Queensland

Parliamentary Debates
[Hansard]

Legislative Assembly

FRIDAY, 21 OCTOBER 1938

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Mr. SPEAKER (Hon. G. Pollock, Gregory) took the chair at 10.30 a.m.

ASSENT TO BILLS.

Assent to the following Bills reported by Mr. Speaker:—

Public Works Land Resumption Acts Amendment Bill.

Apiaries Bill.

PAPER.

The following paper was laid on the table, and ordered to be printed:—

Seventeenth annual report of the Commissioner of Main Roads, being for the year 1937-38.

STATE TRANSPORT BILL.

INITIATION.

The MINISTER FOR TRANSPORT (Hon. J. Dash, Mundingburra): I move—

"That the House will, at its next sitting, resolve itself into a Committee of the Whole to consider of the desirableness of introducing a Bill to provide for the better co-ordination and utilisation of transport facilities within the State, and for other purposes."

Motion agreed to.

SUPPLY.

RESUMPTION OF COMMITTEE—ESTIMATES—TENTH ALLOTTED DAY.

(Mr. Gledson, Ipswich, one of the panel of Temporary Chairmen, in the chair.)

ESTIMATES IN CHIEF, 1938-1939.

DEPARTMENT OF HEALTH AND HOME AFFAIRS.

LAZARET.

Question stated—

"That £8,482 be granted for 'Lazaret.'"

POSTPONEMENT OF VOTES.

The SECRETARY FOR PUBLIC LANDS (Hon. P. Pease, Herbert): I move—

"That, under the provisions of Standing Order No. 313, the vote under consideration and the remaining Estimates, Department of Health and Home Affairs, be postponed until after the consideration of the Estimates, Departments of Mines and Justice."

Motion agreed to.

DEPARTMENT OF MINES

CHIEF OFFICE.

The SECRETARY FOR MINES (Hon. T. A. Foley, Normanby) (10.36 a.m.): I move—

"That £21,119 be granted for 'Department of Mines—Chief Office.'"

The increase of £878 is accounted for by an increase in the salary items of £961, less a reduction in the amount for contingencies of £83. In the salary vote grade increases are provided for six officers of a staff of 26. The increases amount to £113 gross. Provision is also made for two additional officers at a gross salary of £580. The alteration in the salary reductions accounts for the balance.

The provision for contingencies, postages, and incidentals exceeds last year's vote by £227, and that for railway fares, freights, and similar charges is £310 less than 1937-38. This makes a net decrease in this section of the vote of £83. The increased provision is in postages and incidentals, and is mainly to cover the cost of new material for the rescue station at Bundamba in order to bring the outfit up to date.

This may be an opportune time for me to make a review of the position of the mining industry. A definite improvement was noticeable in 1937. The gold yield returns show an increase, and the other mining production figures also reveal a decided improvement. Generally, the mining industry is in what may be termed a prosperous condition throughout the State.

What appears to have been the outstanding development of the year was the discovery of gold at Bartle Frere at the beginning of 1937. This discovery has given some promise and has been responsible for a pronounced impetus to mining in the Mulgrave district. Quite a rush took place in that area. As a result quite a number of prospectors were engaged at Bartle Frere throughout the year. Owing to the difficulty of access to the field—Bartle Frere is the highest mountain peak in Queensland—progress naturally was hampered considerably, but a crushing of 32 tons from one of the leases on the mountain produced 83 oz. of gold, valued at £713.

Another interesting factor about it is that some of the reefs are extremely large, which would, no doubt, mean that if they extend to any depth, as time goes on they may turn out to be good producers that will help very considerably towards the output of gold in this State. However, a good deal of further development is necessary. I understand certain important leases changed hands recently and the new lessees or owners intend to install a treatment plant, but the naturally rough nature of the country—particularly the last 2 miles from the road—will make the transport of machinery to the field a very slow process.

The gold return for the State for last year amounted to 127,281 fine oz., valued at standard price £540,656, compared with the production of 121,174 fine oz., valued at £514,717, for 1936-37. Some of the larger goldmines, such as Mount Morgan, Cracow, and Mount Coolon, were responsible for a greater part of the production; but apart from those a considerable amount of work is being done as far north as the Peninsula. On the Iron Range, in the Portland Roads district, considerable activity has been going on there for the last three or four years, and it appears that it will be of a permanent nature. We have recently built a jetty costing £6,000 in order to improve the facility for landing supplies to the body of miners working in that isolated area.

Mount Morgan is one of the big producers, and after a survey of the reserves the company expects that approximately 7,000,000 tons of ore will be produced from that mine over the next 20 years. The equipment for this operation will mean an outlay of approximately £100,000. It is interesting to inspect the plant and see what is being done at Mount Morgan. The plant is a very up-to-date one, and the mine will prove to be a big thing for Queensland as the years go on.

Cracow is a comparatively recent find. No production worth mentioning took place till 1932, but it has caused the distribution of a tremendous amount of money since it developed on a big scale. It is now treated as a low-grade mine. Quite recently they have been enabled to pick up certain high-grade shoots of ore that they had in some of the higher levels, but they have ample reserves of low-grade ore, and by the institution of greater milling facilities to handle the larger tonnages they will be able to pay dividends for a considerable period, although these may not be quite on the scale they have been paying in the past. It is interesting to note the returns. In 1937 the Golden Plateau treated 48,453 tons of ore.

Mr. Moore: It sounds like a mining prospectus.

The SECRETARY FOR MINES: I am not boasting. I am merely stating the actual facts. As a result of the development, it is established that that mine contains reserves of ore for a definite period ahead. The value of the ore already opened up is also known to a fraction.

It is interesting to know exactly what the Golden Plateau has contributed to the gold production of the State up to the present. The figures are—

—	Tons handled.	Value of Gold won.	Mine development.	Net profit.
		£	£	£
1937 ..	48,453	227,016	16,250	155,662
1938 ..	56,912	224,923	23,150	135,936

The amount of dividends distributed to date is £735,000. This is a good proposition, and it is a matter for regret that there are not a few more of them in the district.

In addition to the Golden Plateau mine, there are approximately 20 small shows, all in the development stage. The township of 1,000 is quite up to date. The development that has taken place is shown by the fact that 261 oz. of gold were produced in 1932 and 27,000 oz. in 1937.

The production figures for the Mount Morgan mine for the year ended 30 June constitute a record. This is the first complete financial year in which the oxidised ore treatment plant has been operating, and for that period the figures are—

Ore treated—

Sulphide ore, 383,700 tons.
Oxidised ore, 311,767 tons.

Estimated production—

58,031 fine oz. of gold.
2,287 tons copper.

A very up-to-date plant is operating, and mining and treatment costs have been reduced to the minimum. It is a very, very low-grade ore, so low indeed that a few years ago it would have been almost impossible to treat it profitably. It is now being successfully treated, and it is interesting to note that, according to the chairman of the company, ore from this mine produces approximately £1,000,000 annually.

The history of the Mount Morgan mine is interesting. From 1886, when the old company was formed, to 1906, the total income was £12,207,619 and the dividends paid £6,500,000. Between 1906 and 1925 the richest of the gold reserves were exhausted, but there were immense bodies of copper ore carrying a small quantity of gold. From 1906 to 1923 the revenue of the company from mine products amounted to £17,000,000 odd.

The value of the production from 1886 to 1925 was therefore £29,000,000; and the yield between 1906 and 1923 was worth approximately £1,000,000 a year. This mine certainly is not worked out. During the last 15 years huge bodies of ore have been left untouched.

The reason why I have mentioned Mount Morgan and its future possibilities is that I desire to emphasise the fact that that mine is producing to-day as a result of the aid given to the company by the Department of Mines. In 1932, the year in which the Labour Government were returned to power, a new body of men took up the lease and asked the Government for a loan of £15,000 to re-open the mine, which had been abandoned by the old company on the ground that to work it was unprofitable; working costs were too high.

Mr. Brand: When was that £15,000 granted?

The SECRETARY FOR MINES: 1932.

Mr. Moore: They had been working copper for some time prior to that.

The SECRETARY FOR MINES: No.

Mr. Moore: They were pumping water out of the mine for a considerable time.

The SECRETARY FOR MINES: That was only a small thing.

Mr. Brand: Was not that £15,000 brought up towards the close of 1931?

The SECRETARY FOR MINES: No. It may have been promised. I think it was promised by the party to which the hon. member belongs during the election campaign.

Mr. Brand: Are you sure it was not 1931?

The SECRETARY FOR MINES: I am certain of it. As a result of this loan of £15,000, Sir Herbert Gepp and several other metallurgists carried out tests on the ore and satisfied their principals that a considerable saving in the cost of treatment could be effected. In view of that report a company was formed, and we see quite a revival at Mount Morgan to-day. It is now a thriving township, whereas at one time the best hotel in the town could probably have been bought for £300 or £400, and many houses were deserted. As the owners were earning no incomes they were forced to go elsewhere.

I quote that mine as an illustration of the help that has been given to the industry in general throughout the State by my department.

It is also interesting to note the value of mining to the community. The total value of minerals other than gold won in Queensland to the end of 1937 was £80,440,000. The total value of gold won up to the end of the same year amounted to £88,000,000, making the total value of minerals produced in this State up to that time £168,495,138. That is no mean contribution for any industry to make to the wealth production of any State, and it certainly has meant a great deal to this State.

I desire now to give the Committee some idea of the progress that has been made in this industry since 1932. The production of gold for the year 1932—the year in which the Labour Government were returned to office—amounted to 23,263 fine oz.

As a result of the generous assistance given to the mining industry by this Administration, there has been a gradual increase in the production of gold. The graph I have here illustrates the growth in this production. It can be reduced to figures thus—

	Fine ounces.
1930	8,000
1931	13,000
1932	23,000
1933	91,000
1934	115,000
1935	102,000
1936	121,000
1937	127,000

The graph illustrates the position very forcibly and shows that the production was at its lowest possible ebb in 1930, one of the years in which the Moore Government held office.

We find an exactly similar change occurred in mineral production. During the Moore Government's period production was at a very low ebb, but there was a gradual rise after 1932, and later a steep rise, so that to-day we are well above the £3,337,000.

Mr. Brand: If the Moore Government had stayed in, according to that graph——! (Laughter.)

Mr. Nimmo: That graph is not to scale.

The SECRETARY FOR MINES: That graph is absolutely to scale. Hon. members can check it afterwards.

Mr. Macdonald: What is the price per ounce now and the price then?

The SECRETARY FOR MINES: It is in the vicinity of £7 plus exchange and premium. There was an increase in price by the end of September or October, 1931, which brought it to £5 5s. It rose at a very steep rate shortly afterwards to the vicinity of £7. What I want to emphasise is that if you give a generous measure of aid to the mining industry and help those concerned to go out and look for the mineral products that are to be found in Queensland, you can get results.

Mr. Brand: That is just what the Moore Government did. That graph proves it.

