production was restricted during the greater part of the year in order to purchase crude oil from other Companies. The major portion of the production is from the fields at Fyzabad and Barrackpore. An intensive development programme was undertaken at Guayaguayare during the greater part of the year but operations were somewhat curtailed towards the close. Considerable extensions to the refinery and shipping depot at Pointe-à-Pierre were in progress during the year.
2	United British Oilfields of Trinidad, Ltd.	Crown Lands under lease Private Lands . . .	Point Fortin, Morne L'Enfer Reserve, Los Bajos. Point Fortin.	Sold to United British Refineries, Ltd. Drilling was confined to the Parry Lands field. A small production is still obtained from the Point Fortin and Los Bajos fields.
3	Trinidad Central Oilfields, Ltd.	Crown lands under lease	Tabaquite and Guapo	Refined, sold locally and exported. Small amount of drilling on the Tabaquite field. Drilling on the Cruse field suspended during the year.
4	Trinidad Lake Petroleum Company, Ltd.	Private lands . . .	Brighton . . .	The bulk of the production is exported to the United States of America. Producing only.
5	Petroleum Development Company, Ltd.	Crown lands under lease	Morne L'Enfer Forest Reserve	Sold to Trinidad Lake Petroleum Company, Ltd. Drilling on Crown oil rights near the Pitch Lake. Satisfactory production.
6	Apex (Trinidad) Oilfields, Ltd.	Crown lands under lease and prospecting license and Private lands	Fyzabad . . .	Sold to Trinidad Leaseholds, Ltd. Very active programme during the year, with the result that this Company had the largest production in the Colony.
7	Kern Trinidad Oilfields, Ltd.	Crown lands under lease Private lands . . .	La Brea Guapo and Rousillac	Sold to United British Refineries, Ltd. Development of Perseverance Estate, Guapo, continued during the whole of the year. Operations were continued on Crown Lands near Guapo. A satisfactory production was obtained.

APPENDIX A.—Continued.

No.	Companies.	Nature of tenure of lands on which operations took place.		Disposal of Oil.	Remarks.
8	Oropuche (Trinidad) Oilfields, Ltd.	Private lands	Fyzabad and San Francique	Sold to Trinidad Leaseholds, Ltd.	Now acquired by Trinidad Leaseholds, Ltd. Small production obtained.
9	Trinidad Petroleum Development Company, Ltd.	Private lands	Naparima, Palo Seco, Cedros.	Sold to United British Refineries, Ltd.	A very active development programme has been carried on in the Palo Seco District, but up to the present the production has been relatively small. Drilling has also been undertaken in the Cedros District with disappointing results.
		Crown lands	Palo Seco, Cedros and Guapo.		
10	Petroleum Options, Ltd.	Private lands	Fyzabad	.. Sold to Trinidad Leaseholds, Ltd.	The properties of this Company have now been leased to the Trinidad Oilfields Operating Company, Ltd.
11	Venezuelan Consolidated Oilfields, Ltd.,	Private lands	Fyzabad	.. Sold to Trinidad Leaseholds, Ltd.	This Company was formerly the Trinidad Friendship Petroleum Company, Ltd. Towards the close of the year an active drilling programme was commenced with a resultant increase in production.
12	British Controlled Oilfields, Ltd.	Crown lands under lease	Oropuche	.. Sold to Trinidad Leaseholds, Ltd.	Drilling operations have been suspended since January, 1926, and a very small production is obtained from existing wells.
13	Trinidad Oil Producing and Refining Company, Ltd.	Private lands	Fyzabad	.. Sold locally	Producing only during early part of the year. Lease surrendered to owner as from 28th June, 1927.
14	Palo Seco Oilfield. (C. C. Stollmeyer) ..	Crown lands under lease	Palo Seco	.. Sold to United British Refineries, Ltd.	Drilling continued during the period under review, and a small production was obtained.
15	Trinidad Oilfields Operating Company, Ltd.	Private lands	Fyzabad, San Francique, Palo Seco and Aripero	Sold to Trinidad Leaseholds, Ltd., United British Refineries, Ltd., and also exported direct	This Company continued a most active programme, with the result that it now has the third largest production in the Colony.

APPENDIX B.

Daily average number of persons employed in Oilfields and Quarries and the quantity and value of minerals obtained during the year ended 31st December, 1927.

Minerals.	Daily average number of persons employed.		Total.	Quantity.	Approximate value.*
	Males.	Females.			
Oil	5,050	75	5,125	5,380,464 Barrels.	£ 1,152,352
Asphalt	1,120	10	1,130	242,131 Tons.	151,332
Private Quarries (Limestone, Gravel, &c.)	343	156	499	137,832 Tons.	15,915
Government Quarries (Limestone, &c.)	330	117	447	52,520 Tons.	9,483

* N.B.—The values in this column are those returned by owners and managers, and represent the value at the place of production.

