

TRINIDAD AND TOBAGO.

Council Paper No. 30 of 1933.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the year 1932.

*Laid before the Legislative Council on the
7th of April, 1933.*

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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 1932.

2. Since the year 1920 there has been a steady increase in the Colony's production of crude oil and I am pleased to be able to record that this increase has continued during the period under review, the production during 1932 being the highest yet recorded, viz.: 10,126,065 barrels compared with 9,743,502 for the previous year. It is not generally realised to what proportions the mineral industry of the Colony has grown during recent years, but the fact that petroleum products and asphalt formed 56·80 per cent. and 3·14 per cent. respectively, or a total of practically 60 per cent., of the total exports shows the importance of these industries to the Colony.

In common with other industries the oil industry of the Colony during the past year has suffered from the financial conditions which are prevailing throughout the world, and prices obtainable for petroleum products in the world's markets have continued to be low though in certain cases companies which have entered into sales contracts for their products based on prices ruling in the United States of America have benefited from the rate of exchange since the departure of Great Britain from the gold standard.

In my last report I mentioned that a number of companies had found it necessary to curtail drastically their operations and that in 1931, 218,642 feet were drilled compared with 372,530 feet in 1930. During the period under review drilling operations have been further curtailed in that only 173,287 feet were drilled.

3. In connection with the growth of the industry it is interesting to note that during the last decade the production has more than quadrupled, the production for the year 1922 being 2,444,751 barrels.

There has been a considerable increase not only in the value but also the volume of petroleum products exported during 1932 as compared with 1931, the figures being as follows:—

| | | | | | |
|----------------------------------|----|----|----|----|------------|
| 1931—8,964,304 barrels valued at | .. | .. | .. | .. | £1,949,455 |
| 1932—9,637,474 do. | .. | .. | .. | .. | £2,382,846 |

From this it will be seen that the average value per barrel of these products was 4s. 11½d. in 1932 as compared with 4s. 5½d. in 1931; it is, however, regrettable that this value is still much below the figure of 7s. 3¼d. returned to the Customs Department in respect of exports for the year 1930.

The value of the exports of the leading staples of the Colony during 1932 is shewn below:—

| | Value | Percentage of |
|---|------------------|---------------|
| | £ | Total. |
| Petroleum Products | 2,382,846 | 56·80 |
| Sugar, Molasses and Rum | 888,092 | 21·17 |
| Cocoa | 579,170 | 13·80 |
| Asphalt | 131,651 | 3·14 |
| Coconuts, Copra and Coconut Oil | 106,786 | 2·54 |
| Coffee | 20,822 | 0·50 |
| Bitters | 18,962 | 0·45 |
| Other exports not enumerated | 67,103 | 1·60 |
| | <u>4,195,432</u> | <u>100·00</u> |

4. As I mentioned in my last Administration Report the United British Oilfields of Trinidad, Ltd., had made arrangements for the raising of fresh capital for the purpose of the construction of a new refinery and loading facilities at Point Fortin. These works were commenced, and at the time of writing the

refinery, having a capacity of 1,000 tons of crude oil per 24 hours, is nearing completion. The construction of a pier some 8,500 feet long at which vessels drawing 30 feet of water will be able to load is now in progress, and it is expected will be completed during the year.

The Kern Trinidad Oilfields, Ltd., have also commenced the erection of a refinery designed to treat 1,000 barrels of oil per 24 hours. Apart from the above there has been little of interest to record regarding the construction of new works during the period under review.

5. The following table will shew the number of feet drilled and the quantity of oil produced during 1932 as compared with the years 1930 and 1931 :—

| | YEAR ENDED 31ST DECEMBER, 1930. | | YEAR ENDED 31ST DECEMBER, 1931. | | YEAR ENDED 31ST DECEMBER, 1932. | |
|------------------|------------------------------------|---------------------------------------|------------------------------------|---------------------------------------|------------------------------------|---------------------------------------|
| | <i>Feet drilled.</i> | <i>Oil won Brls. of 35 galls.</i> | <i>Feet drilled.</i> | <i>Oil won Brls. of 35 galls.</i> | <i>Feet drilled.</i> | <i>Oil won Brls. of 35 galls.</i> |
| Crown Lands .. | 254,116 | 5,260,366 | 138,382 | 5,325,743 | 111,730 | 5,610,901 |
| Private Lands .. | 118,414 | 4,158,541 | 80,260 | 4,417,759 | 61,557 | 4,515,164 |
| | <u>372,530</u> | <u>9,418,907</u> | <u>218,642</u> | <u>9,743,502</u> | <u>173,287</u> | <u>10,126,065</u> |

6. During the year 61 wells were drilled of which 41 were on Crown Lands and 20 on private lands, an increase of one as compared with 1931. In 46 of these wells oil was struck. The total number of wells drilled in the Colony to 31st December, 1932, was 1,902 of which 1,197 were on Crown Lands.

7. At the close of the year 16 concerns were actively engaged in the winning of oil as against 14 at the end of 1931.

8. ROYALTY.—The royalty collected in respect of oil won from Crown Lands during the period under review shewed a considerable increase over that during 1931, the figures being £90,053 7s. 4½d. compared with £84,546 14s. 10½d. during 1931.

9. WAYLEAVES.—The revenue collected under this head amounted to £2,619 17s. 1½d., of which £184 4s. 7d. was for oil pumped along the Trinidad Government Railway. In 1931 £6,420 13s. 1d. was collected.

10. FEES.—Fees charged for crossing the Foreshore, the Trinidad Government Railway and public roads amounted to £414.

11. LICENCES.—No new leases or licences were issued during the year but the following extensions were granted :—

Prospecting Licence to Apex (Trinidad) Oilfields, Ltd., Registered No. 4159 of 1928 was further extended to 31st December, 1933 by Deed Registered No. 5021 of 1932.

Prospecting Licence to the Apex (Trinidad) Oilfields, Ltd., Registered No. 1938 of 1930 was extended for one year from 1st July, 1932 by Deed Registered No. 3004 of 1932.

Prospecting Licences to the Trinidad Petroleum Development Company, Ltd., Registered Nos. 2716 of 1928, 1186 of 1929, 3916 of 1929 and 3177 of 1930 were further extended to 31st December, 1933.

Prospecting Licence to the Siparia Trinidad Oilfields, Ltd., Registered No. 1742 of 1929 was further extended for one year from 1st May, 1932 by Deed Registered No. 2703 of 1932.

12. RETURNS.—The various oil companies have regularly forwarded to the Department the returns required to be submitted by them in respect of their operations. After being carefully checked, these have been filed with the records of the Department.

13. A large number of inspections have been carried out by the officers of the Department in connection with the various operations taking place on the fields, and I have much pleasure in reporting that the Managers readily co-operated with the Department in endeavouring to carry out the provisions of the Ordinances and Regulations.

14. No new legislation affecting the petroleum industry was passed during the year.

SAN FERNANDO BRANCH OF THE DEPARTMENT.

15. A report by the Petroleum Technologist on the working of his branch is enclosed at Appendix " B ".

PREVENTION OF ACCIDENTS ORDINANCE, CAP. 157.

16. In general the Owners and Managers co-operate satisfactorily with the Department in ensuring safety to the workmen in their employment. During the period under review 172 factories in Trinidad and Tobago were worked. It is interesting in this connection to note that during the last year or two a considerable number of small factories employing less than half a dozen hands have been established.

QUARRIES.

17. From inspections made the various quarries in the Colony have, on the whole, been found to have been worked in a careful manner, the number operated during the period under review being 77 as compared with 79 during 1931.

PETROLEUM ORDINANCE, CAP. 145.

18. Five hundred and forty-nine licences to store and sell petroleum products were issued during the year. It is satisfactory to note that as a rule care is taken in petrol service stations to ensure safety.

APPENDICES.

19. Appendix " A " shows the list of oil companies operating in the Colony during the year 1932.

20. Appendix " B " is the Report on the working of the Petroleum Office, San Fernando.

21. In Appendix " C " 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.

22. A comparative statement of the oil produced and exported is shown in Appendix " D ".

23. Appendix " E " shows the amount of oil refined year by year.

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

25. Appendix " G " shows the relation of mineral exports to agricultural exports.

STAFF.