The SECRETARY FOR MINES: I will show hon. members as I go along that the position in the mining industry then was due to the lack of assistance given it. The improvement that has taken place is attributable to the generous assistance rendered by the Labour Administration since they have been in office.

Mr. Brand: Just how much have you done in that period?

The SECRETARY FOR MINES: I will deal with that as I go along. Take now the number of men employed. This graph shows the beneficial effects of an increase in mining operations in that respect. The same increase is seen in this graph showing mineral leases.

Mr. Macdonald: Is that an optical illusion?

The SECRETARY FOR MINES: That is an illustration of the relative positions during the period of the Moore Government and at the present time, as hon. members can see for themselves. You have there a little over 350,000 acres of goldmining and mineral leases.

Financial help enables the mining industry to flourish, and as that help is increased so is the production improved, and generally there is greater development all round, not only in gold production but also in mineral production, number of miners employed, and number of mineral leases. From whatever angle we look at the subject improvement is apparent on all sides, and I display these graphs so that hon. members may appreciate that improvement.

Mr. Macdonald: Mainly attributable to Labour legislation?

The SECRETARY FOR MINES: Yes. (Opposition laughter.) I say definitely that every mine of importance developed since 1932 was discovered as the result of aid given by the department. In addition, there are a number of small shows that may develop into big producers, but at the present time they are hindered through lack of capital.

Mr. Brand: What help has the department given since 1934-35?

The SECRETARY FOR MINES: I have those figures with me, and I shall give them in the course of my speech.

There has been no falling off in gold production in 1938 up to the present time. For the nine months of this year the production has been 107,338 fine oz., or 23,133 fine oz. more than for the corresponding period of last year. So that the position is very bright in this State. Charters Towers, which was at one time a big gold producer, is also showing a very marked improvement. In 1936 the production from this field was 8,020 fine oz., but in 1937 it had increased to 12,933 fine oz.

I say emphatically that the improvement that has taken place on the Charters Towers field, at such mines as Black Jack, Swedenborg, Mons Meg, Midas, and Lolworth, is solely the result of the help given by the Labour Government. I have a letter on the file from the general manager of the Black Jack mine informing me that they were repaying the money lent to them by the department for developmental work and pointing out that if it had not been for that generous help it is quite possible that the Black Jack would be idle to-day.

I should also like to point out that the financial aid to the mining industry by the Labour Government was responsible for the discovery of the Midas on the Lolworth field, the Mons Meg, and other mines.

The production value of base metals, other than gold, but including coal, amounted to £3,337,734 in 1937, as compared with £2,625,373 in 1936. It is expected that the production value for 1938 will exceed the £4,000,000 mark.

Of course, Mount Isa is mainly responsible for the improvement that has taken place in mining production. There again we have a striking illustration of a tremendous mine worked on a large scale with the most up-to-date mining plant it is possible to procure. Mount Isa is supporting a population of over 2,000 people. The mine was established in an isolated part of the State, and its operations would not have been possible but for the help rendered, not only by the Department of Mines, but from time to time by the Government in concessions in railway freights and in other ways.

It is interesting to note the up-to-date methods of mining that are being adopted at Mount Isa. The methods are the most up to date in the State except, of course, those at Mount Morgan. Approximately £4,500,000 has been invested in Mount Isa. The company has persisted in its operations despite all the difficulties associated with the fluctuations in the market price of its metals. It was only last year that this mine showed its first profit amounting to £70,000. To a great extent the prospects of Mount Isa and the return to investors are dependent on the price of the metals produced.

Steady progress is recorded in the tin-mining industry. This has contributed to a very great extent to the relief of the unemployment position, particularly in the northern part of the State. The occurrences of tin in North Queensland are such that usually the small man can operate the lodes or alluvial deposits. As a result, quite a number of men possessing a small amount of capital are able to obtain a good living while the price of tin remains in the vicinity of £200.

Big-scale dredging operations at Mount Garnet are not far off. As a result of concessions given to the original man who began prospecting for tin at Return Creek, a very large company has been formed with a capital of £240,000. The company is installing large dredges. The result of its boring tests indicate that it has a 20-year programme ahead of it. Quite a number of men will be employed by the company. This company is also examining sites in other districts. Exploration work is being carried out by the company at Smith's Creek, adjoining the Mount Garnet area. If the results there are satisfactory, big dredging operations will doubtless be undertaken.

Investigations are also being made in the Innisfail district, the possibilities being that large-scale dredging for gold will be undertaken.

The Broken Hill Proprietary Company has also representatives in the northern areas of the State. They are at present investigating the Mount Garnet district. The company has spent a considerable amount of money prospecting various tin occurrences in the hope of finding one suitable for big-scale dredging.

It is interesting to note that in 1930 only 603 tons of tin were produced, in 1931 that had dropped to 478 tons, and in 1932 it had risen again to 708 tons, and the position has continued to improve until a production of 1,170 tons was recorded in the northern districts of the State in 1937.

The Irvinebank State treatment works are carrying out a useful work. Having obtained the services of an excellent treatment-plant man, Mr. Elford, we invested a sum of money in the improvement of that treatment plant, and it can now treat successfully very low-grade ore. They were responsible for handling 4,602 tons of tin ore, which showed a production of 222 tons 16 cwt. of concentrates valued at £34,000. They have also handled 298 tons of wolfram and molybdenite ores for 10 tons of concentrates.

The battery at Bamford works part-time during the year. It is kept going by the Department of Mines, although a small loss results, because it is of value to the prospectors of that area, and there is the possibility that a development may take place at any time, either in the form of a new discovery or the development of some of the older mines, that will result in production on a bigger scale and the working of the plant for the whole of the year.

Reverting to gold, I wish to refer to the Clermont figures. The bulk of the operations on that field lay in the direction of seeking alluvial gold. We have quite a number of small reefs, and a greater amount of prospecting aid is given to that district than to any other in the State. In 1930 only 129 oz. of gold were produced there, in 1931 production had increased to 875 oz., in 1932 to 1,038 oz. A general improvement occurred each year, and in 1937 2,536 oz. of gold were produced in that field, the value of which exceeded the amount expended in prospecting assistance to the large body of men on the field.

White's Hill, a lead that is being developed and carries a number of men, produced 741 oz. last year. Frying Pan Flat produced 105 oz., and Salter's Leave 845 oz., and various other amounts are being produced from numbers of small leads throughout the field.

Cloncurry is also playing its part in the development of the mineral resources of the State.

In the report we find the amounts of copper, silver, gold, lead, zinc, limestone, ironstone, and scheelite produced in 1937.

The copper ore from the Cloncurry district is transported a very long distance for treatment at Chillagoe. The figures for production from this field are—

Ore treated	.. ..	20,384 tons.
Production—		
Copper	.. ..	2,706 tons.
Silver	.. ..	8,007 oz.
Gold	.. ..	1,080 oz.

Value, £167,679.

The treatment of flue dust increased the value of the production to £168,000.

Mining activities cover a very extensive area of the State, and it is interesting to note the localities in which miners are operating.

There are six very promising shows in the Cairns district, and last year 218 tons of ore were handled for a return of 732 oz. of gold. The reefs are very small, but miners are working some very rich shoots.

Mr. Moore: Do you say that Bartle Frere is in the Cairns district?

The SECRETARY FOR MINES: Yes. It is adjoining Cairns, and a run of 20 minutes from there brings one to this field.

I have already mentioned that there is a gradual improvement in the position in Charters Towers, the figures being—

	Gold.
1936	8,020 oz.
1937	12,933 oz.

We also find an improvement occurring in the Chillagoe field. Much of the gold and copper ores purchased by the State smelters come from the Etheridge district, and from 30,432 tons of ore the recovery was—

Gold	16,008 oz.
Silver	52,000 oz.
Copper	3,220 tons.
Lead	12 tons.

The Batavia River field is in isolated country in the hinterland of Portland Roads. Although it has been operating for some time it is still a very useful producer, the production being—

	Gold.
1936	1,898 oz.
1937	6,306 oz.

The Cooktown area is still struggling and has only a very small production, but the very fact that miners are still operating indicates the possibility of a revival at any time.

On the Croydon field—one of the old-time producers—there has been an improvement. In 1937 a tonnage of 1,047 was treated for a yield of 398 oz. of bullion, of an approximate value of £1,000.

There are a number of shows operating on the Eidsvold mining field, and production has there improved.

There is a small army of mining parties on shows on the Etheridge field, and some of real value are being helped by the Government. The production figures are—

	Production. Tons	oz.	Value. £
Gold ores ..	2,578	2,651	11,264
Add premium			11,940
Total			£23,204

		Value. £
Silver	8,415 oz.	736
Copper	129 tons	7,749
Lead	14 tons	494

Lead ores there have been engaging the attention of miners during the year. Ore totalling 426 tons, containing silver, gold, and copper, of a total value of £9,689, were produced in the 12 months.

In the Gladstone area a slight falling-off occurred during the year, but production is being continued, and a recent newspaper report points to the possibility of a find of some consequence there. Whether it will turn out to be so valuable when developed remains to be seen. It appears that in that district they have been finding some very rich specimens, and it was thought recently that the lode from which those specimens had been shed was discovered. Of course, time will show whether that is so.

In the Oaks district a number of parties are operating. The production for the year is valued at £10,764.

At Kangaroo Hills, another fairly isolated place, they are operating on tin, gold, and other ores.

In the Ravenswood district—another area that was a great producer at one time—a production on standard values of £4,180 was made last year. The by-products from gold ores in that district were—

Silver	2,847.5	oz.
Copper	7.4673	tons
Lead	3,082	tons

In the Warwick district, which I visited recently, there are a number of small shows. With the investment of a little capital and the introduction of more up-to-date methods of working it is probable that some of them will become big producers. Unfortunately, not much interest seems to be taken in the Warwick district. They are just plodding along there in the old prospecting stage. The hammer-and-drill system is still in operation, and, naturally, progress is slow. In that district the total production for last year was 435 tons, yielding 276 oz. of gold of a value of £1,123 (standard).

In the Woolgar district there are a number of parties of miners. Their production for the year was 563 tons, of a value of £1,473.

The review that I have given, brief though it is, certainly gives some idea of Queensland's mining activities.

It will be seen that apart from the few big mines a considerable contribution has been made to our mining production by the many small parties operating throughout the State.

In addition, we have the aerial geological and geophysical survey of Northern Australia, which is being made in co-operation with the Commonwealth Government. Those who are carrying out that survey are collating very valuable information by means of aerial photographs. After the photographs are taken a geological inspection and then a geophysical examination are made. The next step is that a driller goes over the area to test whether the anomalies mapped out by the geophysicists are extensions of lodes.

We have drilling plants in various parts of the State—Trekelano, Dugald River, and a

number of other places—endeavouring to help in that survey.

The search for oil shale goes on in various parts of the State, and, naturally, more scientific methods are being adopted to-day than in the past. We have an area of 40,000 square miles set aside in the Roma and Injune districts where opportunity to prospect is given to any company that desires to do so, and protection is given to it while it is working. Later, such a company can take up a permit, and if it discovers oil the necessary petroleum lease.