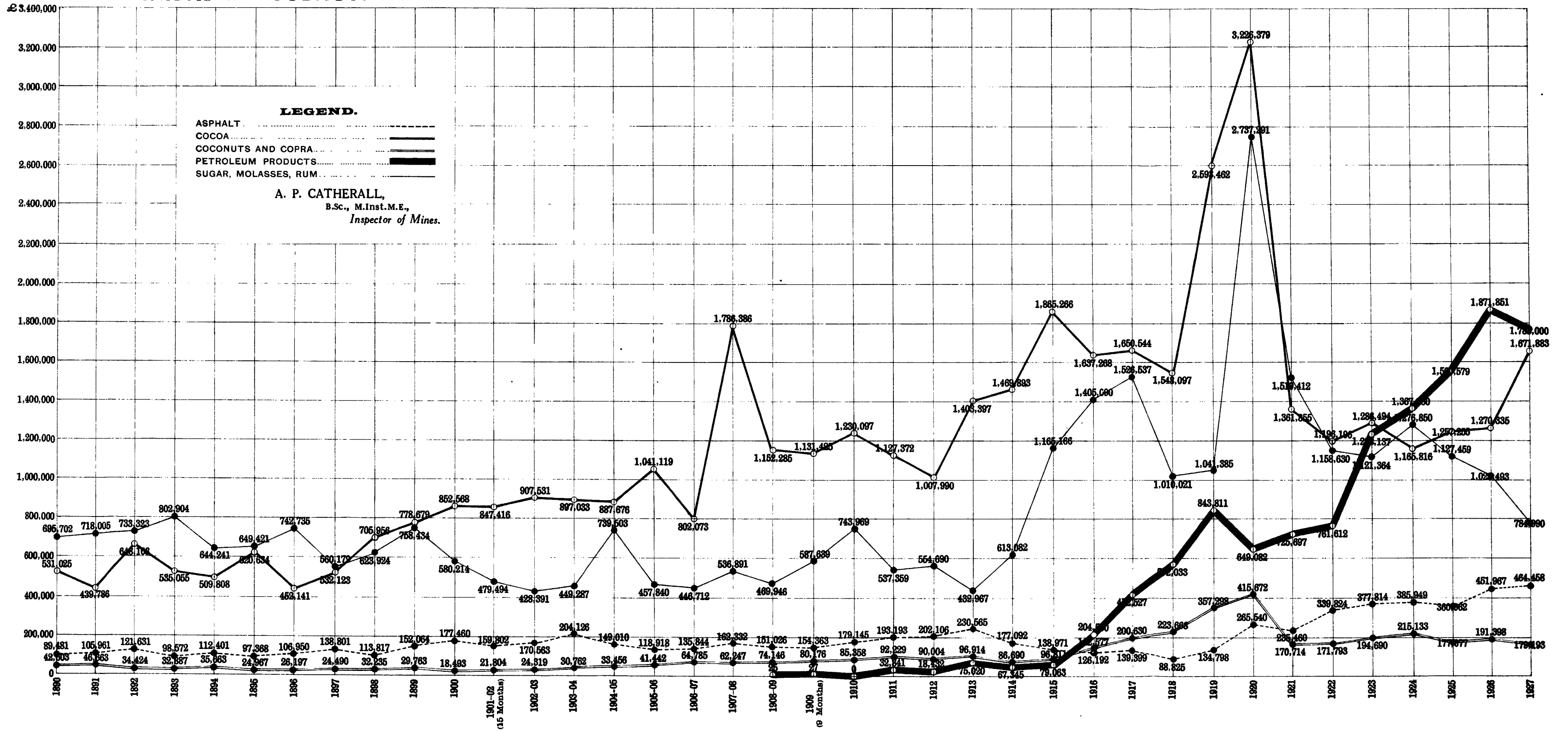
APPENDIX C.

Comparative statement of oil produced, refined and exported year by year since the inception of the Petroleum Industry in the Colony.

Year.	Production in barrels.	Quantity of Crude Oil refined in barrels.	Quantity of Crude oil and refined oil exported in barrels.
1905 to 31st March, 1910	10,541
1910-1911	225,112
1911-1912	285,307	Previous to 1912 to 1913	37,842
1912-1913	503,616		9,484
1913-1914	643,516		35,061
1914-1915	1,050,112		41,413
9 months ended December, 1915	671,125		58,437
1916	927,877		107,822
1917	1,602,312		505,002
1918	2,082,068		2,106,369
1919	1,841,047		1,149,943
1920	2,083,027		1,395,487
1921	2,354,160		1,806,016
1922	2,444,752		1,820,018
1923	3,050,872		2,360,279
1924	4,056,612		3,433,902
1925	4,386,507		3,790,343
1926	4,971,471		3,786,876
1927	5,380,464		4,796,223
	38,470,498		27,240,517
			27,835,434