26. I have great pleasure in recording the very able and loyal assistance I have received from the members of the staff.

A. P. CATHERALL,
Inspector of Mines.

18th March, 1933.

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 and Guayaguayare Fyzabad and Barrackpore | Pumped to the Company's Refinery at Pointe-a-Pierre, and there refined. Most of the production is exported in bulk | Whilst this Company has the second largest production it continues to be the most important one in the Colony from the point of view of marketing and refining. The major part of the Company's production continues to be obtained from its various holdings in the Fyzabad area; drilling operations in this area have been increased during the year with a resultant increase in production. Some drilling has been done at Barrackpore but the production has slightly declined. Development has continued on the Company's holdings at Guayaguayare and the production has considerably increased. |
| 2 | United British Oilfields of Trinidad, Ltd. | Crown lands under lease | Morne L'Enfer Reserve | Sold to United British Refineries, Ltd. | This Company has confined its operations to the Parry Lands area where the production has fallen slightly. There has been under construction during the year a new refinery and new shipping facilities. |
| 3 | Trinidad Central Oilfields, Ltd. | Crown lands under lease | Tabaquite, Guapo and Lizard Springs | Production from Tabaquite and Lizard Springs refined, sold locally and exported; that from the Cruse field sold to the Trinidad Leaseholds, Ltd. and United British Refineries, Ltd. | Little work has been done by this Company. The production at Tabaquite and Lizard Springs has been maintained but drilling has been suspended on the Cruse field and the production has greatly declined. |
| 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 and La Brea | Sold to Trinidad Lake Petroleum Company, Ltd. | No drilling has been done, production has decreased. |
| 6 | Apex (Trinidad) Oilfields, Ltd. | Crown lands under lease and prospecting license and private lands | Fyzabad and Siparia | Crude oil sold to Trinidad Leaseholds, Ltd.; Casing Head Petroleum Spirit sold to United British Refineries, Ltd. | This Company is the largest producer in the Colony. The production has been maintained at much the same rate as last year. |
| 7 | Kern Trinidad Oilfields, Ltd. | Crown lands under lease Private lands | La Brea Guapo and Rousillac | The production is exported in bulk | There was a considerable curtailment of footage drilled as compared with 1931 with a decrease in production as a result. |

| | | | | | |
|----|--|---------------------------------------|---|---|--|
| 8 | New Oropuche Trinidad Oilfields, Ltd... | Private lands | .. Fyzabad .. | .. Sold to Trinidad Leaseholds, Ltd. | No drilling has been done and the production has slightly decreased. |
| 9 | Trinidad Petroleum Development Company, Ltd. | Private lands Crown lands | .. Palo Seco Palo Seco, Los Bajos and Santa Flora | Sold to United British Refineries, Ltd. | This Company has again carried on a very active drilling programme in the Palo Seco district and although the footage drilled has not been so great as in 1931 the production has increased. |
| 10 | Palo Seco Oilfield (C. C. Stollmeyer) | Crown lands under lease | Palo Seco | .. Sold to Trinidad Leaseholds, Ltd. | Although drilling has been suspended, the production from existing wells has increased. |
| 11 | Trinidad Oil Fields Operating Co., Ltd. | Private lands Crown lands | .. Fyzabad, San Francique and Palo Seco .. Pointe d'Or and San Francique | Sold to West India Oil Company | .. Some drilling has been done during the year, and the production has increased. |
| 12 | New Dome Oilfields, Ltd. | Private lands | .. Fyzabad .. | .. Sold to Trinidad Leaseholds, Ltd. | This Company has considerably increased its footage but the production has slightly decreased. |
| 13 | Siparia Trinidad Oilfields, Ltd. | Crown lands under Prospecting License | Palo Seco .. | .. Sold to Trinidad Leaseholds, Ltd. and Trinidad Petroleum Development Co., Ltd. | Both drilling and production have considerably decreased. |
| 14 | Trinidad Freeholds, Ltd. | Private lands | .. Fyzabad .. | .. Sold to Trinidad Leaseholds, Ltd. | No drilling. Small production. |
| 15 | H. S. Tucker | Private lands | .. Pointe Ligoure and Fyzabad | Refined and products sold locally | .. Small production obtained from existing wells in the Fyzabad and Pointe Ligoure districts. |
| 16 | Coldan, Ltd. | Private lands | .. Williamsville | .. The production was consumed by the Company | This concern drilled one well in an abandoned field and then suspended operations; all the production was consumed. |

APPENDIX B.

HONOURABLE INSPECTOR OF MINES,

The year under review shows an increase of about 3.9 per cent. in the production but a decrease in footage drilled of 20.7 per cent. over the 1931 figures. The corresponding figures with regard to 1930 were 7.5 per cent. increase and 53.5 per cent. decrease respectively.

An analysis of the production and feet drilled for 1931 and 1932 shews:—

| | 1931. | | | 1932. | | |
|------------------|------------------|--------------|------------------------------|------------------|---------------|------------------------------|
| | Production brls. | Feet drilled | Average Production per Well. | Production brls. | Feet drilled. | Average Production per Well. |
| Crown Lands .. | 2,816,924.44 | 42,960 | 612 | 3,340,290.65 | 44,568 | 806 |
| Alienated Lands | 2,511,544.57 | 95,400 | 1,828 | 2,270,610.21 | 67,162 | 1,775 |
| Private Lands .. | 4,415,033.58 | 80,107 | 1,394 | 4,512,958.49 | 61,557 | 1,856 |

Sixty-one new wells were started up during the year making a grand total for the Colony of 1,902.* These new wells were disposed of as follows:—

| | | | | | <i>Crown.</i> | <i>Private.</i> |
|--|----|----|----|----|---------------|-----------------|
| Wells started during 1932 .. | .. | .. | .. | .. | 41 | 20 |
| Wells brought forward from 1931 | .. | .. | .. | .. | 17 | 12 |
| Total .. | .. | .. | .. | .. | 58 | 32 |
| Wells completed as producers | .. | .. | .. | .. | 32 | 19 |
| Wells completed as a water well | .. | .. | .. | .. | 1 | 0 |
| Wells completed as dry holes but not abandoned | .. | .. | .. | .. | 1 | 1 |
| Wells current in 1932 and abandoned as dry or uncommercial holes | .. | .. | .. | .. | 2 | 1 |
| Wells current in 1932 and abandoned as junked or watered holes | .. | .. | .. | .. | 0 | 1 |
| Wells unfinished at the end of 1932 | .. | .. | .. | .. | 22 | 10 |
| Totals .. | .. | .. | .. | .. | 58 | 32 |
| Old wells abandoned during 1932 | .. | .. | .. | .. | 3 | 5 |
| Wells re-completed during the year | .. | .. | .. | .. | 19 | 16 |

The average number of wells producing monthly shewed a slight increase over the 1930 and 1931 figures as follows:—

| | | | | 1930. | 1931. | 1932. |
|-------------------------------|----|----|----|-------|-------|-------|
| Wells flowing .. | .. | .. | .. | 170 | 185 | 215 |
| Wells pumping | .. | .. | .. | 544 | 504 | 469 |
| Wells Swabbing or Bailing | .. | .. | .. | 38 | 60 | 81 |
| Wells on Air or Gas Lift | .. | .. | .. | 19 | 13 | 15 |
| Wells on Displacement Pumping | .. | .. | .. | — | — | 6 |
| | | | | 771 | 762 | 786 |

From the above it will be seen that the number of flowing wells has increased. This is mostly due to the increased use of tubing to bring a new well in which prolongs the flowing life of a well considerably as was indicated in my last year's report. This use of tubing together with more attention paid to the older producing wells has considerably reduced the number of feet required to be drilled to maintain the Colony's production, despite the fact that in some areas drilling has proceeded further down the flanks necessitating deeper wells.

The greatest production again came from the Fyzabad area with 63.8 per cent. of the total for the Colony divided amongst the Companies operating there.