A good deal of work is being done in the search for oil, and some of the parties are very optimistic of results. Adjoining Mount Bassett there is a showing of oil, discovered some time ago, and the miners feel that they are on the edge of a pool. As a result of an authority to prospect a geologist discovered structures suitable for the holding of oil. That was verified by the Chief Government Geologist, and it was again verified by the Commonwealth Geologist, with the result that they are now receiving Commonwealth assistance to put down a hole on that structure. Time will tell whether oil exists in that area in commercial quantities. While the prospecting is going on there is always hope that something will be discovered.

Aid given to small parties of miners has been on a more generous scale than in the past. That is certainly necessary, because on visiting various mining districts I have found the small prospectors using out-of-date methods and this hampers their progress. However, it is impossible for the Department of Mines to equip every party with up-to-date plant, but we do the next best thing by first of all helping the prospector with a weekly allowance and then, at a later stage, if he has discovered favourable prospects, we help him by a subsidy scheme. Some very good results have been obtained.

The Commonwealth during the last few years has supplemented State moneys to a considerable extent, and naturally that has allowed us to carry out a much bigger programme than otherwise. The Federal aid stopped in June last, and we have had to carry on with State funds. The amounts expended from all sources are as follows:—

—	Commonwealth-States.	Unemployment Relief Fund.	Department of Mines—In aid of Mining.
	£	£	£
1933-34	3,000	..	30,000
1934-35	6,086	15,720	30,000
1935-36	15,168	29,971	20,000
1936-37	13,336	29,292	15,000
1937-38	9,961	19,998	15,000

With the exception of the department's own vote in aid of mining, the whole amount has been spent on prospecting assistance.

The following table shows the amounts spent by the department since July, 1931, including the £15,000 that was lent to the Mount Morgan company in 1932—

	£
1931-32	34,844
1932-33	56,263
1933-34	37,026
1934-35	63,567
1935-36	84,505
1936-37	77,885
1937-38	71,860

I propose now to reply to the question asked by the hon. member for Isis earlier in my speech as to the amount advanced during the time of the Moore Government and the amount advanced by the Labour Administration. These are the figures—

	£
1929 to 1932 (Moore Administration)	65,972
1932 to 1935 (Labour Administration)	157,250
1935 to 1938 (Labour Administration)	250,000

In other words the increase in the amount of financial aid given to the mining industry by the Labour Administration in comparison with that given by the Moore Government was 400 per cent.

So much for the prospector! The Labour Government have been liberal in other directions too, for instance in their loans and subsidies, which I have already mentioned, and their aid to Mount Isa and Mount Morgan. Both those places can testify to Labour's kindly help and encouragement during their early operations.

Mr. Brand: What amount did the Labour Government pay to Mount Morgan?

The SECRETARY FOR MINES: An amount of £15,000. I think that there was another £1,000 advanced later, making a total of £16,000.

Mr. Brand: The Labour Government did not pay any part of the other £25,000?

The SECRETARY FOR MINES: It was not necessary.

Mr. Brand: I just wanted to know. You said you paid the company £1,000 in addition to the figures you quoted.

The SECRETARY FOR MINES: The total amount advanced to the Mount Morgan company was £16,000.

Loans and subsidies have also been given for the purchase of mining machinery, roads to give access to mining camps where there are fair prospects of development, and the establishment of small batteries in places where ore cannot be taken to a mill. We have installed one small battery at Packers Creek, in the Portland Roads district. This battery has proved invaluable to the men there, who are isolated from a crushing battery. In addition to this battery, Gordon's battery has given a great deal of assistance to the prospectors. Small batteries have also been installed by the department at Sunnyside in

the Mackay district, Targinnie in the Yarwun district, one in the Clermont district, and one at the Gilded Rose line of reef in the Cloncurry district..

In an endeavour to help small parties without capital and accelerate developmental work, we recently allocated £7,500 to permit of the purchase of compressors and jackhammer drilling outfits. The machines acquired were costly ones, the cheapest being about £550 and others £770. One machine has been allocated to Charters Towers. It is capable of using a medium-sized single drill or two small drills. The machine that has been allocated to the Cloncurry district is capable of using one drill. A plant capable of working two drills has been set apart for Forsayth and a small one-drill plant for Clermont district. A two-drill plant has been allocated to Cracow and a similar plant to Portland Roads. The plants will be rented out to users, at a nominal rent, after they have carried out their programme of developmental work. The plant will then, on the recommendation of the mining inspector and warden of the district, be rented to the next applicant on the list. In this manner it will go the round of prospectors who want it. A diesel-engine equipment goes with the compressor. The plant will be under the control of the mining inspector for the district.

Earlier in my remarks I referred to the increase in employment, and illustrated my remarks by a graph. I now give the actual figures. In 1930, 5,534 persons were employed in the mining industry, and in 1937 this number increased to 8,924. This is over 3,000 more than the number employed in the industry during the time of the Moore Government.

Mr. Brand: You gave the figures for 1932, not 1930.

The SECRETARY FOR MINES: There is a slight improvement on those figures—not a great improvement.

Mr. Brand: Give me the 1929-32 figures.

The SECRETARY FOR MINES: The figures are—

	No. of men employed.
1930	5,434
1931	6,753
1932	8,013
1933	8,512
1934	8,597
1935	8,640
1936	8,830
1937	8,924

The figures for 1929 would be less than those for 1930.

The same applies to mineral leases; they have increased from the number held in 1930. There has also been an increase in miners' rights. In 1936 the number was 5,940 and in 1937 they had risen to 7,122.

All along the line, from whatever angle the position is examined, there has been a general improvement; and, as I said earlier, most of that improvement is due to the generous aid that has been rendered by the Labour Administration through the Department of Mines from 1932 up to the present time. We have made every endeavour to assist as far as possible, knowing that by doing so we should be increasing wealth production and stimulating the whole economic structure of the State.

The prospector is one of the most useful of men to commerce and one of the most valuable to civilisation. If there were no prospectors there would be no miners, and if there were no mines there would be no civilisation.

Mr. William Sulzer, a former Governor of New York, said—

> "Show me the people without mines and I will show you a people deep in the mire of poverty and one thousand years behind the procession of civilisation."

We must have our mines and our minerals and increased production. Realising that, we have endeavoured to give to the mining industry as great a measure of help as possible. The aid rendered by the department during the last few years was 400 per cent. above the amount given for the period 1929 to 1932.

It was only natural that we should be able to show results. There are other factors that come into the picture, of course. Mineral prices naturally have an effect; but without assistance to enable the miner to get over the preliminary stage, that of prospecting, which is the most important stage, there would be no development at all. For example, in the Charters Towers district a man named Congdon applied for weekly prospecting assistance and it was granted. He continued to prospect and reached the Lolworth district and discovered a good lode. Not long afterwards he was the employer of 15 or 20 men. In the tin districts and the wolfram districts and in the Cloncurry area men have received help year after year since 1932, with the result that I have outlined here to-day.

Mr. BRAND (Isis) (11.44 a.m.): I am sorry the Minister has taken away the graph that has occupied a conspicuous position alongside him since he began his speech. In the 25 minutes at my disposal I cannot hope to cover the field that it has taken the Minister over an hour to traverse.

It was produced in this Chamber for the purposes of party political propaganda by endeavouring to show that the Moore Government were not competent to deal with this industry and that it was left to the Labour Administration to do so.

Mr. Jesson: Quite right.

Mr. BRAND: The hon. member agrees that my deduction is right. If the hon. gentleman had reviewed the mining industry from the practical or business viewpoint, it would be a different matter altogether. The figures quoted by the Minister were not those at the conclusion of the Moore Government's term, but those at the beginning of it. In 1929 the industry was bankrupt, owing to the action of a Labour Government, but from 1929 to 1932 there was great development in mining in Queensland. In the short period

of three years it developed into a highly prosperous industry. It is well known that in the closing days of the McCormack Government mining was at such a low ebb that the Labour Government of the day had to close the last of the State enterprises—the Chillagoe smelters. There was almost no development in metalliferous mining.

Mr. Walsh interjected.

Mr. BRAND: The hon. member will have a chance to make his speech later. The mining industry is of great importance to the State, and notwithstanding the depression during the time of the Moore Government, a time when a Labour Government in the Commonwealth sphere fell down on their job all round and were unable to provide money to enable the States to continue their activities, the Moore Government continued to develop mining in Queensland. That Government put it back on the path to prosperity.

What do the figures quoted by the hon. gentleman reveal? He endeavoured to point out that there had been very little development in mining under the Moore regime, but unconsciously quoted figures that indicated a great development in metalliferous mining during that time, and this development has proceeded to the present.

The great mineral resources of the State should be a factor in the economic position of Queensland, but it is very unfortunate that the Government are not contributing to the development of this industry to the degree they should, considering its importance.

The Minister gave the Committee the number of men employed in the mining industry in 1930. After all, the true indication of the success of an industry is the number of men engaged in it. If there are no men employed in an industry there can be no production. The greater the number, the greater the production. In 1930 5,434 men were employed in this industry. This increased to 6,753 in 1931, and further increased to 8,013 in 1932. In other words, there was a 50 per cent. increase in the number of men engaged in this industry during a period of three years. The Labour Government took control in 1932, and at that time 8,013 men were engaged in mining, whereas to-day the number is 8,924, or an increase of 900 for the two terms of Labour's administration. These figures should be compared with those during the Moore Administration. Only thus can a true comparison be obtained of the progress made.

The Moore Government had to reorganise the whole of the mining industry in Queensland. They showed vision. I am sorry that the Minister's graph has been removed, as I should have liked to point out to anyone who can read a graph the great development that took place in that industry during the years 1931 and 1932, and show that after 1932 there was a marked decline, thus proving that the Labour Government showed themselves unable to continue to develop the great mining industry.

What are the facts to-day? This morning we were told about the great goldmining industry. This certainly is one of the producers of wealth that we all desire to see continuing to develop by leaps and bounds. We were told that the beneficence of the Labour Government was responsible for the reopening of Mount Morgan. The Minister was a member of this Assembly during the years 1929 to 1932, and he knows very well that the resuscitation of Mount Morgan was started under the Moore regime. He knows, too, that before the Labour Government were returned to office the company that has been associated with the recent development of Mount Morgan had been given an undertaking by the Government that they would make available £15,000, and that we promised another £25,000 if it wanted it.

The Secretary for Mines: You used that as an election issue.

Mr. BRAND: Just to show that the Minister is wrong, let me say that the revival of Mount Morgan as a gold-producing unit of the State was brought about as a result of assistance rendered by the Moore Government following upon a recommendation made by the Mining and Works Committee of the State Employment Council, and the company was notified of that decision by the Under Secretary for the Treasury before the Labour Government came into power.

The Secretary for Mines: Why did the Moore Government not give the money?

Mr. BRAND: They did. They made it available as soon as the recommendation of the Mining and Works Committee was made to the Government.

The Secretary for Mines: You never gave it anything. That announcement was made on the eve of the State election.