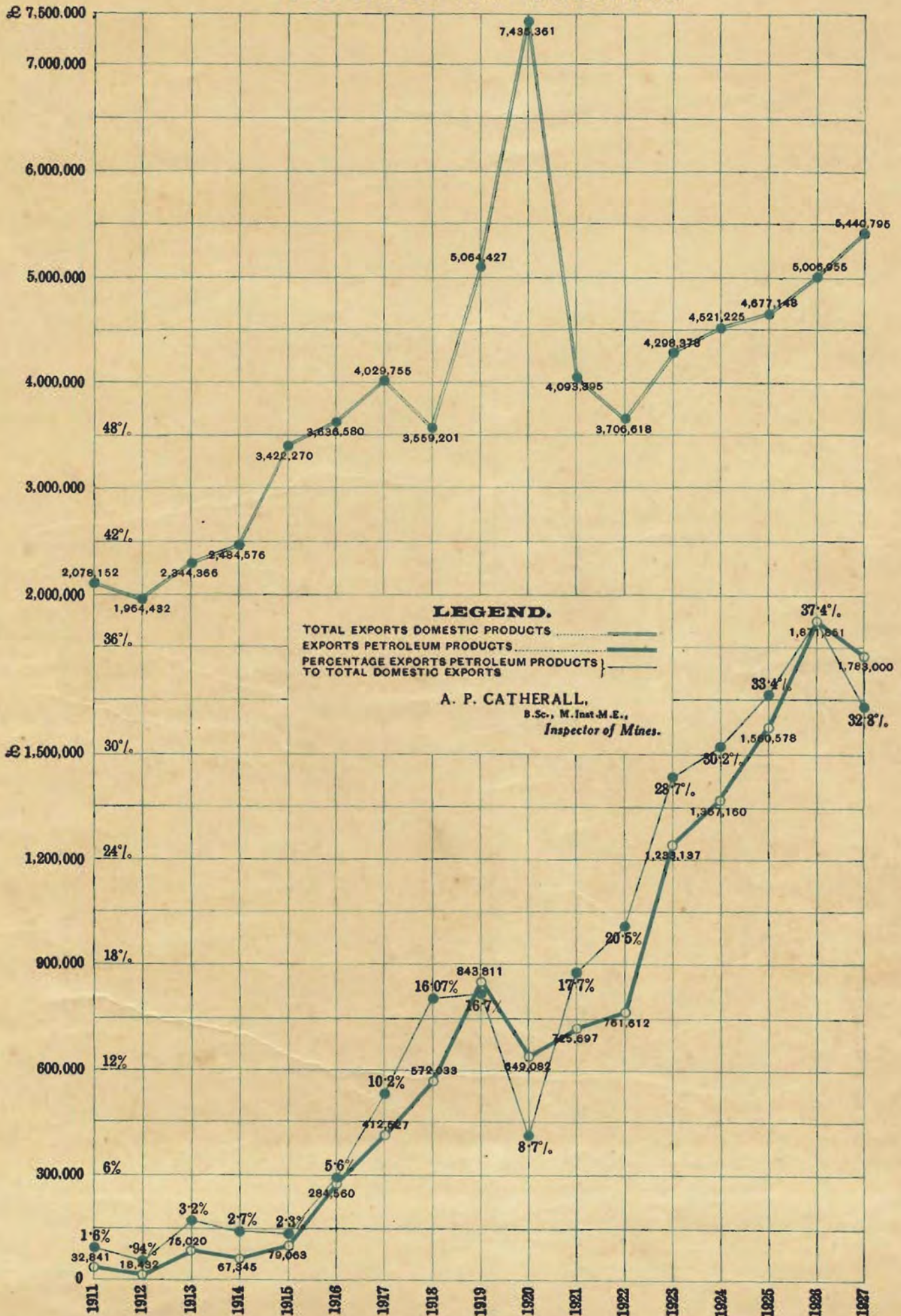
A EXPORT OF LOCAL PRODUCE.

TRINIDAD AND TOBAGO.



B

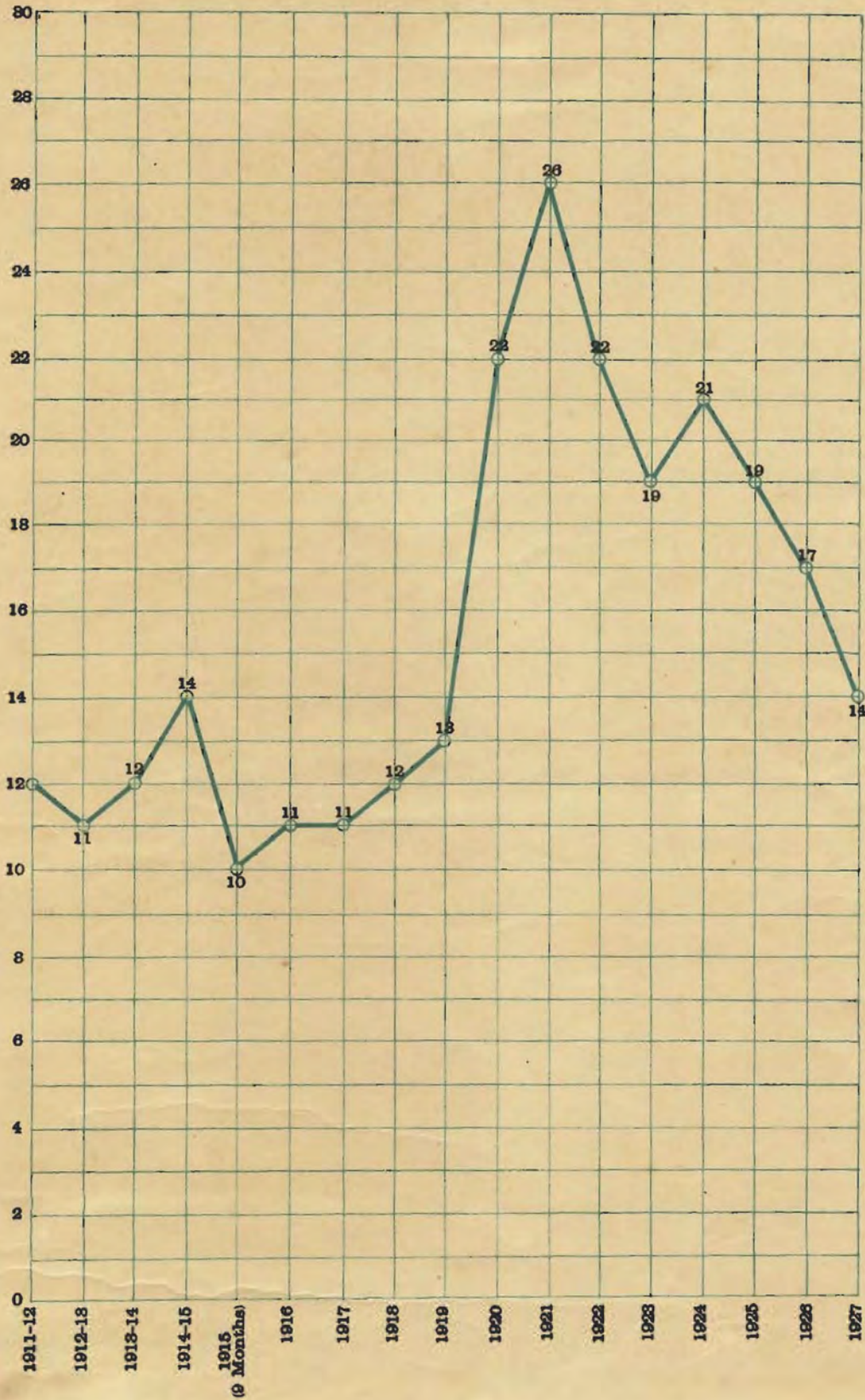
TRINIDAD AND TOBAGO.