Surface geology is still being carried out to fit in with the geophysical survey of the south-western corner of the island mentioned in my last year's report.

* One pup well was drilled on Crown Lands in 1926 but was not previously reported.

An additional survey with two Eötvös balances was carried through from Cedros peninsula to Moruga and where the results are available they have confirmed previous geological opinion. This survey is continuing and a magnetometer is now being used in places where the torsion balances were unsuitable.

The most outstanding item of interest of the year was the start in July of checking up strata drilled in a well by an electrical instrument and this apparatus is now run in most of the wells drilled in the Colony. In some areas the instrument is used as a check to mechanical coring and in others it is entirely relied on for placing the perforations in the oilstring.

The acid bottle is generally used to check verticality of a well where such checking is carried out.

During the year four wells were surveyed, the first two by means of a gyroscopically controlled instrument and the other two by an electric teleclinometer. Of these four wells three were found to deviate up dip and the fourth along the strike.

Frequent inspections of drilling and production machinery were carried out in conjunction with the ordinary routine duties. All Companies have continued to shew the greatest willingness to co-operate with this office in all ways.

There was one fatal accident and 22 other accidents reported during the year. An analysis of these accidents shews 48 per cent. were due to carelessness or inattention to what was going on by the man injured, the balance were unavoidable. No well caught fire during the year.

Owing to the small production obtained from the wells and to the sulphur content of the crude it was decided to abandon the Point d'Or Field. This work is now nearing completion.

2nd March, 1933.

C. E. CAPITO,
Petroleum Technologist.

DRILLING AND PRODUCTION RETURN FOR 1932.

| Month. | New Wells Started. | | New Wells completed as producers. | | New Wells completed as dry but not abandoned. | | Wells re-completed as producers. | | Wells abandoned. | | Total Wells started to date. * | Footage drilled during month. | Production for month. | Wells producing by | | | | | | | | | | Grand Total. | Percentage Wells producing to total wells drilled. | REMARKS. | | |
|--------------|--------------------|----|-----------------------------------|----|---|---|----------------------------------|----|------------------|---|--------------------------------|-------------------------------|-----------------------|--------------------|----|-----|-----|----|----|----|---|---|---|--------------|--|----------|-------|---------------|
| | C | P | C | P | C | P | C | P | C | P | | | | C | P | C | P | C | P | C | P | C | P | | | | | |
| January .. | 2 | 2 | 1 | 3 | 1 | — | 1 | 1 | — | 1 | 1,845 | 12,271 | 846,955.72 | 128 | 82 | 305 | 158 | 67 | 8 | 10 | 2 | — | 2 | 510 | 252 | 762 | 41.32 | |
| February .. | — | 3 | 1 | 3 | — | — | 1 | 1 | 1 | 2 | 1,848 | 10,188 | 828,859.80 | 125 | 82 | 313 | 160 | 68 | 5 | 15 | 3 | 1 | 2 | 522 | 252 | 774 | 41.91 | |
| March .. | 3 | 2 | 2 | 1 | — | — | 1 | 3 | — | — | 1,853 | 10,037 | 874,144.95 | 128 | 83 | 322 | 161 | 67 | 3 | 10 | 3 | 2 | 3 | 529 | 253 | 782 | 42.22 | |
| April .. | 2 | 3 | 4 | 2 | — | — | 3 | — | — | 1 | 1,858 | 14,250 | 852,080.32 | 131 | 83 | 328 | 160 | 74 | 5 | 11 | 4 | 2 | 3 | 546 | 255 | 801 | 43.13 | |
| May .. | 5 | — | 1 | — | — | — | 2 | 3 | — | — | 1,863 | 15,404 | 859,609.51 | 130 | 73 | 327 | 153 | 75 | 5 | 13 | 4 | 3 | 3 | 548 | 238 | 786 | 42.21 | |
| June .. | 2 | 1 | 3 | 4 | — | — | 1 | — | — | — | 1,866 | 17,394 | 839,247.51 | 135 | 76 | 320 | 150 | 76 | 5 | 16 | 3 | 3 | 4 | 550 | 238 | 788 | 42.25 | |
| July .. | 3 | 2 | 3 | 1 | — | — | 3 | 1 | 1 | — | 1,871 | 17,405 | 883,101.96 | 136 | 75 | 317 | 150 | 80 | 4 | 20 | 2 | 2 | 5 | 555 | 236 | 791 | 42.30 | |
| August .. | 5 | 1 | 5 | 2 | — | — | 1 | 2 | 1 | 1 | 1,877 | 16,051 | 854,301.16 | 141 | 80 | 317 | 152 | 75 | 5 | 14 | 2 | 3 | 6 | 550 | 245 | 795 | 42.38 | |
| September .. | 6 | 2 | 2 | — | — | — | 1 | 2 | — | 1 | 1,885 | 12,534 | 840,980.51 | 136 | 82 | 319 | 151 | 81 | 4 | 13 | 1 | 3 | 6 | 552 | 244 | 796 | 42.25 | 1 Water well. |
| October .. | 3 | — | 2 | 2 | — | — | — | 2 | 1 | 1 | 1,888 | 17,727 | 850,281.23 | 145 | 81 | 313 | 142 | 77 | 10 | 13 | 2 | 3 | 6 | 551 | 241 | 792 | 41.97 | |
| November .. | 4 | 3 | 3 | — | — | — | 3 | — | 1 | — | 1,895 | 12,383 | 785,155.01 | 144 | 75 | 313 | 139 | 76 | 9 | 13 | 1 | 3 | 6 | 549 | 230 | 779 | 41.13 | |
| December .. | 6 | 1 | 5 | 1 | — | 1 | 2 | 1 | — | — | 1,902 | 17,643 | 809,139.67 | 147 | 77 | 308 | 143 | 87 | 9 | 13 | 1 | 1 | 6 | 556 | 236 | 792 | 41.66 | |
| Totals .. | 41 | 20 | 32 | 19 | 1 | 1 | 19 | 16 | 5 | 7 | | | | Averages | | | | | | | | | | | | | | |
| Grand Totals | 61 | | 51 | | 2 | | 35 | | 12 | | 1,902 | 173,287 | 10,123,857.35 | 136 | 79 | 317 | 152 | 75 | 6 | 13 | 2 | 2 | 4 | 543 | 243 | 786 | 42.06 | |

* One pup well was drilled in 1926 on Crown Lands but not previously reported

C—denotes Crown Oil Rights.
P—denotes Private Oil Rights.

2nd March, 1933.

C. ERIK CAPITO,
Petroleum Technologist.

APPENDIX C.

Daily average number of persons employed in Oilfields and Quarries and the quantity and value of minerals obtained during the year ended 31st December, 1932.

| Minerals. | Daily average number of persons employed. | | | Quantity. | Approximate Value. † |
|--|---|----------|--------|--------------------|----------------------|
| | Males. | Females. | Total. | | |
| Oil | 4,386 | 71 | 4,457 | 10,126,065 Barrels | £1,378,855 |
| Asphalt | 546 | 3 | 549 | 68,266 Tons * | 42,666 |
| Private Quarries (Limestone, Gravel, &c.) .. | 241 | 91 | 332 | 126,938 Tons | 9,417 |
| Government Quarries (Limestone, &c.) .. | 335 | 96 | 431 | 74,880 Tons | 11,318 |

* In addition to this amount 39,191 tons were extracted from the Pitch Lake by the Public Works Department for use on the roads of the Colony.

† The values in this column are those returned by owners and managers and represent the value at the place of production.

68266
39191
107457

APPENDIX D.