Mr. BRAND: The announcement was made by the Under Secretary to the Treasurer. It was not made by the Minister. The company was notified of the recommendation of the State Employment Council, which had been set up by the Moore Government.

That is the reason why there was so much confidence in the Moore Government. They did not do these things for political reasons; they did them in the interests of the industries of the State. They did these things in an effort to build upon a sounder foundation than the rotten foundation that had been left to them by the Labour Government. They were endeavouring to raise Queensland to the pinnacle on which we all desire to see it.

Mr. Jesson: Then, how did you come to get the sack in 1932?

Mr. BRAND: The hon. member likes to introduce side issues. No man can say that the Moore Government, during their three years of office, did not revive the old prospecting system that had died out under the Labour Government's regime. The Moore Government helped the old prospectors, and what is the result? The result is that the main producers of gold that the Minister has spoken about were established during the period of the Moore Government—Mount Morgan, Mount Coolon, and Golden Plateau

The total production of 127,281 fine oz. of gold in 1937 was valued at £540,656 at the standard value of £4 4s. 11d. a fine oz., or £1,104,760 in Australian currency. The principal sources of gold were—

	Fine Oz.
Mount Morgan	51,079
Cracow	27,625
Charters Towers	12,993
Mount Coolon	7,183
	98,880

Thus the three chief sources of gold production resulted from the development of mining brought about under the Moore Government. They were able to give help when it was necessary to provide the incentive for people to go out looking for gold, which they did, although without the advantage of the present high price. That discloses that we were pursuing a policy conducive to the development of the Queensland mining industry that should be continued.

The graph we saw this morning indicated the blight that followed the return of a Labour Government. There was a lull, and later progress began again. People lost confidence in the Labour Government, and it was not until they had told the world that they were not the extreme brand of Labour Government that could be found in New South Wales under Mr. Lang, or the Communist brand of Labour politics, that people regained confidence.

We have been told that there has been a great deal of development. Last year we were told that the old goldmining fields of Queensland could be resuscitated, but the Minister has not indicated this morning that there has been any great development in that respect. The "Courier-Mail," 12 months ago, on 19 October, 1937, said—

> "Both the Etheridge and Croydon goldfields should have a new lease of life with gold at its present price of about £8 13s. an ounce, but assistance is required and, if the Government would erect batteries to crush the ore development would become active. This is the opinion of Mr. F. W. Cuthbert, who went to the Croydon field in the big rush of 1887, and is still engaged in mining enterprises in the North.
>
> "Mr. Cuthbert said yesterday there was plenty of new ground on the Etheridge field, and only recently a new line of reef, called Mount Jack, had been discovered 4 miles from the railhead at Forsayth. It looked promising. There were several undeveloped formations around Forsayth and Georgetown, which should be highly payable."

I understand that we have only one drill operating to-day, and that the others are stored at Charters Towers. There is a great need for more drilling, and we should be actively engaged in this form of pioneering development.

The Commonwealth Government recognised their responsibility in this development. The Minister claimed that the Labour Government have done it all.

These figures show the aid given by the Commonwealth Government to mining in Queensland—

	£
1934-35	20,000
1935-36	30,000
1936-37	55,600
1937-38	24,900
	£130,500

That amount of money has been made available to this State by the Commonwealth Government, and rightly so. The Commonwealth Government are prepared to help any State to develop its mineral resources, especially if they are required for the defence of the country.

The following is to be found on the very first page of the last annual report of the department—

> "Eminently satisfactory results were achieved by the department's policy of encouraging the working of low-grade tin deposits, and tin miners generally have been greatly assisted with funds made available mainly by the State following the co-operation of the Commonwealth authorities with the State."

The annual report indicates clearly that the Commonwealth Government have co-operated with the State, thereby encouraging the working of low-grade tin deposits here. The figures that I have given also clearly indicate that not all the help has come from the Labour Government.

The general impetus to mining development in this State took place between 1930 and 1932, when considerable encouragement was given to mining companies to carry on this work. We know very well that Mount Isa might not have been with us to-day if it had not been for the help given by the Moore Government by way of a guarantee, thereby restoring confidence in the industry and enabling the company to raise the £2,000,000 required to complete the works in its area. Mount Isa is one of the biggest mining ventures in this country. Its operations are being conducted scientifically and the company is winning tremendous wealth from the earth.

I should like a little more information from the Minister concerning the help that he alleges his Government have given to the mining industry during the past few years. I have pointed out that the Commonwealth Government have given considerable help since 1934-35. In the "Courier-Mail" of 22 May, 1934, the following announcement appeared:—

> "The Acting Premier (Mr. Pease) announced last night that several important British mining investment groups were negotiating with the Queensland Government with a view to starting large-scale prospecting and mining operations in Queensland. He said that the announcement of a scheme to develop concessions

in North Queensland by a British company with £600,000 capital was an indication of a much wider interest of British mining investors in the development of Queensland's gold and other mineral resources.''

Mr. Nimmo: What went wrong?

Mr. BRAND: I should like to know from the Minister whether he can tell us anything about that £600,000 that the Acting Leader of the Government at that time said was coming to Queensland for the development of the mining industry. I have only quoted the opinion of that hon. gentleman.

Mr. Duggan: The speeches of hon. members opposite deterred them.

Mr. BRAND: The hon. member may rest assured that nothing that any hon. member on this side may say will deter those who wish to invest in mining operations in this State, but on the contrary the speeches of hon. members opposite and the actions of their Government will deter them. Mining investors must have confidence in this State and I should like the Minister to tell us whether during his term as Minister he was able to get any part of that £600,000 for mining development mentioned by his Acting-Leader in 1934. A considerable period has elapsed and we want to know whether every effort has been made by the department to induce any of that capital to come to this State for the development of mining. One of the objects of a discussion on these Estimates is to enable the people to know whether that money has been attracted to Queensland or whether any efforts have been made to get it.

I hope that the Minister will be able to assure me that considerable development is taking place and that we shall have the benefit of this amount of capital, which would be a great boon not only to the mining industry of Queensland, but Australia generally. If I can judge by the figures of the number of men employed in Queensland, as given by the Minister, we have not got that £600,000.

An Opposition Member: It is on paper.

Mr. BRAND: We get some very flourishing reports from the Government. They use the columns of the Press for propaganda. They would have the people believe that an El Dorado is at hand, but we do not see any actual accomplishment of these prophecies. The previous Government accomplished something in mining. I have shown this morning that when they set out to achieve a purpose they succeeded. They succeeded so well that they were able to show a steady improvement in the number of persons employed in mining. That was competely established by the graph produced by the Minister, no matter how much he would have liked to disguise the fact.

At 12.6 p.m.,

Mr. KING (Maree), one of the panel of Temporary Chairmen, relieved Mr. Gledson in the chair.

Mr. BRAND: Great development took place in the mining industry in the period 1930-32. I am interested in mining development, because in my electorate, and in the adjoining electorate of the hon. member for Port Curtis, the great Burnett area, mining was a very important industry in the economic life of this State in the early days—the roaring eighties. We still have great mining possibilities and we desire to see greater development in this district. We want that area thoroughly prospected and investigated. Surely to goodness the winning of hundreds of thousands of pounds of mineral wealth from a little hill called Mount Perry cannot be an isolated occurrence! There must be some other mountains in the district full of mineral wealth. We have great possibilities in molybdenite and other minerals in that area. I want to see a great development of this mineral wealth.

It is regrettable that our State, in the great expenditure that is about to be made for defence purposes in Australia, will receive only a mere pittance of the total amount. This is one of the most vulnerable parts of the Commonwealth, and industries could be developed here that would be of immense value in a time of need. We have possibilities everywhere. Until the Minister assures me that the £600,000 capital I have referred to has been lost to Queensland I cannot say that legislation was the decisive factor. We want to give to the investing public, those in Australia for preference, every confidence and encouragement to put their money into gilt-edged investments in this State, in order that we may have capital to develop the mineral wealth in this country and provide work at good wages and good conditions for the tremendous number of people who cannot get full-time work to-day.

(Time expired.)

Mr. McLEAN (Bundaberg) (12.10 p.m.): I congratulate the Minister and his staff on the compilation of the annual report of the Under Secretary. It tells us what has taken place in mining throughout the State, and I am pleased to learn from it that there has been a marked improvement in the ventilation of the mines and in the prevention of dust. The report last year indicated that there had been a lack of proper control of ventilation and the occurrence of dust, and it is very pleasing to know that that condition has been remedied.

Dealing with this matter, the report says—

> ''The ventilation of the mines generally was maintained at a reasonably good standard, but rises, dead-ends, and similar places called for special measures.''

Anyone who has had any experience of mining, working in rises and dead-ends and other similar places, knows that it is of vital importance to the miner to have good ventilation.

The hon. member for Fitzroy and I have had experience of these conditions when we worked in mines thousands of feet below the surface, and it is particularly pleasing to us to know that the miners are receiving more consideration now than they were some years ago.

Now I do not know all the wardens, but I know there is one practical miner amongst them, Mr. Dick Power, whom I was associated with when mining many years ago on the Gympie goldfields. In the course of their duties, wardens are often called upon to report to the department on applications for grants in aid of mining; and I think it is essential that a practical man should deal with such matters. I do not know how the difficulty could be overcome. Probably it could be overcome if an official of the Department of Mines who had practical experience of mining, was stationed in our district and could be called upon to report on these matters. I do not reflect in any way on Mr. Aitken, the mining warden, but like most of the other wardens he has not had any practical experience. Men who are inexperienced in mining should not have the responsibility of determining whether an application for prospecting aid should be granted.

I do not desire to emulate the hon. member for Isis who, waving his hand like an ardent evangelist said, "In our time (referring to the Moore regime) we did help Chillagoe and we did help Mount Morgan."

On the verge of an election the Moore Government said that they would make grants for the development of mining in these areas. In like manner they made the promise that there would be a reduction in land taxation. But what did they actually do? The fact is that on the verge of the election they were still obtaining the same revenue from land taxation, and it was left to their successors, the present Labour Government, to bear the heat and burden of the day. The promise of a grant to the Mount Morgan Company and the Chillagoe Company was not fulfilled, and it was left to a Labour Government to finance these projects, and, as the State was emerging from a period of depression, it fell very hard on the Government.

The hon. member, in a flight of fancy, referred to increased mining productivity under the Moore regime. The time to make a denial is when a statement is made. Hon. members opposite—the hon. member for Isis in particular—were silent when the Premier gave a resume of the development that had taken place in the State under the control of a Labour Government. The statements made by the hon. gentleman were not denied at the relevant time, and I regret that under this vote opportunity was taken to endeavour to discredit the work done by the Minister and his staff in the development of the mining industry. The recent Brisbane show was a reflection of the increased productivity under Labour administration. It would be idle for hon. members opposite to deny this very evident fact.

The figures indicate that there has been increased productivity in mining—

	Gold Yield. Fine oz.	Value. £
1937	127,281	540,656
1936	121,974	514,717
1935	102,990	437,473

There was a very marked increase each year. The value of the base metals, including coal, for the present year was £3,337,734, as compared with £2,625,373 for 1936. Do these figures not indicate that there has been a very marked increase in productivity?