APPENDIX-D.

C

Curve showing the number of Oil Companies that have operated annually in the Colony from 1st April, 1911, to 31st December, 1927.

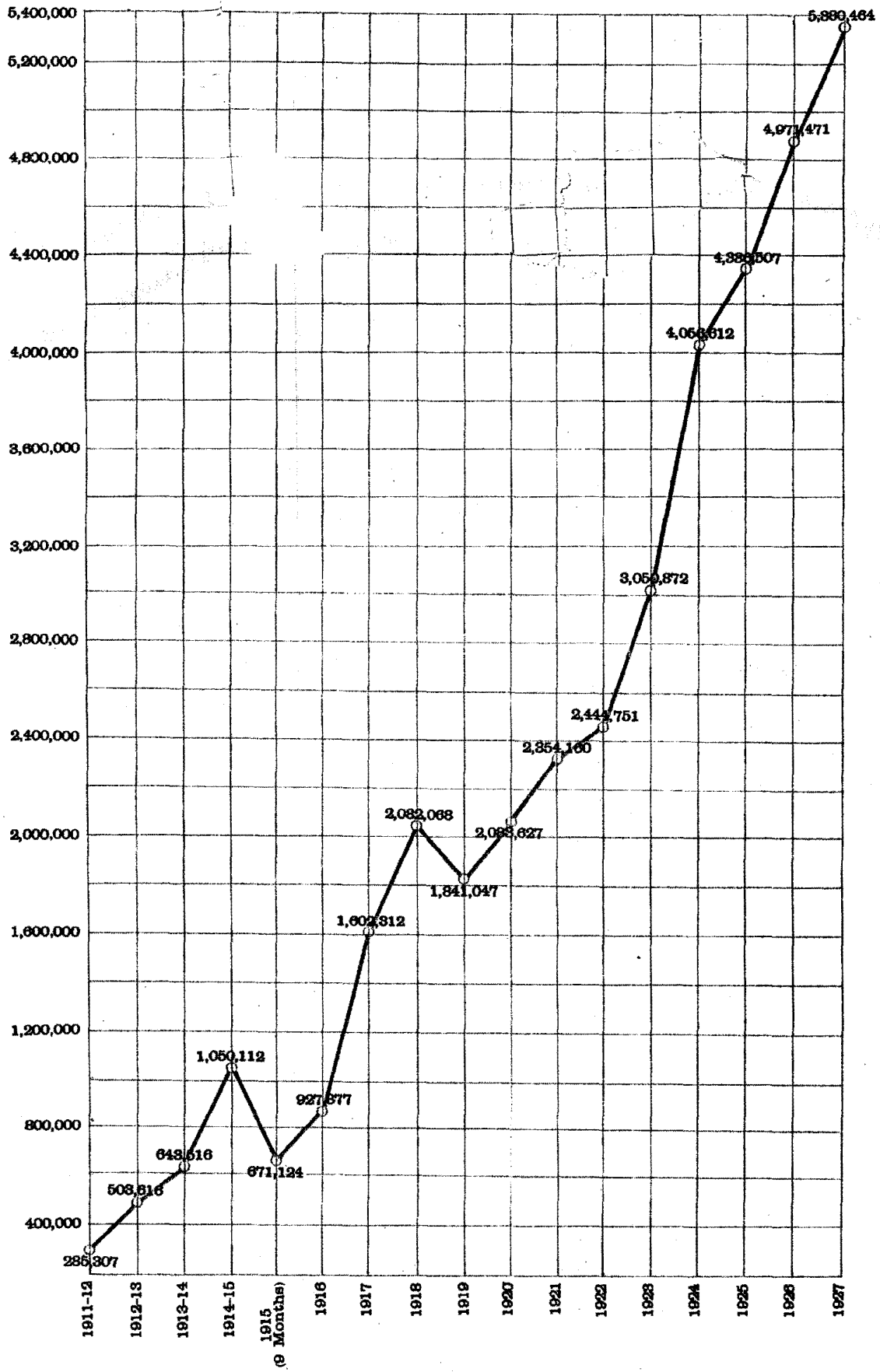


APPENDIX-D.

D

TOTAL ANNUAL PRODUCTION OF CRUDE OIL IN BARRELS.