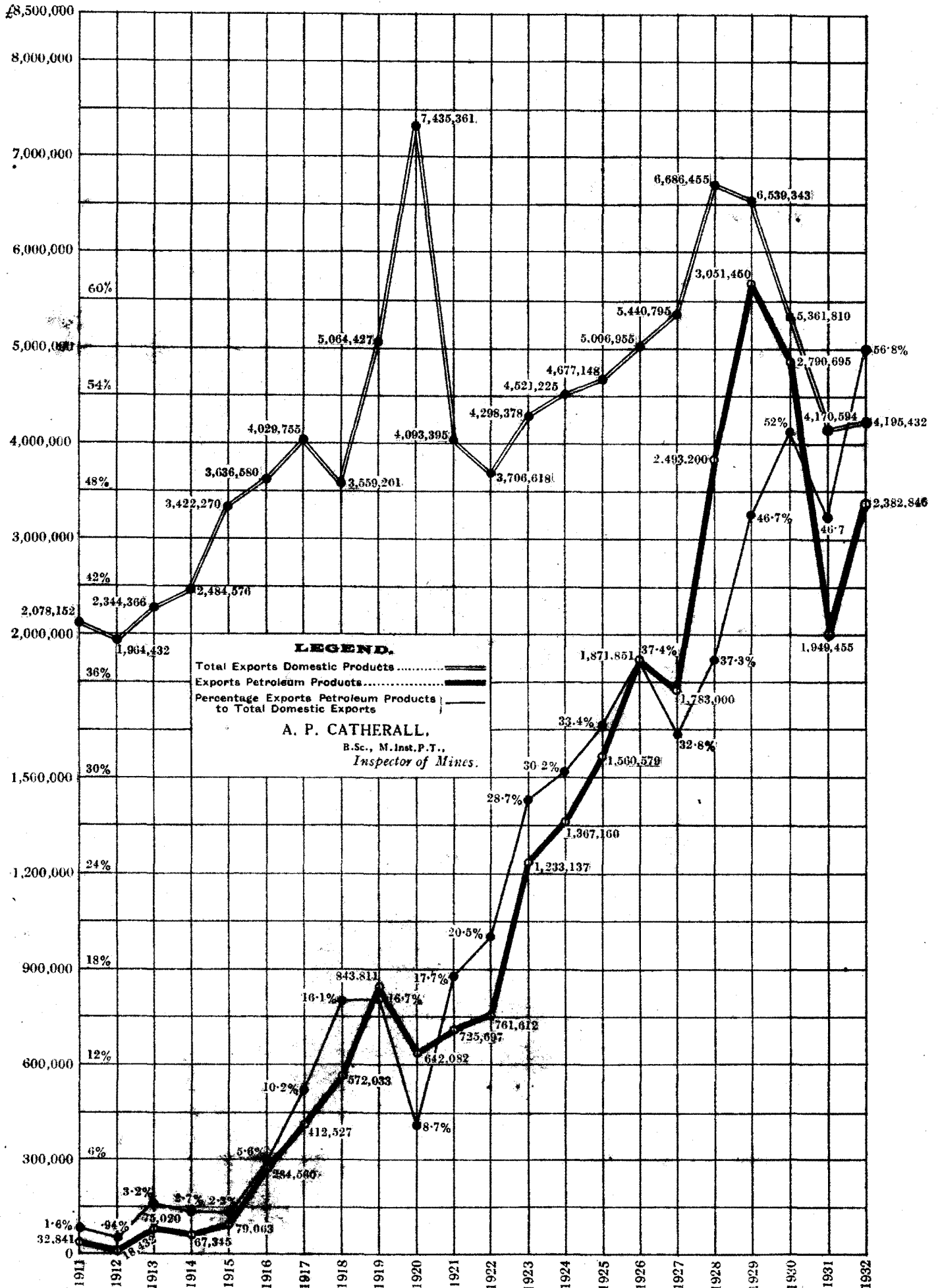
Comparative Statement of oil produced and exported year by year since the inception of the Petroleum Industry in the Colony.

| | Production 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 | 219,582 |
| 1912-1913 | 503,616 | 122,734 |
| 1913-1914 | 643,516 | 387,719 |
| 1914-1915 | 1,050,112 | 348,351 |
| 9 months ended December, 1915 .. | 671,125 | 408,188 |
| 1916 | 927,877 | 975,142 |
| 1917 | 1,602,312 | 1,079,369 |
| 1918 | 2,082,068 | 1,305,407 |
| 1919 | 1,841,047 | 1,406,264 |
| 1920 | 2,083,027 | 1,034,907 |
| 1921 | 2,354,160 | 1,223,346 |
| 1922 | 2,444,752 | 1,615,740 |
| 1923 | 3,050,872 | 2,432,470 |
| 1924 | 4,056,612 | 3,224,529 |
| 1925 | 4,386,507 | 3,606,608 |
| 1926 | 4,971,471 | 3,988,308 |
| 1927 | 5,380,464 | 4,456,770 |
| 1928 | 7,684,450 | 6,361,675 |
| 1929 | 8,715,652 | 8,243,023 |
| 1930 | 9,418,907 | 7,678,807 |
| 1931 | 9,743,502 | 8,964,303 |
| 1932 | 10,126,065 | 9,637,474 |
| | 84,159,074 | 68,720,716 |

APPENDIX F.

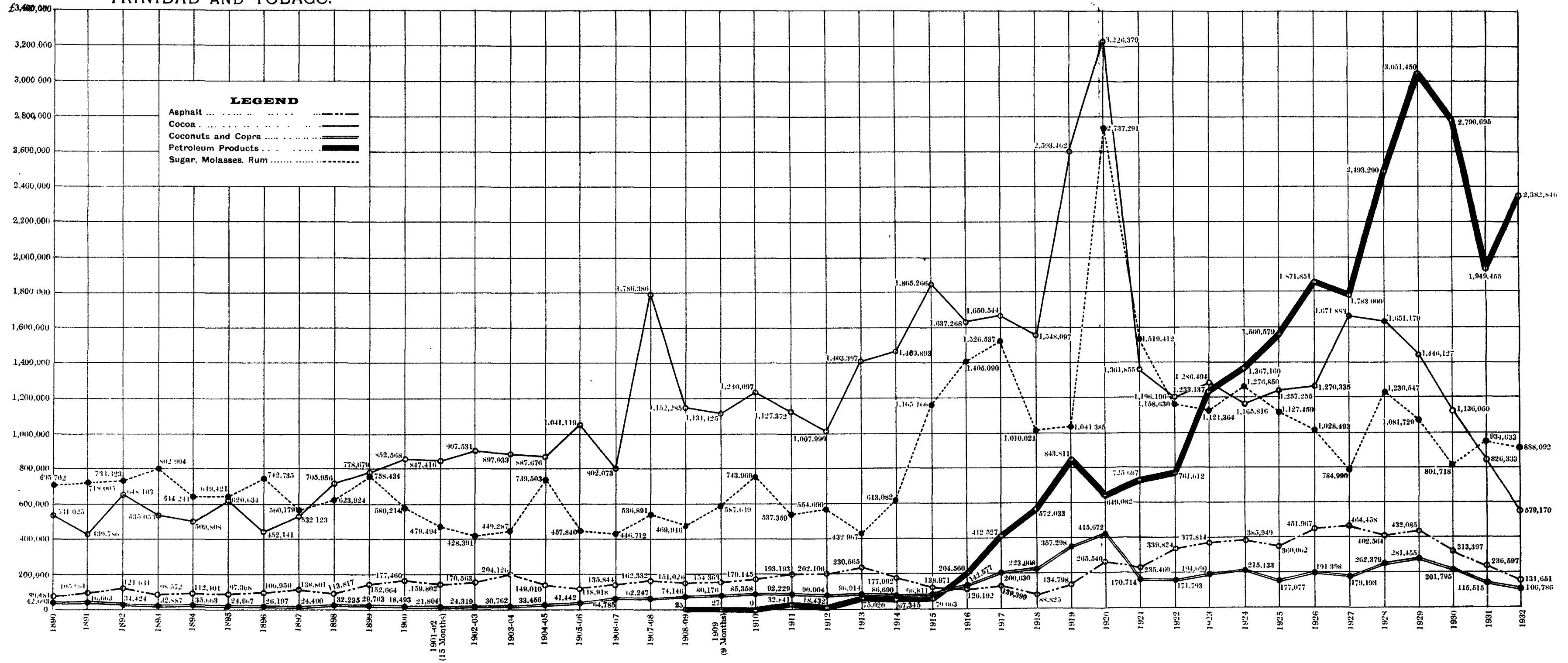
A

TRINIDAD AND TOBAGO.