The hon. member for Isis stated that while we have been getting these results there has been a decrease in employment. Let me state clearly what is happening in the coalmining industry. Mr. Staines, the Under Secretary, in his report, says that the collieries in the Maryborough district recorded a slight increase in output over the previous year and that the average time worked was only 2½ shifts each week. Before the redistribution of electorates the coal mine referred to was in the electorate of the hon. member for Isis. The men are working only 2½ shifts, and they are producing more coal than ever.

Why is coal not used to a greater extent than it is? Everyone knows that the competition of the oil companies has been detrimental to the coalmining industry of this State. Coal could be used to a greater extent for the purposes of producing oil. A question was asked of the Prime Minister, Mr. Lyons, about the equipment that had been installed at Middleton on the Tees in England for the extraction of oil from coal. This is one side of the question that the Commonwealth Government have failed to consider. The Commonwealth Government have neglected their duty to help in the development of this essential process in the various States of Australia. If, therefore, blame is attachable to anyone it must be laid at the door of the Commonwealth Government in the first place.

I am pleased to see from the warden's report that mining in the Bundaberg area has developed over the last 12 months. The hon. member for Isis is closely associated with these mines, in that they are in his own electorate, and I should like him to note that there has been marked progress in that area. The Minister has said that he intends visiting the mines that are operating throughout this area, and I am pleased to hear that he desires to make personal contact with the men engaged in the industry there.

The warden states—

> "Contrary to expectations, results from mining operations during the year showed a decided improvement on the previous year. The value of all minerals won was £3,876 as compared with £1,419 for the year 1936."

This increase in production of over 200 per cent. in the hon. member's electorate has been brought about by the action of this Government in granting assistance through the Department of Mines to the prospectors in that area.

During the discussion on these Estimates last year I referred to the molybdenite mine in the Wonbah district, which I believe could be developed into a very large mine. Curtailment of finances has precluded any extensive development there, but Johns, Schulz and

party have done a great deal of work. The mine is a valuable asset to the district and the State, for its 5 tons of molybdenite produced had a value of £964. With molybdenite at a value of approximately £200 a ton it is worth developing. I know those miners and the mine well, and the Minister could see for himself on a visit that they have done remarkably well with the somewhat primitive methods they employ. The help given by the State has enabled them to undertake further development.

Approximately £400 was paid in the Bundaberg district in aid to prospecting during the year, but it is true, as the warden says, that no discovery of any note was made. Nevertheless, I have known of districts in New South Wales, such as that outside Torrington, where we found there was fluorspar, antimony, cobalt, and tin. It was significant that that field contained those valuable minerals, and I believe that in the Burnett district there are valuable deposits. Gold has been mined there for many years, Mount Perry has yielded copper prolifically, and in the Boolboonda and New Morrita areas, old mining fields, gold is still obtainable.

There is a lack of experience on the part of some of the men doing prospecting work, and that leads to danger, as the following report would indicate:—

> "A party of three inexperienced prospectors cleaned out an old 40-feet shaft at Ballara, one side of which had caved in over a considerable length to a depth of 12 feet. They placed three long bearers in position, using light saplings for lagging, and dumped the material from the shaft behind the lagging, causing the light bearers to collapse, resulting in about 20 tons of filling falling down the shaft on top of a man in the bottom. The evidence at the inquiry indicated that the accident was to be attributed to the entire lack of mining experience on the part of the men."

Many persons want to go out prospecting, but that paragraph indicates to me that there are many incompetent men among them. I am with the department in the contention that it must keep a close watch on the suitability of men who want to go mining. To discover valuable minerals a man has to have some practical knowledge of the mineral he is seeking, and he must have enough practical knowledge not to endanger life.

I hope the Minister will consider the advisableness of rectifying the anomaly whereby the warden is allowed to determine whether financial aid shall be given to miners or not. I am satisfied that there are opportunities for even greater development in the mining industry in this State than any that have taken place. However, the annual report discloses great achievements over the past 12 years, and reflects the utmost credit on the Minister and his staff. They are to be congratulated upon the help they have given in developing the mining industry in this great State.

Mr. TAYLOR (Enoggera) (12.31 p.m.): I should not like this vote to go through without complimenting the Minister and his staff on their very valuable efforts to develop the mining industry in this State.

Mining, as an industry, is as old as civilisation itself. Let us for a moment consider the motives behind the mining activities of ancient civilisations. In addition to economic development for food, the Incas of Peru went in extensively for mining for precious minerals such as gold and silver and precious gems, so that they might decorate their cities and their temples, but they made no attempt to use these precious metals and gems for barter or in any other commercial way. Probably, the ancient Jewish civilisation under King Solomon was the first to use precious stones as a means of international barter. One has only to know something of the Aztecs of Mexico, one of the most ancient civilisations, to have some knowledge of the mining industry in that country in very early times.

The conquest of those civilisations by the Spaniards resulted in the enrichment of Spain. The only booty that the Spanish Armadas that sailed to South and North America with their arms could bring back to Spain was precious minerals like gold and silver and precious gems, millions of pounds worth of which went into the coffers of the Spanish nobles and other members of the ruling class. That enabled Spain to become the richest and most powerful nation of the time.

To-day mining is carried on for somewhat similar reasons. We know that the urge is still with the human being to find rich gems, rich minerals, or treasures of some kind or another. There is an instinctive desire in persons who embark on these expeditions not only to enrich themselves but also to find something unique. That is apparent when we read reports of explorations by scientists—in Java, Siam, the Andes in South America, or, coming nearer home, in the Carnarvon Ranges, the Northern Territory, and the Gulf country. These men do not undertake such explorations merely with the object of studying animal and plant life.

Sometimes an entomologist or a biologist or two accompany the party, it is true, but there is always behind such an enterprise the longing to find something that will be of some value to the State, such as metals or gems. That is a very laudable desire. No civilisation, in our time or in the past, has been of any consequence that did not have a substantial mining industry behind it.

Expenditure on grants to prospectors, which has been one of the main features of the department's work during the past five or six years, have been the means of increasing gold production considerably. If one of 100 prospectors who received the prospecting allowance over a period of six years made a strike, it would be an immediate asset to the State, and justify all the expenditure. Consequently, no other system operating under the department or the unemployment

relief scheme has been more successful than the grants made for prospecting.

I have had considerable experience in mining, as I have said in this Chamber on more than one occasion. As a lad I worked at Ballarat, and as a youth and young man I was five years in a mine on Broken Hill. I can assure the Committee that if it were not for Broken Hill and Mount Isa, the inhabitants of Western New South Wales and North-West Queensland would not now have good transport systems. Broken Hill was first connected by rail with Adelaide, but in more recent years rail connection has also been made from Condobolin, giving the whole of the country between that town and Broken Hill a wonderful opportunity of development through the possession of a modern transport system.

My remarks apply to Mount Isa also. Could this, or any other Government, have constructed a railway from Duchess to Mount Isa without a mine of the dimensions of Mount Isa at the terminus? Definitely, no. The Mount Isa railway is going to be of valuable aid in the construction of the inevitable railway link between Brisbane and Port Darwin. If another mine like it could be developed at Tennant's Creek, or somewhere else in Central Australia between Alice Springs and Daly Waters, the present railway termini, the Government would be induced to construct the North-South line to connect Darwin with the Southern capitals, thereby opening up the central part of our continent. Such development is one of the important results of a mining industry.

This vote has not been increased as it might have been. That is probably owing to the fact that we have to be dependent on the generosity of the Loan Council for the amount of cash that we spend. The aid the Government have given to mining would be more generous than it is if it were not for that fact.

I hope the development of mining will reach a stage when the Department of Mines will be able to provide more funds for assistance to mining generally and prospecting in particular.

During the last 12 months there has been considerable development in what I may call the mechanical help given to mining, in the form of the supply of air-compressor drilling machines to prospectors who have developed a lode. This policy should result in an increase in mineral production, and thus in the assets of the State. The installation of batteries on small fields is of great value, because it saves heavy cost of transport to the bigger centres.

I believe that there is a possibility of great development in the Portland Roads district. When I was in Sydney last June I called on a friend of mine who is secretary of the Placer Development Goldmining Company and the Bulolo Gold Dredging Company in New Guinea. While waiting in his office I met two gentlemen, one an engineer and the other a miner, who had been up in the Portland Roads area, and they expressed themselves as very satisfied with the work that had been carried out there by the Department of Mines. The erection of a jetty by the department, enabling boats to tie up at a wharf instead of having their cargoes lightered, and the construction of a developmental road to the field, are both evidence of the valuable work that is being carried out. There is not the slightest doubt there will be a development in mining in the far northern parts of the State as a result of the far-sighted policy carried out by the department. I have no hesitation in saying that the mining industry in Queensland will continue to develop and progress while the present policy is persisted in and administered as it is to-day.

No doubt many holes have been sunk for which no return was received, but other mines have proved so rich that they have more than made up for the loss sustained on the "duds." I believe the Commonwealth could develop such an inner transport system in this wonderful continent of ours as would give access to the Kimberley and Macdonnell ranges, and result in a greater output of mineral production in Australia.

The aid given by the Queensland Government in the geophysical and geographical aerial survey that was begun about two years ago, and is still being carried out, was commendable, and the result should be of great value to the industry.

Co-operation between the Commonwealth, Queensland, and Western Australian Governments will prove to be of great value to the mining industry in the very near future.

The application of science, not only to the work of the prospector, but also in transport, is of great help in the development of mining, and that phase of the work of the Government is to be commended.

Twenty or 30 years ago people would not even have dreamt that Mount Morgan could be developed in the way it has. Nobody would have believed that Mount Morgan could take another lease of life. Yet, with the help of the Government, it has been done.

Mount Isa has played a very important part in the development of a far-distant part of the State, and this development has been made possible by co-operation over a period of years between the Government and the company. The lode shows every indication of providing work for the next half-century.

A continuation of the present policy of the department will increase the national assets of Queensland, and I commend the department and the Minister for the very valuable work done by them in the development of the mining industry.

Mr. MANN (Brisbane) (12.49 p.m.): The Minister has certainly shown in the administration of his department that he has a practical knowledge of mining, and is very keen to push the industry ahead.

The department is pursuing the right policy in making prospecting grants to practical men, thus encouraging the search for gold

and other metals. In bygone days the prospector searching for minerals had to undergo the harsh conditions of bush life without monetary assistance, and, after making a good strike, in many cases a company was formed and he was robbed of the just reward of his labours. Hon. members know the story of the discovery of Mount Morgan, for instance.

Great activity exists on the mining fields of Queensland, particularly those of the North, where, in the boom days a considerable number of men were engaged in mining for gold, copper, and wolfram, and great wealth was dug from the earth. Great activity in mining operations also took place during the period of the Great War. This was particularly so in the Cloncurry area. Numbers of men formed small parties and were able to earn a good living for themselves. Since the war, however, prices have slumped and many of those mines have been closed down. Thanks to the interest the Government are showing in mining, and to the help they are giving to prospectors, many of these shows have been reopened and many men have found work in the industry.