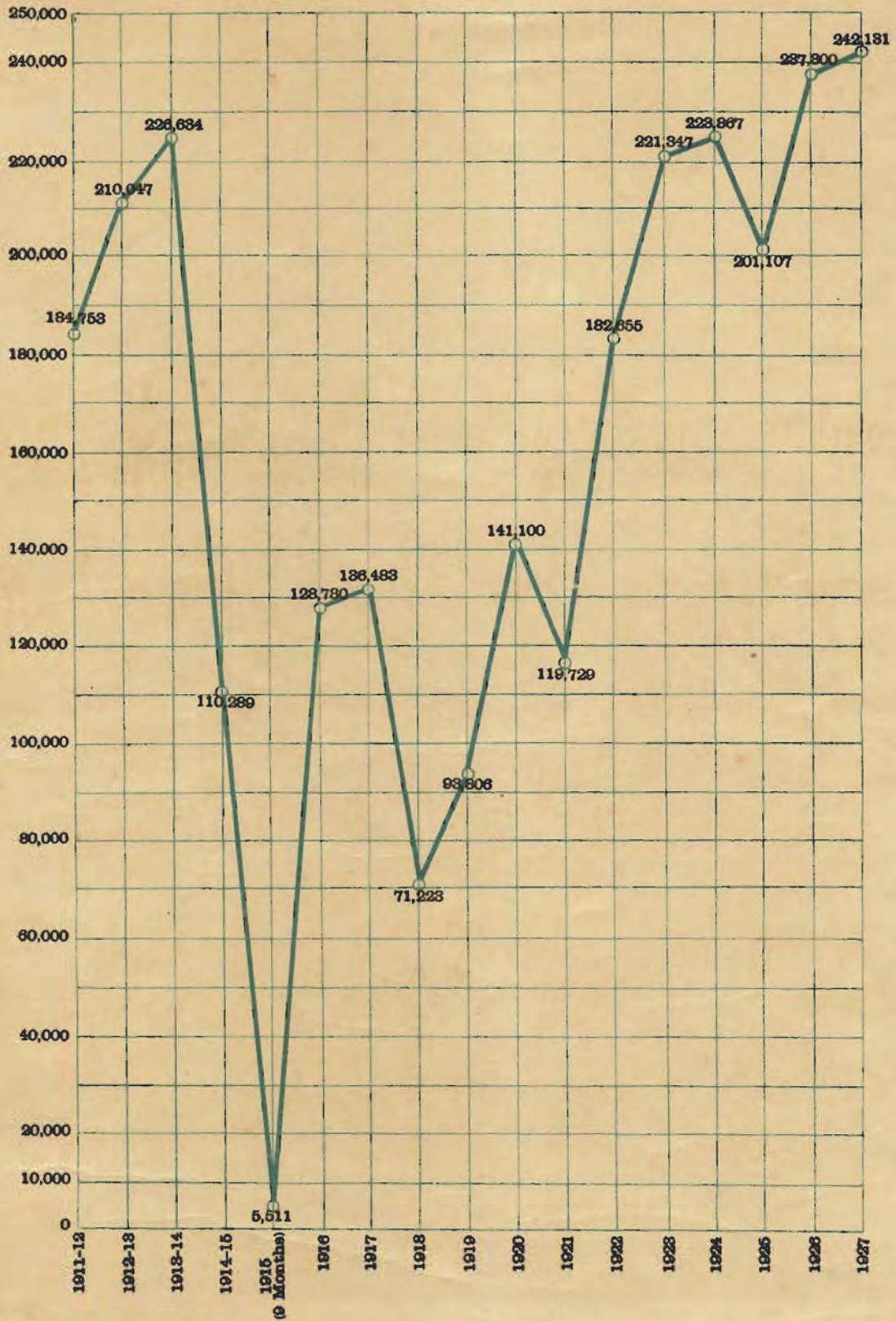
One barrel = 35 gallons.



APPENDIX-D.

E

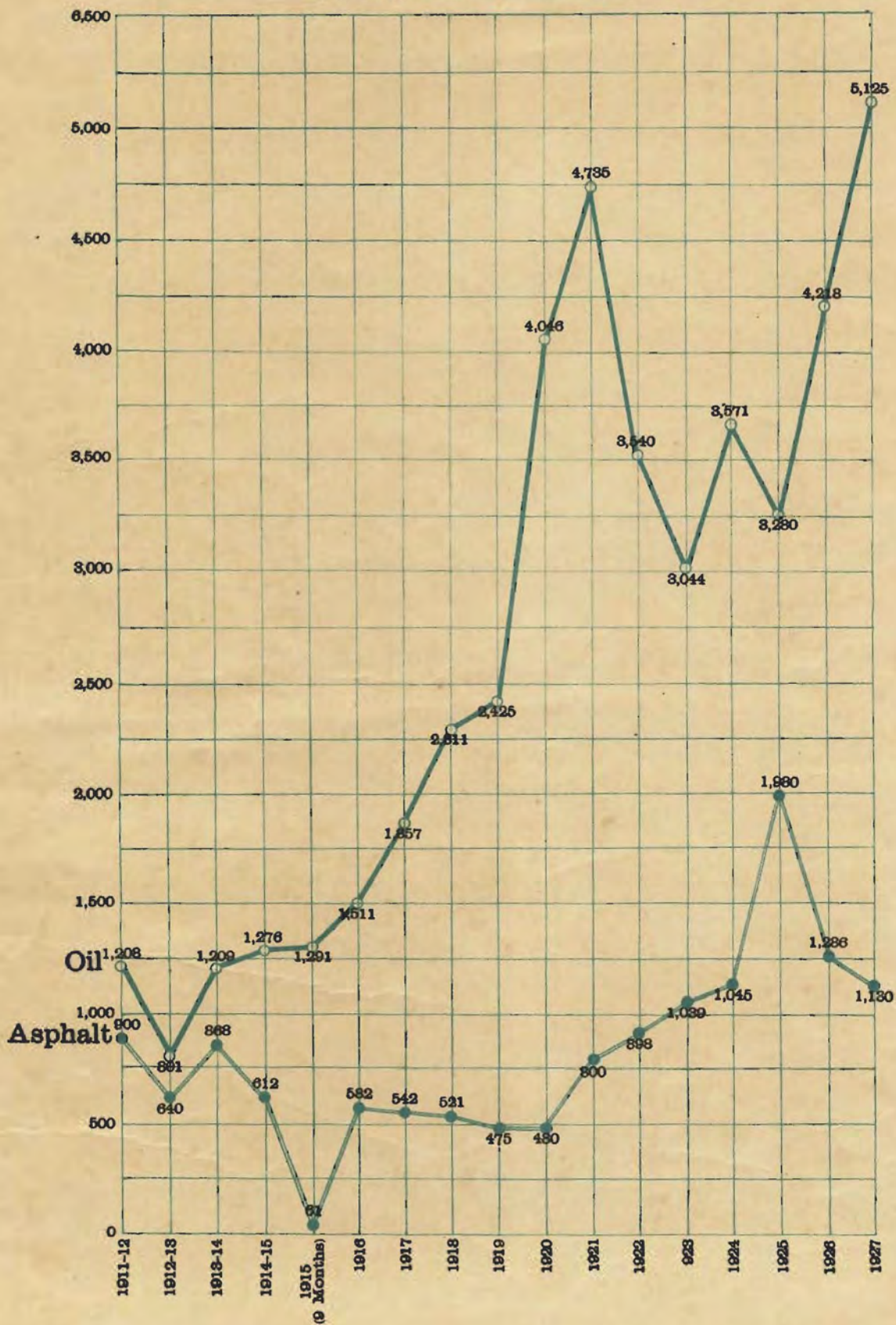
Curve showing yearly output of Asphalt from the Colony in Tons from 1st April, 1911 to 31st December, 1927.