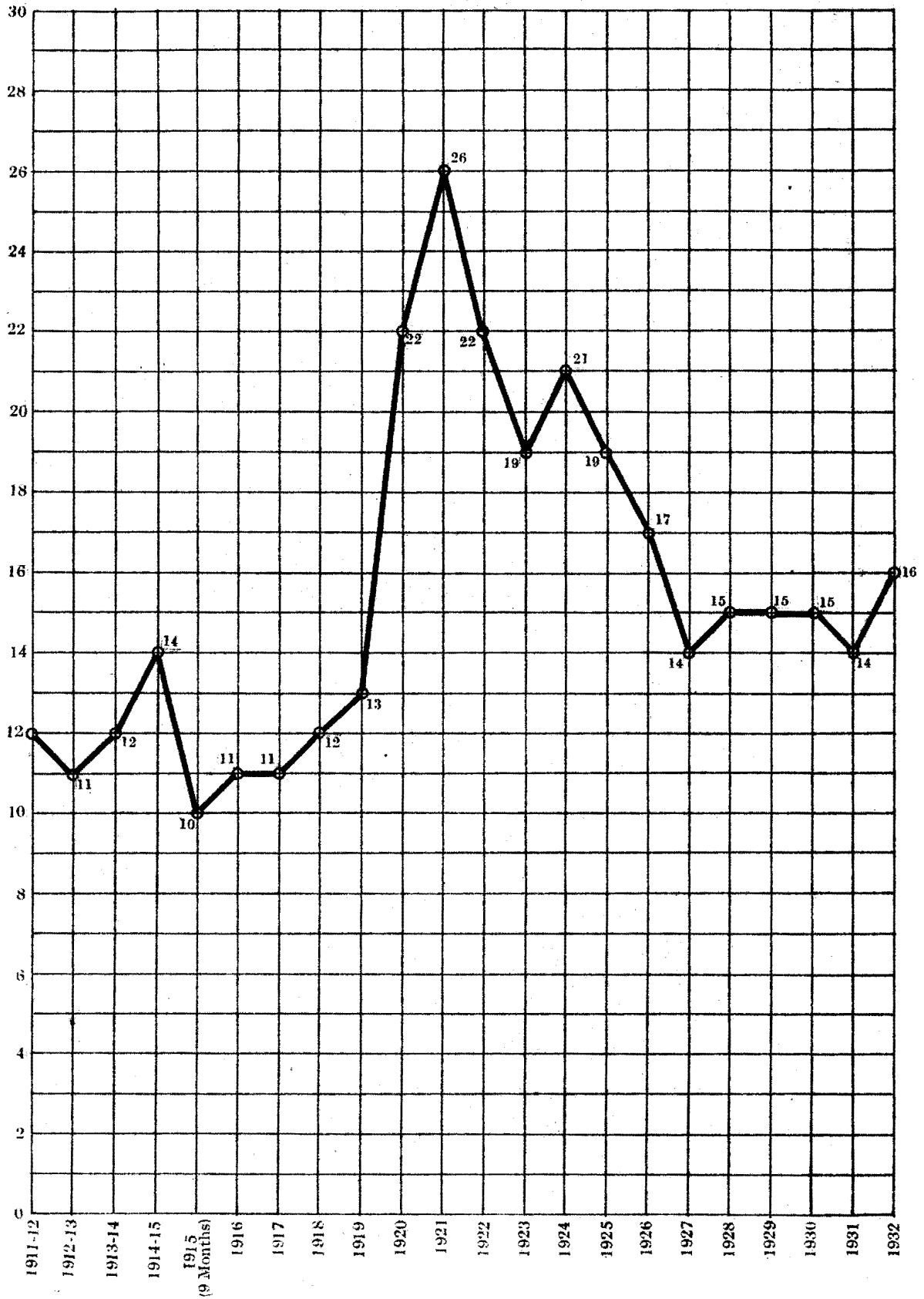
EXPORT OF LOCAL PRODUCE

TRINIDAD AND TOBAGO.



C

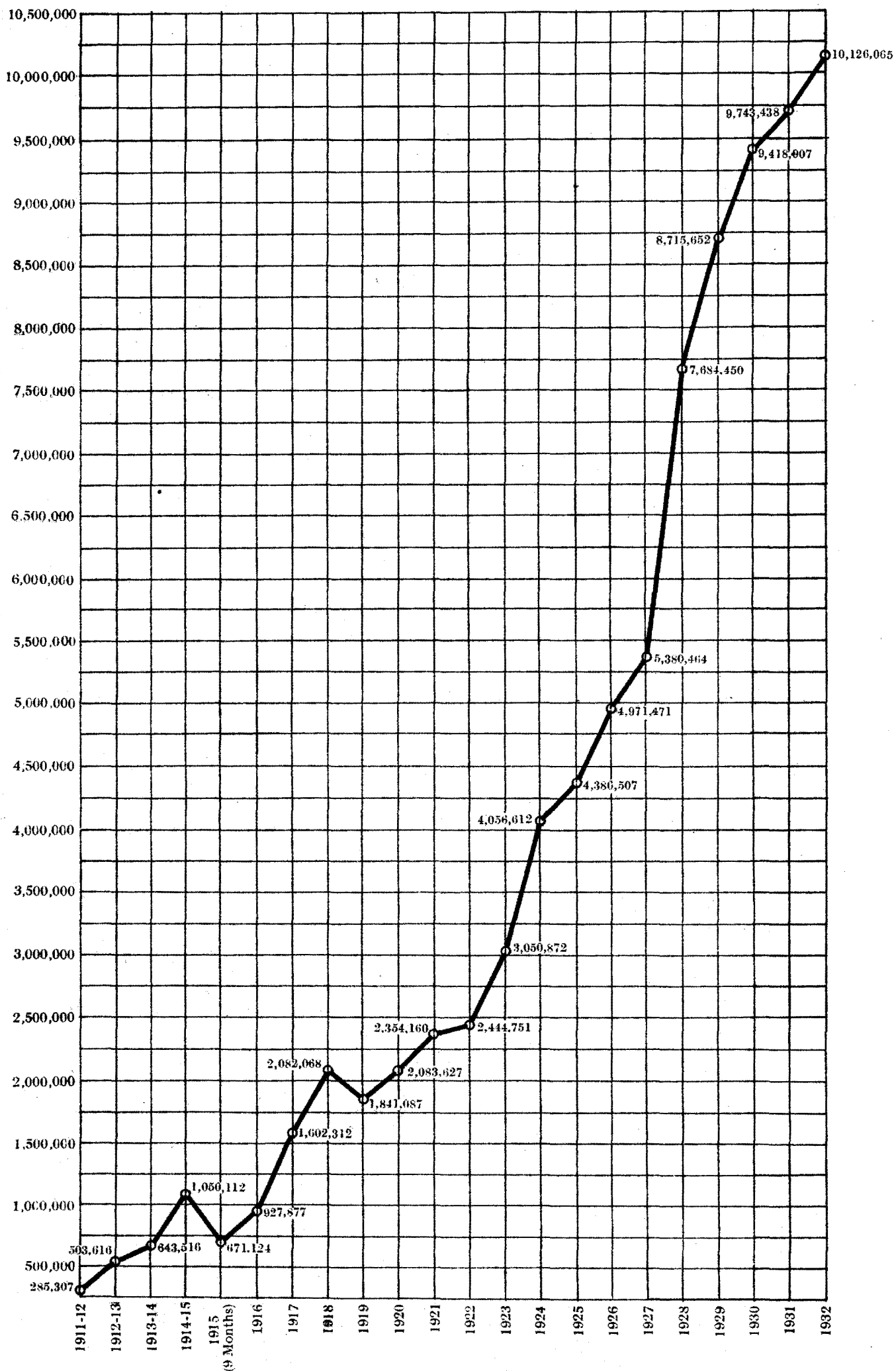
Curve showing the number of Oil Companies that have operated annually in the Colony from 1st April, 1911 to 31st December, 1932.