The Government have given advances for the purchase of mining machinery, they have made access roads to mining camps where there is a fair prospect of development, and they have established batteries in places from which it is extremely difficult to transport ore to the mills. The Claudie River show, at Portland Roads is an excellent example of what has been done in this direction by the Government. The hon. member for Enoggera has mentioned this place, and I think that it is a typical example of what can be done and of the help that this Government have given to the mining industry.

In order to prove that the present Government have given a greater amount of money to prospectors than the Moore Government, I should like to mention that the total sum made available for this purpose by the Moore Government during their three years of office was £65,972, whereas during the three years from 1932 to 1935 this Government allocated £157,250 to this purpose and, for the period between 1935 and 1938 that amount was increased to £250,000. Those figures speak for themselves. They prove conclusively that the Labour Government have rendered considerable aid to the small men for the purpose of encouraging prospecting. Actually, the grant has been increased by something like 300 per cent. Is it any wonder, therefore, why we on this side of the Committee claim credit for the Government's policy and are pleased to be able to pay a tribute to the Minister and his department?

Another direction in which the Government have been liberal is in the granting of loans and subsidies. Both Mount Morgan and Mount Isa can testify to the timely aid and encouragement that were rendered by this Government during the early developmental stages of those activities.

The hon. member for Bundaberg quoted our gold returns. We have only to read the report of the Department of Mines to see just what the increase has been during this Government's term of office. This Government are entitled to claim credit for the winning of increased quantities of gold in Queensland. Their policy has been to encourage prospectors and miners in general to engage in the work with enthusiasm, and they are doing everything that is possible to foster the industry.

The interests of the small man are kept in mind by the department. The basis of rendering financial aid to prospectors is extremely liberal. This help is rendered through both the Department of Mines, by means of prospecting allowances, and the Unemployment Relief Fund.

Not only this, but all previous Labour Governments have been alive to the fact that as a general rule the development of the mining industry leads to the establishment of other industries. Mining has been encouraged in Queensland for that reason, too.

The annual report of the Department of Mines is sufficient evidence for anyone, in my opinion, in this respect. To put the matter plainly, the report shows that more gold has been won and a notable increase made in the production of base metals; in fact, steady progress in all mining, resulting in a large increase of employment in the industry.

The opening of a single mine may cause the establishment of a town; it may cause railways to be built or air services to be established, or a water supply to be laid on. At Mount Isa, for example, the discovery of a large mine has created one of the principal mining towns of the State. Railways have been built, and the township itself gives work to hundreds of men. Similar development has followed at Mount Morgan, Mount Coolon, and Cracow, and all of these fields had their origin in the work of the prospector.

I could speak of Mount Morgan at some length, for I was reared on that mining field, but I leave that to my friend, the hon. member for Fitzroy, who will be able to tell the Committee what the Government have done there.

I cannot, however, mention Mount Morgan without associating with it the name of the late Hon. J. Stopford. I have often heard my father say that the miners in Mount Morgan always made the proud boast that whenever disputes occurred or the mine management tried to "put anything over" the miners "Stopford was always there to take the part of the miners." As a member of the Government he was prepared to give Mount Morgan Gold Mining Company any help he could to develop the mine, but he would not sacrifice his principles and was always on the workers' side. He was the father of the miner's phthisis sections of the Workers' Compensation Act; it was through his agitation that they were placed in the statute-book. I understand that on occasions he took members of the Government Party and members of the Opposition to Mount Morgan to show them how the patients there suffered from that dreadful disease.

The policy of the Government in encouraging the working of low-grade ores and the smaller shows is sound. Tin mining is generally considered to be an industry of smaller dimensions, and it has been greatly helped by the Government in co-operation with the Commonwealth Government.

At 2 p.m.,

Mr. GLEDSON (Ipswich) resumed the chair.

Mr. MANN: Previously the plant used in treatment of tin at Irvinebank and Herberton worked for about three months of the year, but to-day these places are hives of industry and plants are being operated to full capacity. Dredging operations on a scale unheard of before in Queensland are to begin at Mount Garnet, and I understand from reports by the department that the company concerned has a large amount of capital at its disposal. This enterprise should go far towards encouraging the introduction of capital for similar projects in this State.

While on the subject of tin production I should like to quote the following article, which appears in the "Queensland Government Mining Journal" of 15 August last—

> "Statistics from the latest bulletin of the International Tin Research and Development Council show that the world apparent consumption of tin was 52,700 tons for the first four months of this year, compared with 67,500 tons for the corresponding period last year, the decrease being almost 22 per cent. World production declined to 57,800 tons from 62,300 tons in the same comparative period, the fall being slightly more than 7 per cent. Consumption for the first five months of 1938 represents a decline of 20 per cent., in the United Kingdom to 8,251 tons and an increase of more than 44 per cent., in Russia to 9,090 tons, compared with the corresponding period of 1937. The fall in tin consumption has been most severe in the United States, where the total for the first four months decreased by 45 per cent., from 33,505 tons in 1937 to 18,187 tons in 1938. In Germany there was an increase of 7.3 per cent. to 4,291 tons in January-April, 1938, and in France a decrease of 6.7 per cent. to 3,368 tons. Consumption in Japan increased by 23.7 per cent. to 3,710 tons and in Italy by 34.4 per cent. to 1,697 tons. World tinplate production in the first four months of 1938 totalled 910,000 tons, a decrease of 38½ per cent., compared with 1,478,000 tons for the corresponding period of 1937. Production in May, 1938, is estimated at 223,000 tons, against 394,000 tons in May, 1937. World apparent consumption of tin in the year ended April, 1938, was 183,700 tons, and the estimated consumption in manufacture was 162,700 tons."

Seeing that the world production of tin has decreased it is gratifying to know that the Government are going to help prospectors and companies in the production of this mineral.

It is gratifying to know that there are companies that will develop this industry in the far-northern parts of the State. There can be no doubt, in view of the report published by the department, that capital is readily forthcoming from British companies and groups of British investors with big capital, to develop our mining resources in North Queensland. This all points to the success of the sympathetic treatment of these companies by the Government, and shows that their policy is a sound and progressive one.

I wish once again to congratulate the Minister on the keen interest he takes in his department, and his officials for their capable administration.

Mr. MOORE (Aubigny) (2.5 p.m.): I was very interested in the Minister's long dissertation on the progress of mining since 1932. I was also surprised to see the depth to which a Minister could descend in an endeavour to get propaganda for the Government out of a reason that he did not mention, namely, the increase in the price of gold.

The Minister knows perfectly well that the increase in the price of gold has been the main factor in the increase of goldmining and gold production, not merely in Queensland but all over Australia. Any number of mines that were unable to carry on operation with gold at £4 4s. 11d. an oz. could carry on profitably with gold at £7 1s. an oz. The enhanced value of gold made all the difference in the world in goldmining operations. As a result, Victoria has gone up from the lowest gold-producing State in the Commonwealth to the second highest position. That was entirely due to the increase in the price of gold. Properties that were entirely unprofitable at the old price of gold are profitable to-day at the new price.

Mr. Bedford: The Australian price of gold to-day is over £9 an oz.

Mr. MOORE: It is £9 to-day, but it was £8 a few days ago. That makes all the difference between profit and loss in working a gold mine. I remember that in 1929 Mr. Bernales advocated a bonus on the production of gold, and Mr. E. G. Theodore, the then Federal Treasurer, brought in a measure providing for the payment of a bonus on the price of gold. He recognised that it would be a big factor in providing employment. Fortunately, the bonus was in operation for a short time only, if at all, because the increase in the price of gold overseas brought about a huge increase in the price of gold in Australia, and mines that were quite unprofitable became profitable.

One of the biggest factors in providing employment in Australia has been mining. The most profitable sources of expenditure in endeavouring to provide employment has been the granting of assistance to prospectors, establishing boring plants, and doing Government boring to see whether profitable mines could be located. That was one of the principal reasons that brought about an increase in employment and prosperity, not only in

Queensland, but also in Western Australia and Victoria.

This element in mining can be exploited a good deal more than at present. A huge area in the northern part of Queensland is virtually unexplored, so far as metalliferous mining is concerned. It has been gone over, as they say, but no more, and it is a very large area. It seems to me that a great deal of money can be usefully expended in exploring that area by giving grants for assistance to prospectors or groups of prospectors. We have not spent a great deal in that way. Last year £36,047 only was spent in aid to mining prospectors out of £2,664,313 collected from the unemployment relief tax. This year the appropriation is £35,000, and the receipts from the tax will probably be about £2,000,000.

I do not suppose there is any better method of getting an increase in employment than by giving help to experienced prospectors throughout Queensland. Western Australia provides evidence of what it means to have efficient prospecting with Government aid.

There has been an increase in mineral output over a long period of years. In 1928 the amount of copper produced in Queensland was 2,786 tons, silver 22,034 oz., lead 42 tons, gold 13,277 oz. Owing to the depression there was a falling off but gradually the increase in price of gold caused prospectors to go out and by 1932 the production of copper had increased to 3,136 tons, silver had gone up to 2,301,782 oz. lead to 47,715, tons, gold to 23,263 oz. Since that time large numbers of men have been out prospecting, although the number actually employed in the mines did not increase to the extent one would expect.

As the Minister said, 80 per cent. of the gold produced came from four mines, namely, Mount Morgan, Mount Coolon, Charters Towers, and Cracow; the other 20 per cent. comes from small plants in other parts of Queensland. There seems to me to be an opportunity of providing greater assistance out of the Unemployment Relief Fund, and there is likely to be a bigger yield if more money is made available to the Department of Mines for assistance to prospectors and for experimental boring.

Mr. Wellington: Hear, hear!

Mr. MOORE: I understand that one boring plant is operating and another one has been stored at Charters Towers for a long time.

Mr. Wellington: I can tell you why.

Mr. MOORE: I understand it has been taken away now. In Victoria there are about six, and they have been a profitable investment and the Government are continuing the policy of boring in the areas most likely to provide results. I think the same policy could be applied in Queensland with gratifying results.

It is rather depressing to read in the Auditor-General's report of the continuous losses we have in almost every Government mining enterprise. I recognise—as was pointed out earlier—that it may not be proper to only look at the matter from the point of view of the monetary loss. When my Government took office in 1929 the Chillagoe smelters were closed down because of the losses that had been accumulating. But there are other factors to look at besides the actual monetary loss upon the service. There are the large number of men who would be thrown out of work throughout the mining areas in North Queensland—men who had been sending their ore to the smelters for treatment—who have to be considered.