APPENDIX-D.

F

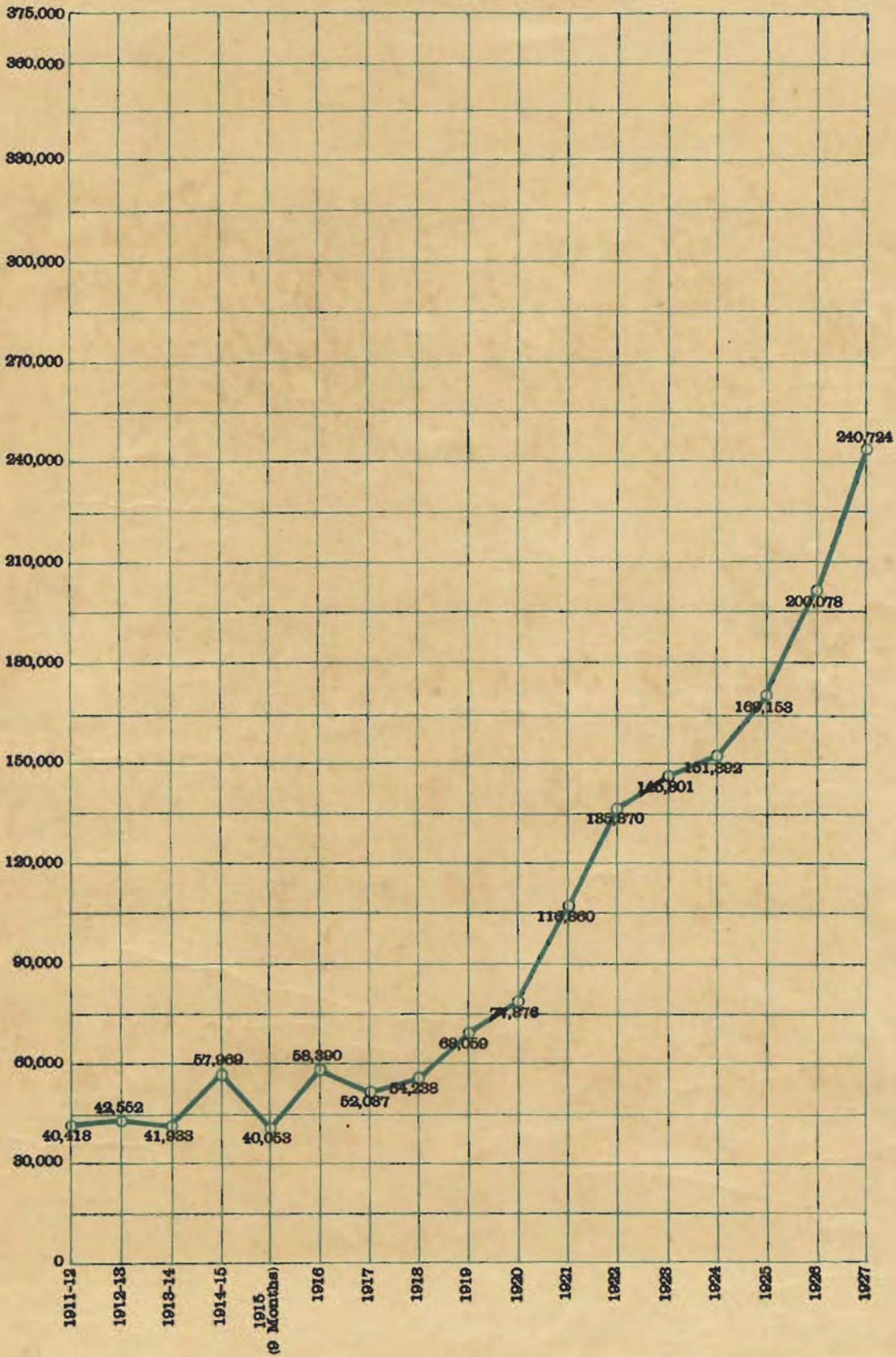
Curve showing comparison of daily average number of persons employed in the Oil and Asphalt Industries of the Colony from 1st April, 1911 to 31st December, 1927.



APPENDIX-D.