D

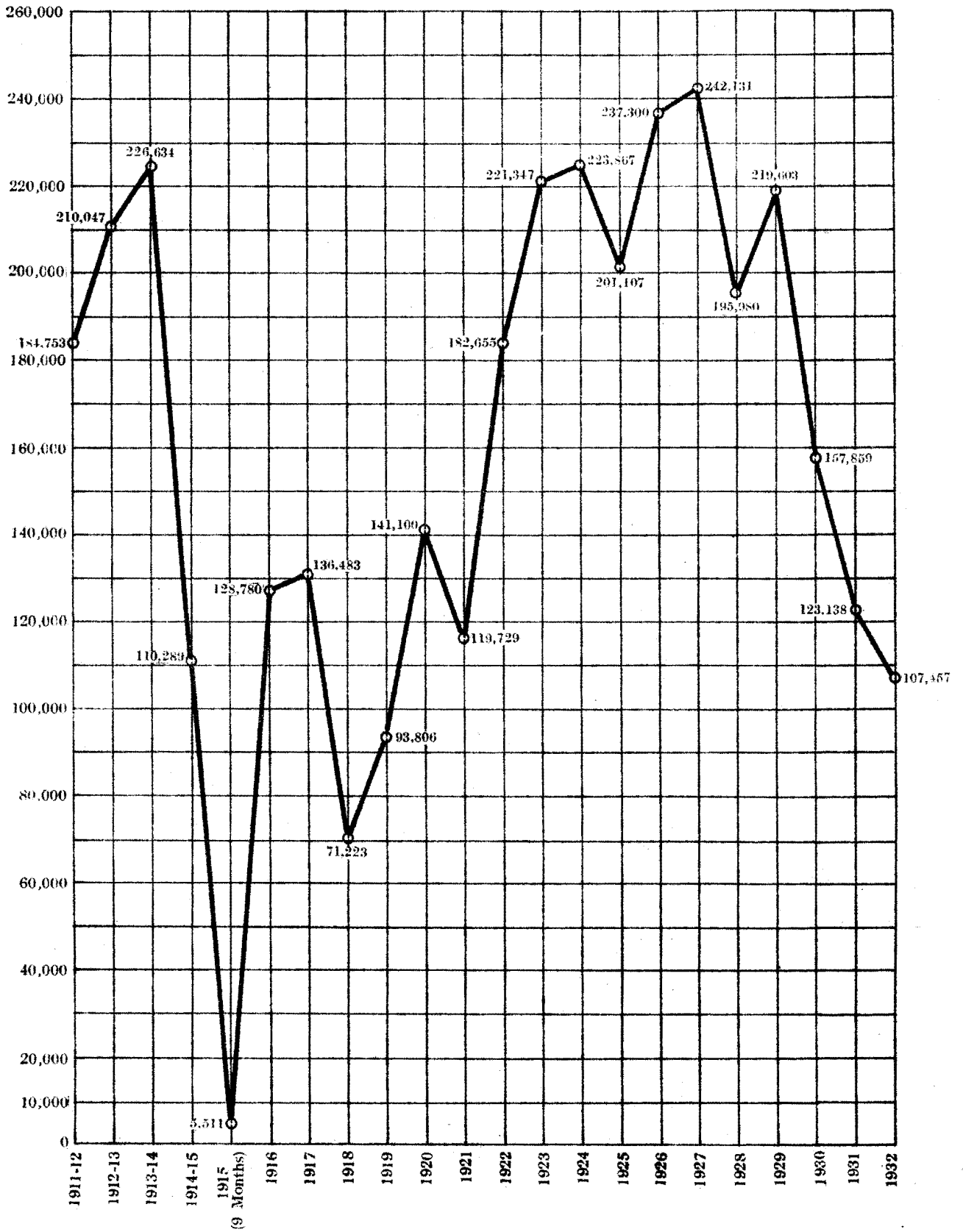
Total Annual Production of Crude Oil in Barrels.

One barrel = 35 gallons.



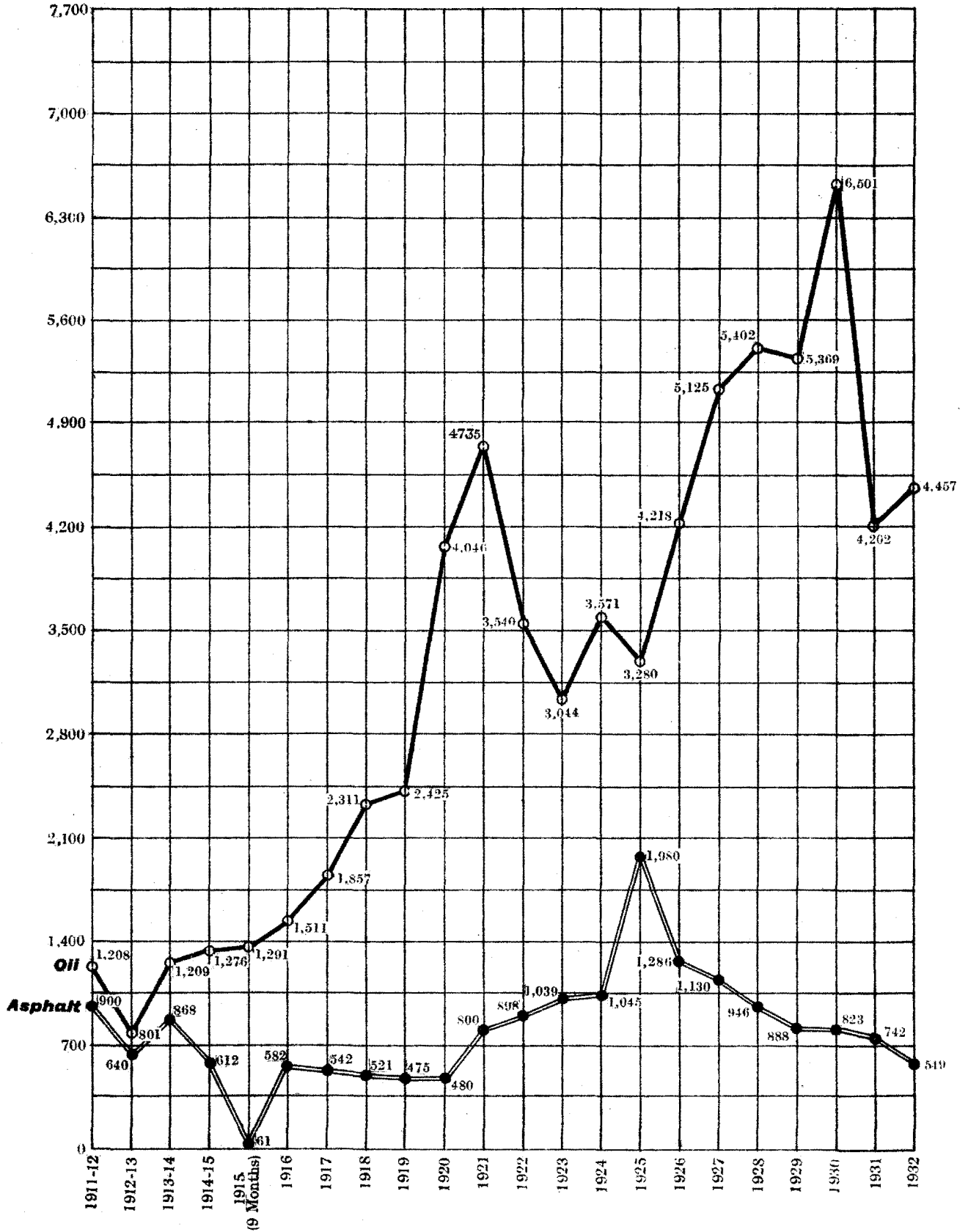
E

Curve showing yearly output of Asphalt from the Colony in Tons, from 1st April, 1911 to 31st December, 1932.