At that time, when they were open, Dr. H. I. Jensen had this to say—

> "The Chillagoe enterprise is a credit to the State Government, for it has saved tens of thousands a year in payments for relief of unemployed, and greatly increased the productivity of the State. The Moore Government was broadminded and wise enough to re-establish the Chillagoe enterprise because it was really necessary to the maintenance of settlement in the North. Mining activity has been restored in the Chillagoe, Mungana, O.K., Herberton, and Etheridge districts, and the mineral production of the State will probably be increased by £500,000 per annum as a result. It is good to know that the present management is equitable and honest, and that the miners and gougers get a fair deal."

That, of course, depends on how far one is to go.

Unfortunately, I see that the loss for the year on the Chillagoe State smelters amounted to £50,066 19s. 9d last year., not taking into account interest on the amount that was written off. On page 180 of the Auditor-General's report the losses for each year are given—

	£
1929-30	27,204
1930-31	18,322
1931-32	82,138
1932-33	38,086
1933-34	45,533
1934-35	44,622
1935-36	32,261
1936-37	7,747
1937-38	50,066

The Auditor-General's report is rather dreary reading and throughout the mining section there is nothing but losses, except in one place. I was rather struck by the fact that the report on page 174 states—

> "State Coke Works.
>
> "Trading and profit and loss account for the financial year ended 30 June, 1938, and balance-sheet as at that date are given on pages 175-176.
>
> "Operations for the year resulted in a net profit of £3,817 1s. 2d., as compared with the profit of £778 18s. 9d. for the year 1936-37."

I suppose the heart of the Minister was cheered with that, but on turning back to

page 168 I find the trading and profit and loss account of the Bowen State mines shows a loss of £5,875 5s. 10d., and the report adds—

> "The loss is due to the fact that the coke works were supplied with coal at a rate of 5s. 0.61d. per ton below cost. Had the coal supplied to the works been charged at cost the mine would have shown a profit of £5,136."

The system of accounting in the Department of Mines is rather amusing. First of all, coal from the Bowen State mines is sold to the coke works at 5s. a ton below cost and then after this the coke works make a profit of £3,817. This principle could be carried on indefinitely.

The Secretary for Mines: Mount Isa actually gets the rest.

Mr. MOORE: Mount Isa bought 16,280 tons at 33s. a ton. The proceeds of the sale of coke amounted to £26,589 after allowing for penalties in respect of excess of ash. The following are the sales:—

	Tons.
State smelters	9,419
Mount Isa	16,280
Export overseas	1,807
Expert overseas	1,774

Then there are various other smaller amounts.

The Secretary for Mines: You notice the different prices?

Mr. MOORE: The State smelters at 35s. a ton. Of course, that partly accounts for the loss of £6,000 in the State smelters, because probably the State coke works get a little bit more out of that. This principle might be carried on indefinitely—the principle of making a loss in one section of the department in order to show a profit in another. It does not work out very creditably, taken on the whole.

When all these enterprises of the Department of Mines are taken into consideration we find that there are nothing but losses and all the way through, with one exception, amounts for interest and redemption have not been charged.

Take the Irvinebank treatment works. After providing for depreciation amounting to £1,887 2s. 6d., there is a loss of £7,742 17s. 5d. for the year, compared with £7,556 3s. 10d. for the previous year. The accumulated losses written off for the various years from 1934 are—

	£	*s.*	*d.*
30 June, 1934	2,235	8	9
30 June, 1935	8,654	4	1
30 June, 1936	6,532	4	2
30 June, 1937	7,556	3	10
30 June, 1938	7,742	17	5

The total loss over those years is £32,720 18s. 3d.

We find, too, that the liability to the Treasury was further increased by £8,522 0s. 2d. during the year 1937-38.

On the State batteries the following losses are disclosed:—

	£	*s.*	*d.*
Kidston	1,038	19	7
Bamford	489	5	11
Venus	1,102	2	11

It seems rather extraordinary that we should have these continual losses.

Then, in the case of the Chillagoe smelters, we find a loss of £50,066 19s. 9d. for the year. The smelters apparently were charged a higher price for coke than Mount Isa was.

The Secretary for Mines: Why do you not be fair and quote the Auditor-General on the reasons for the loss made by the smelters?

Mr. MOORE: If the Minister thinks that will make the position better I am prepared to quote them. At page 180 of his report the Auditor-General states—

> "Factors which contributed to the loss of £50,066 19s. 9d. for the year 1937-38 were—
>
> "Reduced returning charge of £2 per ton on shipments of blister copper and stocks on hand or in transit.
>
> "Low gold recovery of 93.5 per cent. on 19,766.02 ounces of gold smelted.
>
> "Loss of approximately 17s. 1d. per ton on smelting of copper ores, the tariff being calculated on a charge of £1 16s. 11d., whereas the actual charge was £2 14s. per ton.
>
> "Loss allowed when drawing up copper tariff, also including cartage allowances up to 27s. 6d. per ton made to suppliers of sulphur fluxing ores.
>
> "Administration and assaying charges, £9,931 3s. 4d. Commission and charges on cover sales, £1,370 7s. 1d.
>
> "Loss through fall in market values of ores, forward standard rates at which cover sales are made, being lower than the average mean price of electrolytic copper, at which price ore purchases are made."

Those are all reasons for the loss, but I cannot see that they can constitute an excuse for it.

The Secretary for Mines interjected.

Mr. MOORE: I realise that there are several factors that are responsible for the loss. They are all set out here. On the same page the Auditor-General further states—

> "Ores purchased and freights thereon during the year amounted to £236,210 18s. 6d. as compared with £182,052 19s. 1d. for the previous year."

Of course, if one continues that argument one may say that the more ore the Chillagoe State smelters bought the bigger the loss was.

As a rule the more you produce the less your overhead expenses become and so losses are reduced, so when the treatment of a

greater tonnage results in a greater loss, it does not seem quite right.

We may be keeping an industry going, but at what cost? If it is cheaper to subsidise the men to supply their ore to some other place such as Port Kembla than to lose £50,000 on Chillagoe State smelters, it would be profitable for the Government to make a change. To keep the smelters operating keeps a certain number of men employed, certainly, but that is not the only factor to look at. It may be more economical to provide relief or other work for them. Certainly, as long as the smelters are kept operating, no one has any information as to the cost of the alternative.

I recognise, as Mr. Jensen pointed out, that we are keeping a plant operating that will help in the development of North Queensland mining fields and will keep many men employed, but the question is how far the loss can be allowed to go without imperilling the Government's position.

The Minister spoke about the vast distance over which ore was transported from Cloncurry to Chillagoe, at a loss to the railways. The railways have to lose that money so that the miners can have a treatment works for their ore. All those things, it seems to me, have to be taken into consideration in deciding whether it is worth while for the Government to keep a plant like that open or whether the Government would get a better return by subsidising the miners to have the ore treated at some other place.

The balance sheet of the coal mines is quite satisfactory. I cannot quite understand why the Bowen coalmine is making a loss when it had an accumulated profit. Is it a fair thing for that mine to be compelled to sell coal to the coke works at a loss, so that it has to draw upon its accumulated profit from year to year? The accumulated profits were somewhere about £43,000.

The Styx has shown a loss all the time.

One bright spot is the Mount Mulligan mine, which in 1929 was showing a loss of about £350 a week. I recognise that about £88,000 was written off. The mine was given to the miners on a tribute of 5s. a ton. On page 173 of his report the Auditor-General says—

> "The operations resulted in a net profit of £122 16s. 10d., as compared with £287 9s. 2d. for the previous year, a reduction of £164 12s. 4d.
>
> "The decreased profit resulted mainly from the additional workers' compensation charges, which were £153 17s. 3d. greater than the previous year.
>
> "The balance to credit of the accumulated profit and loss account at 30th June, 1938, was £1,528 12s. 8d."

It is to the credit of the men who have worked this mine on tribute that they have been able to continue their operations since 1929 and show a profit when the other mines controlled by the Government have showed losses. Of course, the Mount Mulligan miners always received a higher price for their coal than that paid to the other Government mines, whether the coal was sold to the Chillagoe smelters or the Railway Department.

(Time expired.)

Mr. COLLINS (Cook) (2.31 p.m.): During the debate on this vote hon. members have covered a very wide field, including mining in the days of Solomon, the history of the Medes and Persians, and the industry of the Incas of Peru, and what the Moore Government did when they were still in political napkins and endeavouring to get mining going between 1929 and 1932.

Does it matter very much what was done when Solomon was a boy or what was done between 1929 and 1932? The question is: are we doing as much as we can at the present time to help this great industry?

I must compliment the Minister on the splendid review he gave us to-day of the operations of his department, aided by statistical information and highly interesting graphs. They indicate that we are moving along very well in this industry, and so long as we continue to do that, and speed up as far as possible, we shall probably have every reason to be satisfied.

That the mining industry has been a valuable one to this State is illustrated by the fact that since its inception we have produced £88,054,677 worth of gold and over £80,000,000 worth of minerals other than gold, or a total of over £168,000,000. That shows that we possessed vast natural resources in this State.

I do not propose to discuss mining in a general way, but shall direct my remarks particularly to a consideration of the Etheridge field, a very rich mining field potentially, and also to the Cape York Peninsula and the Palmer field. The Palmer field has produced 1,333,113 fine oz. of gold, the Etheridge field 649,348 fine oz., and the Coen field, which adjoins the Palmer field, 54,171 fine oz. Nearly the whole of that gold was produced when it was worth less than one-half of to-day's price, and it should be readily imagined that there must still be a great quantity of gold in those fields that it would pay to recover with the present high price for gold.

There is probably no potentially richer field than the Etheridge goldfield. The Mines Association at Forsayth compiled figures from statistics furnished by the Department of Mines showing that 80 reefs within a 10-mile radius of Forsayth carried from 7 to 15 dwt. of gold a ton. We naturally ask the question: if the gold is there why are these reefs not worked—the reefs come right to the surface? The reason is that the ore is of a very refractory nature, and consequently it is very difficult to obtain a complete extraction of its gold. If it were not for the existence of the Chillagoe smelters the Etheridge field would be entirely closed. Kidston would be the only field that could successfully carry on. The Chillagoe smelters have the best known method of extracting

gold from refractory ores, but even under this method it is impossible to recover all the gold.

A good deal of discussion has centred round the project of erecting batteries in the Etheridge district to encourage many mines to recommence operations. The hon. member for Isis read an extract from the "Courier-Mail" published this morning in advocacy of that policy, adding that it would have the effect of restarting operations on the field.

That is a factor that has not been overlooked by the Department of Mines. Samples from practically all the gold-bearing ore on the Etheridge field sent to the Chillagoe smelters have been taken and forwarded to the Council for Scientific and Industrial Research in Melbourne for analysis and report on the question of gold extraction. This body has reported that by the use of the present-known method of extracting gold from these refractory ores, only approximately 81 per cent. of the gold is recoverable. The experiment, which is not quite complete, is being persisted with.