G

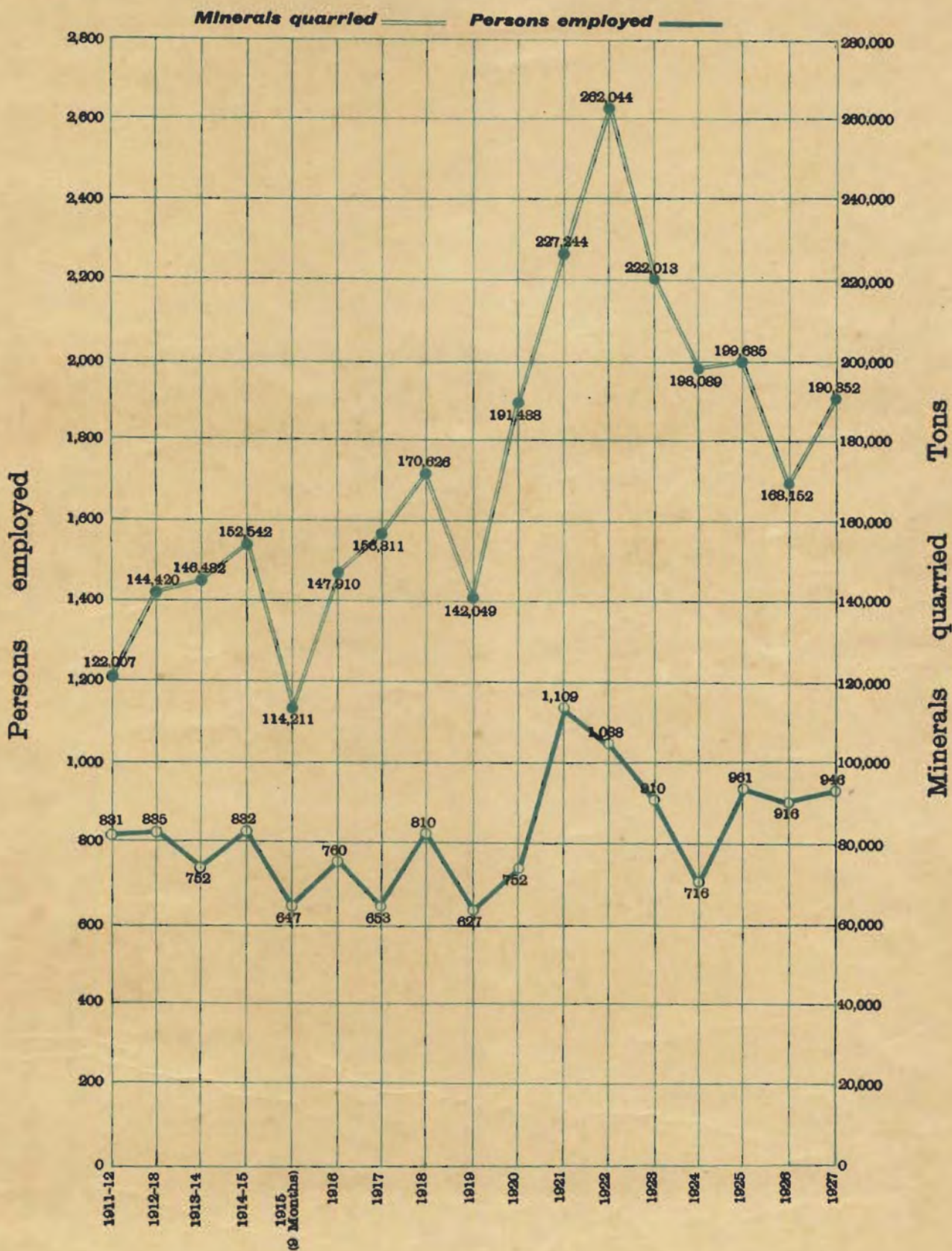
Curve showing yearly total number of feet drilled in the Colony from 1st April, 1911 to 31st December, 1927.



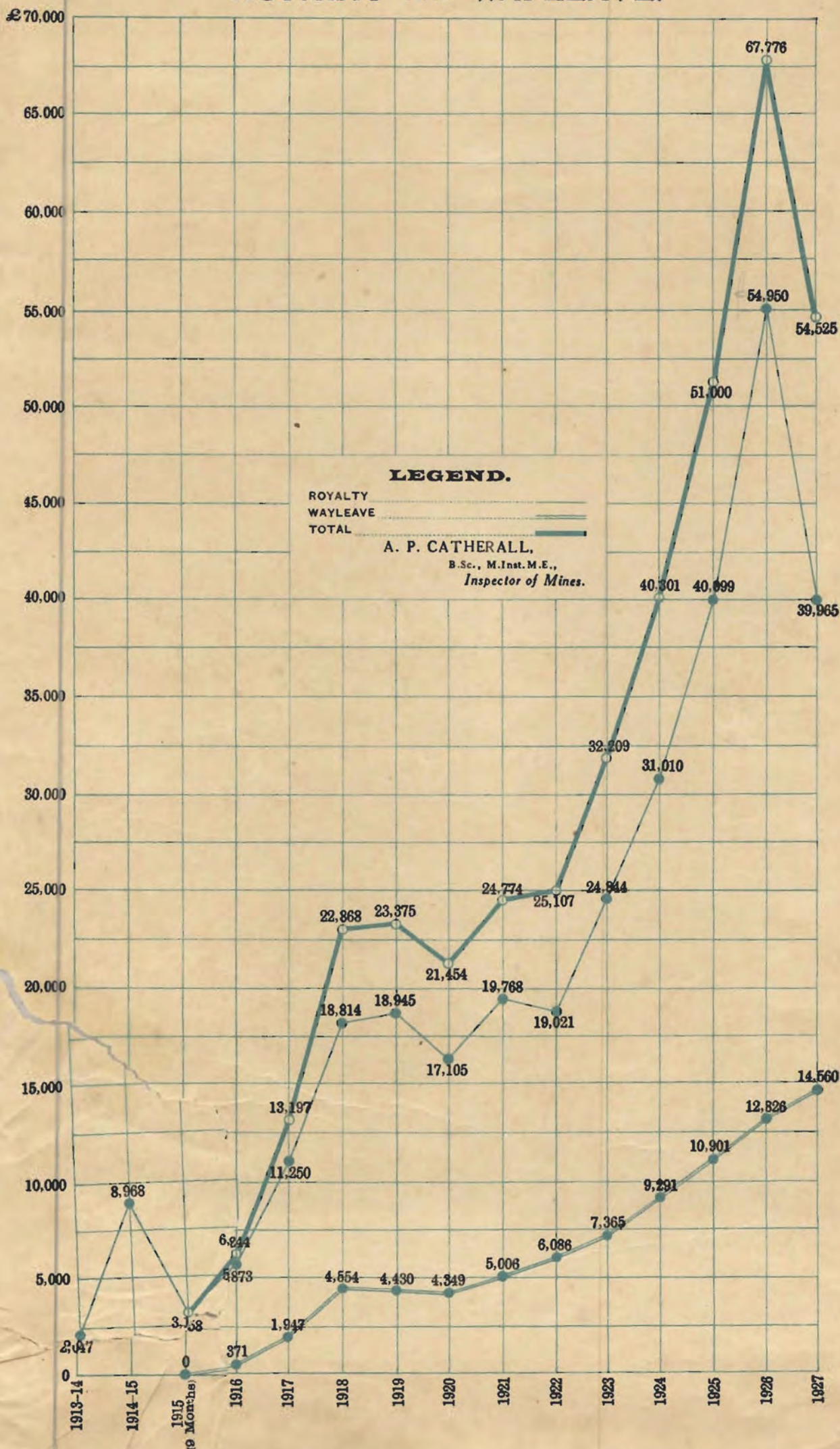
APPENDIX-D.