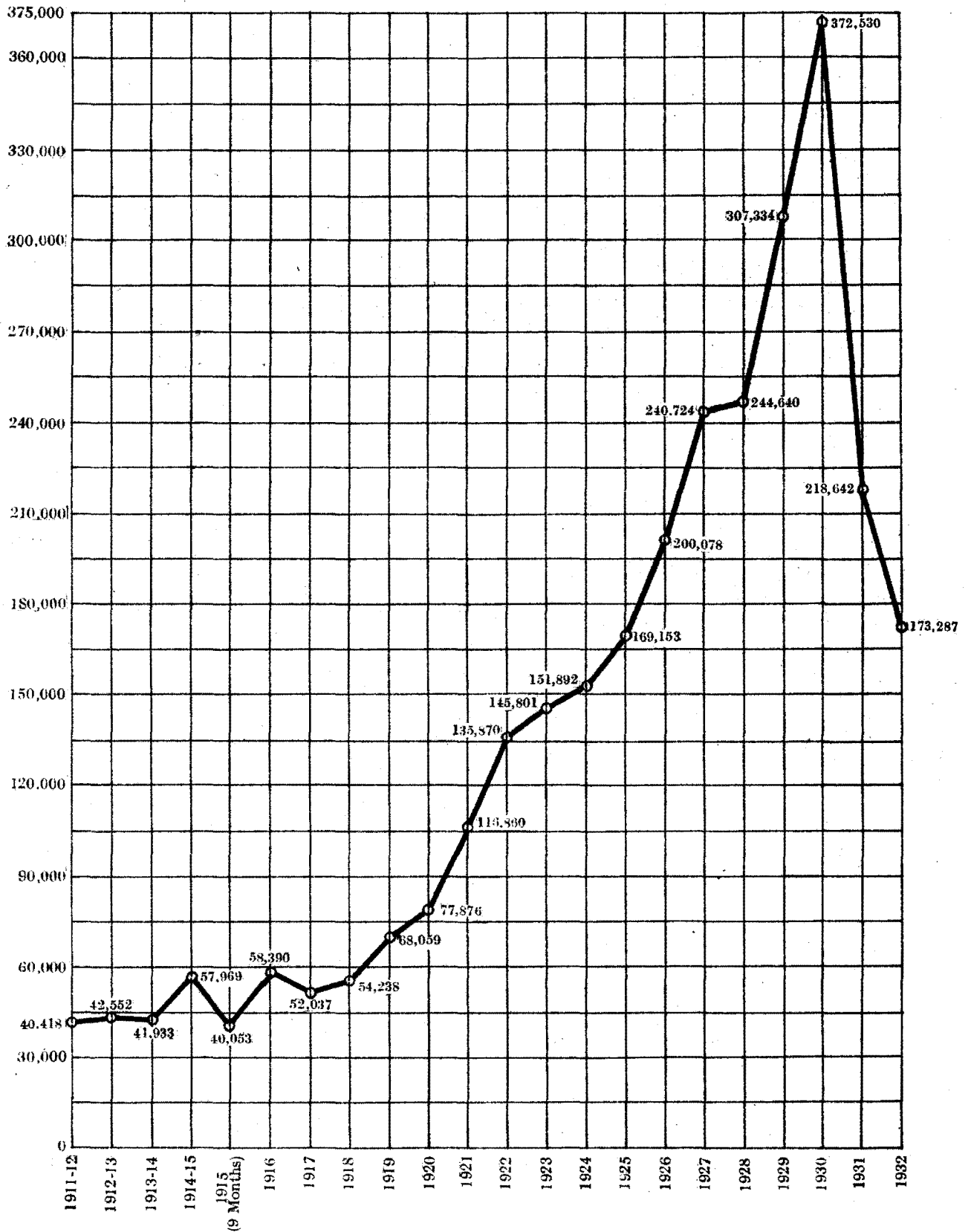
F

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, 1932.



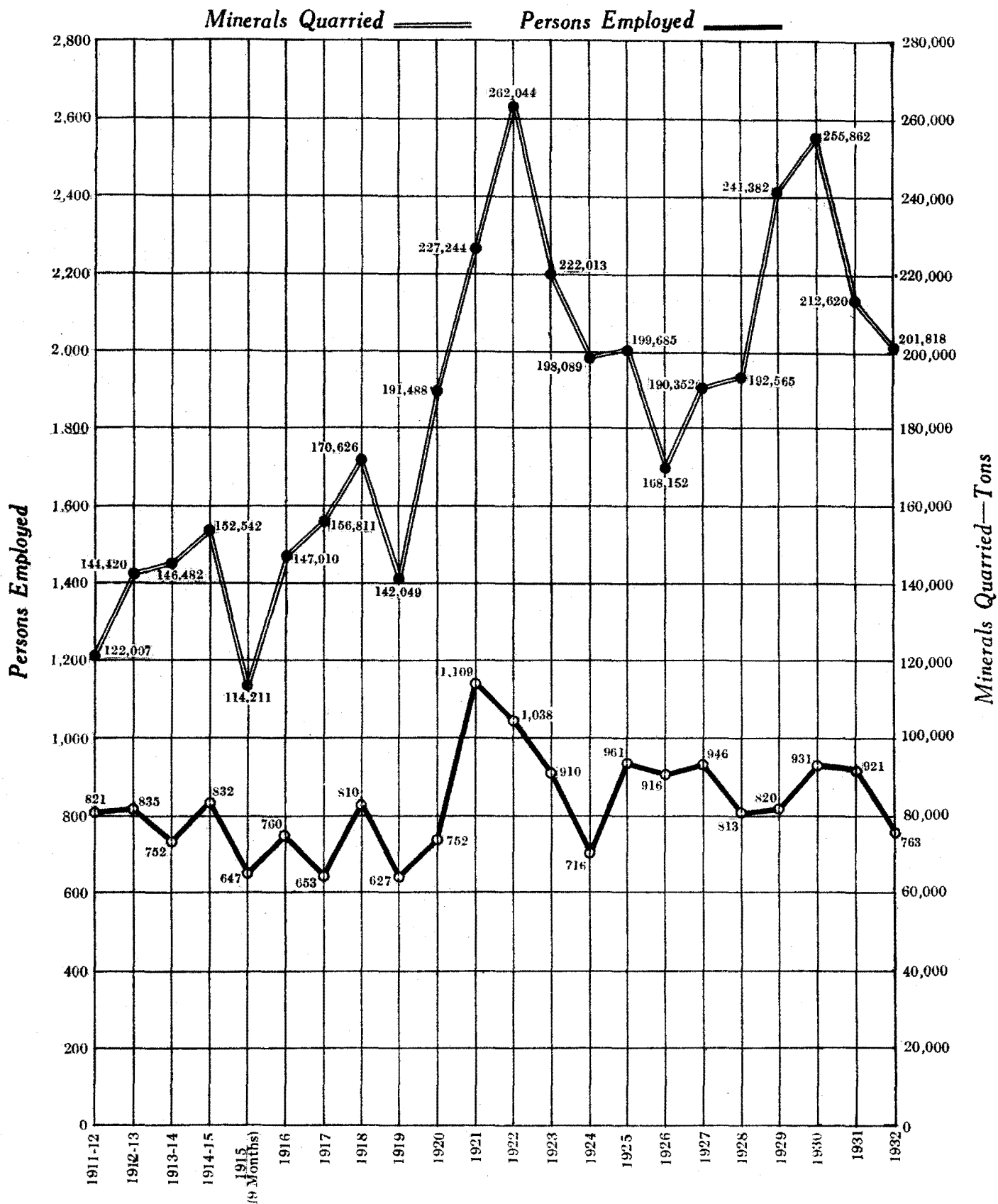
G

Curve showing yearly total number of feet drilled in the Colony from 1st April, 1911 to 31st December, 1932.