H

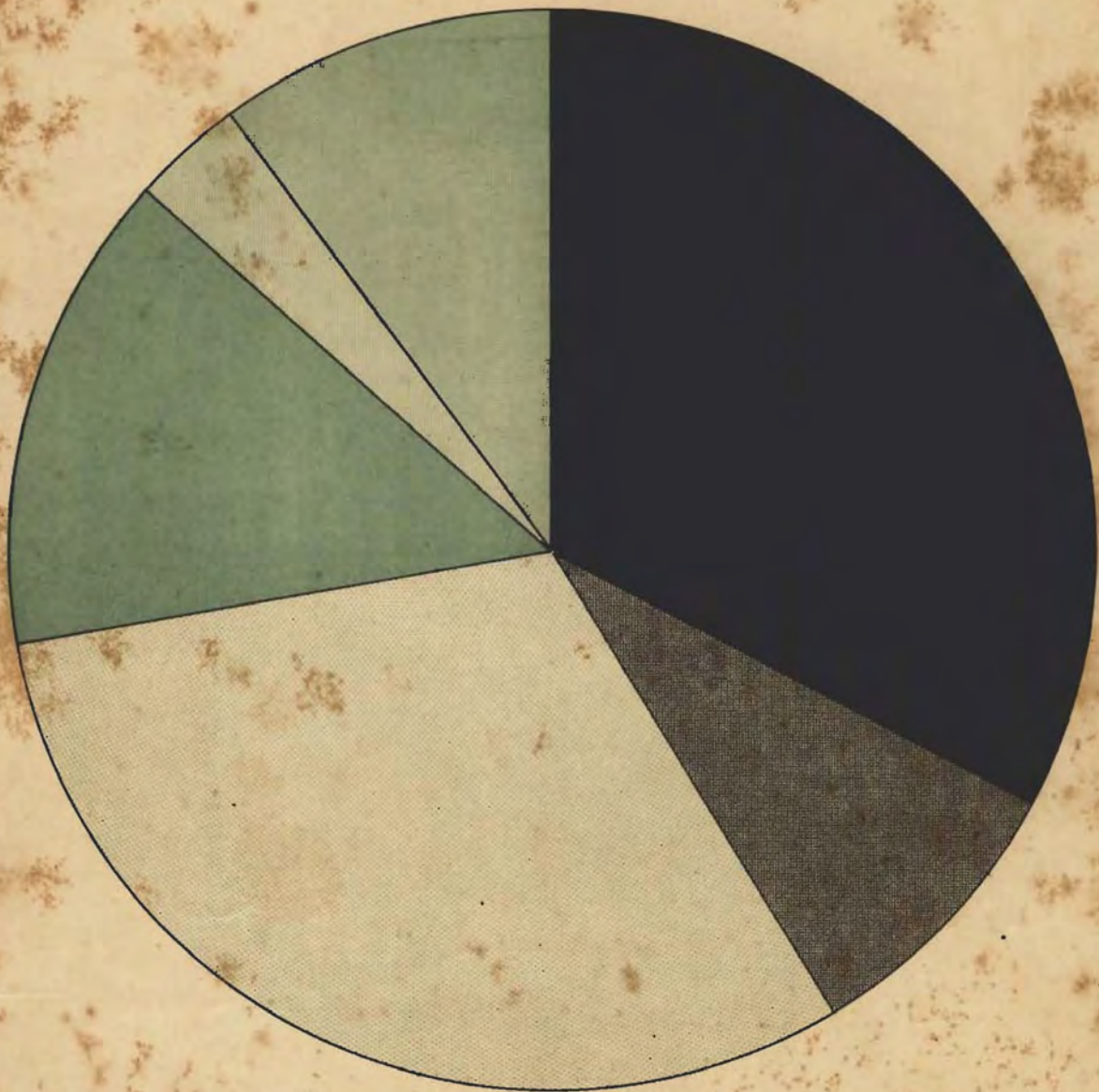
Curve showing the yearly total quantity of Minerals quarried and a comparison of the daily average number of persons employed in Quarries in the Colony from 1st April, 1911 to 31st December, 1927.



ROYALTY AND WAYLEAVE.



APPENDIX-E.



1927

MINERAL EXPORTS

41.3%

Petroleum Products

32.8%

Asphalt

8.5%

AGRICULTURAL AND OTHER EXPORTS

58.7%

Cocoa

30.7%

Sugar, Molasses, Rum

14.4%

Coconuts and Copra

3.3%

Other Exports

10.3%

$\frac{10.3}{48.4}$