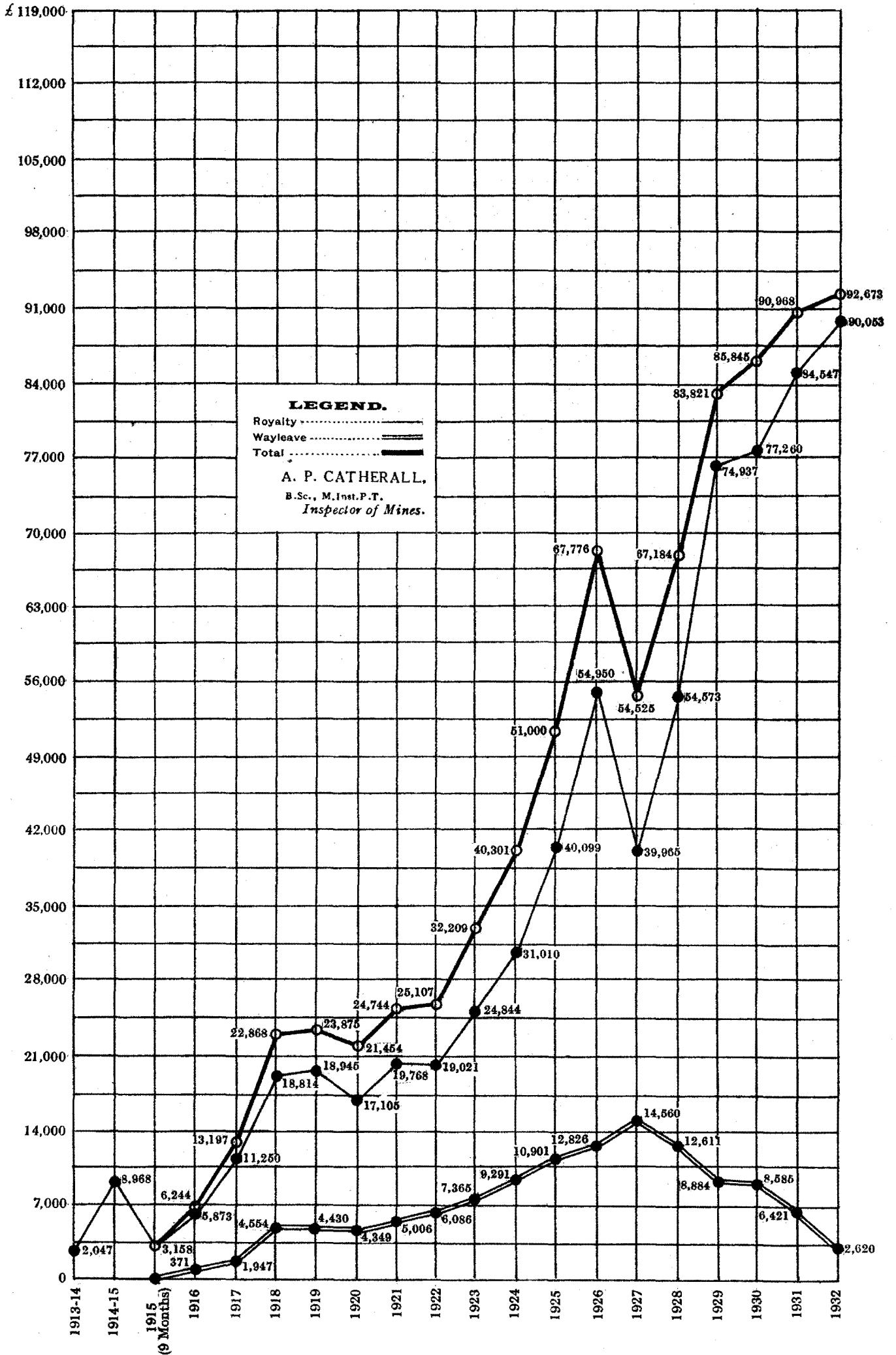


H

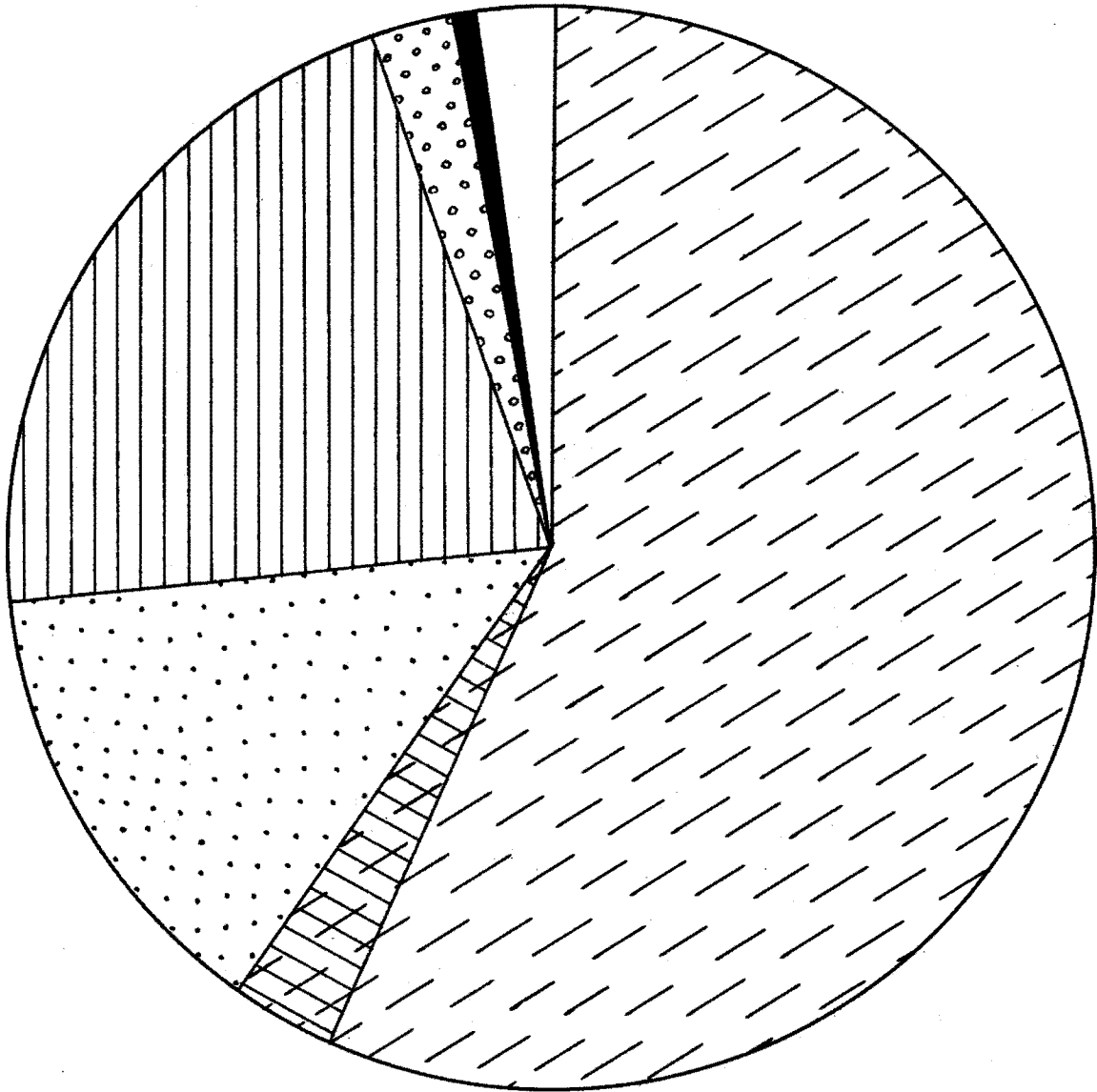
Curve showing the yearly total quantity of Minerals quarried and a comparison of the daily average number of persons employed in Quarries in the Colony from 1st April, 1911 to 31st December, 1932.





ROYALTY AND WAYLEAVE.








APPENDIX G.



Mineral Exports 59.9%

| | | |
|--------------------|-------|---|
| Petroleum Products | 56.8% |  |
| Asphalt | 3.1% |  |

Agricultural and other Exports 40.1%

| | | |
|------------------------------|-------|---|
| Cocoa | 13.8% |  |
| Sugar, Molasses, Rum | 21.2% |  |
| Coconuts, Copra, Coconut Oil | 2.6% |  |
| Coffee | 5% |  |
| Other Exports | 2.0% |  |