Bulk samples have been put through a battery that has been erected in Georgetown with assistance from the department. The object has been to see what recovery can be obtained, first over the plates, and secondly in the concentrates. The department has helped to finance this experiment up to 50 per cent. of the total cost. Amongst other reefs from which samples were taken was the Mount Jack reef mentioned by the hon. member for Isis. It has been revealed by prospecting that a reef of considerable size exists at Mount Jack in addition to three others, all of which carry good gold. The experiments so far indicate—they are not final—that very little recovery was possible over the plates or by means of the concentrates. As I said, the experiments are being continued, and I hope that the Council for Scientific and Industrial Research will be asked to make further analyses of these samples. We know that gold is in those reefs, and if a satisfactory method of extraction can be obtained thousands of men will be employed on the Etheridge field, as there were at the beginning of this century.

There is a very good reason why batteries are not operating at the present time on the Etheridge field. In the old days probably more than 50 batteries were operating in various parts of the field.

While those batteries were successful in working on the oxidised ores near the surface it was impossible for them to get complete recovery when they got down to the sulphide zones. The result is apparent in the 12,000 tons of tailings dumped within 3 miles of the railway. That dump remains there unworked carrying 6 dwt. of gold and illustrates the metallurgical difficulties to which the field was and is faced. On the other hand, at Kidston, where the gold is free-milling gold, they can work as low as 2 dwt.; it is simple treatment. It is only a matter of going carefully into this problem and we shall be able to deal with the problem successfully.

One of the difficulties associated with tests by the Council for Scientific and Industrial Research is the great delay that takes place before the result is available. We appreciate the fact that it has to be very careful and that the analysis has to be carried out in the most exact manner; but, at the same time, many months elapse between the time you send a sample down and the time it is returned to you. As a result, the gouger who is struggling along out in those areas is inclined to lose interest and say, "What is the good?" The miners on those fields live under very hard conditions, but, like miners the world over, they are full of expectation of improvement; and if they are assured that every effort is being made to evolve a more profitable method of extracting gold from the stone they are prepared to carry on patiently. I do not wish in any way to detract from the great value of the work carried out by the Council for Scientific and Industrial Research; I realise that it is probably as capable an institution as any similar institution in the world.

We must look at the loss on the Chillagoe smelters broadly, because they are responsible for keeping a tremendous number of people in work, not merely in the Chillagoe district but over a very large area of the State. They are keeping miners working in Cloncurry, and the Herberton copper mines and silver-lead mines depend largely on the Chillagoe smelters; and as far down as Kelsey Creek in the Bowen electorate they are dependent on the Chillagoe smelters. Any loss they show is more than off-set by the great number of people they are keeping in employment in the mining industry.

The Department of Mines has made a good deal of money available in the form of aid to prospectors with the object of stimulating the industry. In the area I refer to in the last 12 months they made available £1,643 for prospecting assistance, and £2,095 by way of subsidy on machinery. All that money has been given out in small amounts to individual miners. The number of men who were assisted in prospecting was 131.

The Government have granted small loans for purchasing small machines, pumping plants, and so forth, used in developing the mines, and to-day the Etheridge field is maintaining a reasonable production of gold.

To improve the methods of mining a pneumatic drilling apparatus has been made available to that district, amongst many others, and the Minister is to be commended for this further display of interest. These drills reduce the laborious work of the prospector to a very considerable extent, and thus the industry is assisted to a very great extent. Additional pneumatic drills should be provided if found necessary.

The department has also made available to that district two or three of its pumping plants to be used in dewatering many of the old mines, and in these can be found some very rich shoots of ore. One example of this is the City of Glasgow, abandoned in 1885. It has been reopened and a parcel of ore sent to Chillagoe has given a yield of over

10 oz. to the ton. That shows the high values obtained in the days when gold was very plentiful.

To the adjoining district of Herberton and Mount Garnet £3,321 was granted for prospecting assistance, and machinery loans amounting to £5,552. The men assisted numbered 276, and the amounts advanced varied from £135 to £353. Certainly, these are not large amounts, but they afford precious assistance to the miner, and I commend the Minister for his intention to continue the granting of such valuable aid to mining, as the industry is well worth helping. Of course, help should not be handed out indiscriminately. The department must see that the money is used for the purpose intended, and in the great majority of cases the money has been very well spent, as illustrated in our ever-increasing mineral production.

The review made by the Under Secretary for Mines, Mr. Staines, in his report to the Minister, is comprehensive, and I should be lacking in gratitude if I did not avail myself of this opportunity, on behalf of the great number of miners in my electorate, to thank the Minister and the departmental officers for the monetary aid and advice rendered by them. Mines inspectors and geologists have always given good advice and the utmost possible help, and I can speak only in terms of the highest praise of the Under Secretary, Mr. Staines, the Assistant Under Secretary, Mr. Dunne, Mr. Jackson, and Mr. Stafford for their never-failing courtesy and advice.

One receives the utmost consideration in all matters one brings before the department, and the department is willing at all times to help any sound scheme to the fullest extent that its finances permit.

Mount Mulligan is a coalmine that is working under considerable difficulty, but it is pleasing to see that the industry is nevertheless being carried on there without loss. Costs of production are of necessity high, and they must remain so, because the coal seam is only a small one. Whether a larger seam will be uncovered as developmental work progresses I do not know, nor can I ascertain whether any serious attempt has been made to prospect the whole of the coal seams in the mountain by boring.

It is hard for anyone who has not seen Mount Mulligan to appreciate the position there. We have to deal with a great sandstone mountain rising by sheer cliffs to a height of about 1,500 feet. The seam now being worked is at approximately ground level. A boring plant capable of boring to a depth of at least 1,000 to 1,500 feet would be needed to prospect the coal seams in that mountain properly, and I believe that the installation of such a plant should be favourably considered by the department, because with it we could discover if there are more and better seams of coal available.

I also appreciate the action of the department—and I express the feelings of the miners of Mount Mulligan when I say this—in making available money for the purpose of effecting improvements to the ventilation of the mine and in other ways. It is thought that these improvements will lead to a reduction in hewing costs.

Like other hon. members, I feel that all the help that has been given to the mining industry has been worth while, and I believe that it would be wise to give an even greater amount of help in this direction.

Mr. BEDFORD (Warrego) (2.53 p.m.): This debate tends generally to an admission that when it comes to a question whether one shall destroy the human element in an existing community without having any place to decant them to, one should abandon strict business methods. For instance, in reviewing the losses of the Chillagoe State smelters, it has been admitted—although I do not think the significance or need of it has been properly understood—that where it is necessary to keep men in work, and especially when the alternative is keeping them without work, certain business considerations must go by the board. So we have the loss at Chillagoe, representing the carriage of copper ore at unpayable rates from Cloncurry and a great reduction in the actual cost of smelting, so that charges are 17s. 1d. a ton under what they should be, and we have also the fact that private enterprises such as Mount Isa have been helped at some loss to the coalmining section of this department and at some loss to the railways of the State.

In the circumstances, with a large number of people dependent upon the continuance of mining operations at Mount Isa and the fact that the Government are carrying coal at unfavourable rates one would think that the Commonwealth Government would take some steps to prevent exploitation by any outside force.

Mount Isa is a great low-grade proposition—7 per cent. lead, under 7 ounces of silver and under 7 units of zinc. While the Commonwealth shipping line was in existence Australian exporting industries had a chance of making a living, and in the case of industries such as wool a chance of making high profits, but immediately that Commonwealth shipping line was put out of existence by the Bruce-Page Government there was a tremendous increase in freights on wool and meat and now the latest industry to feel it is the Mount Isa mine, which has had to stack its zinc concentrates because it cannot pay the increased cost of carriage to overseas smelters. The facts are that the increase in freight rates makes it unpayable even although the company does not charge any of the cost of mining to the zinc concentrates; it treats them as by-products. Even then it cannot make them pay.

There is one matter in the report on the Chillagoe smelters that should be looked into. The extraction of gold is 93.5 per cent. of the assayed value, showing a loss of 6½ per cent. There is a somewhat similar loss in copper. Whether there may be any difficulty in smelting operations that makes these losses necessary is another matter. To my mind they can be corrected.

While these things are happening in the case of two unpayable undertakings being kept open for the public welfare, Australia must not lose heart, seeing that only most of the sunburnt gold has been discovered. The general value of mining to Australia has been that it found a small pastoral and agricultural population and precipitated it into a nation. Often new fields have come to the rescue of the country at its worst times.

In the depression of South Australia the first mine discovered at Burra immediately gave it a new chance—an agricultural chance, because it gave a market. Kadina and Moonta followed, and you had the discovery, when New South Wales was at its worst, of gold at Summer Hill Creek, and at the same time during the pastoral depression, of gold at Clunes and Ballarat in Victoria. So it went on until in the 1885 depression Broken Hill came to help and in the 1887 depression Mount Morgan came to save the position, just as Gympie had largely saved Queensland from its worst depression in 1869. Then, immediately after the 1893 bank smash, along came the discoveries in Western Australia to cancel out the loss.

The only trouble with Australia was that at such times it found itself open to such free-trade influences that it exported all its gold in exchange for credits for imports, which it could well have made itself in the country. Now that Australia is committed to protection, the profits of no new and great mining discovery will be divided with the people on the other side of the world.

Broken Hill comes into my mind as the greatest of all discoveries. It was discovered in 1884. Until then nobody had the curiosity or the courage to put a pick into it. In 1884 its 14 shares were going begging at £50 a share. A year later they were worth £20,000, and 14 years later worth £1,250,000.

Mr. Sidney Kidman sold six bullocks to Mr. Poole for a one-fourteenth of Broken Hill, and promptly resold one-fourteenth for £150. It was the dearest meat ever known—six bullocks for £1,250,000 is a fairly high price for beef. (Laughter.)

Let us see how far these 14 men, all resident in the country, made their tremendous effort with very little money. It was decided in 1884 that each fourteenth share should put in 10s. a week to conduct the mine—£7 a week. They did it and carried on until they were able to float it in 1885 after the discovery of chlorides. It was Australia's courage that made this thing, which was going begging for £700 in 1884, produce the metal value of £173,000,000, and the metal at the south end of the line is still going strong with 50 to 60 years' work ahead.

As there was not enough coke available in Australia for smelting purposes, they imported their coke from Germany, carried it on bullock wagons from the railhead to the field, and although lead was then worth £17 a ton, they took it in at the field at £4 a ton. They brought their fluxes by bullock drays, yet when a new field is opened we have the objection of the city miner that it is "too far away." Fortunately, mines do not grow in Queen street, Brisbane, Pitt street, Sydney, or Collins street, Melbourne.

The fact remains that all the development that was worth while came in the first place from the pastoralist travelling his sheep and cattle, followed by the man who knew metal when he saw it or at least had enough curiosity to inquire into something when he was not quite sure.

The Territory is largely in the position of Cloncurry. It has been gouged, the most expensive and wasteful form of mining known. In many cases outcrops that I knew of 30 years ago in the Cloncurry district I could not find now because they have been broken down to the surface and even a few feet below, filled in, and it is almost impossible to relocate them.

It appears to me that we can save tremendous loss on carting ore to Chillagoe so long as we do not lower the general number of men in the work in the process of decanting. It would not matter if we decanted these men somewhere else. We should endeavour to make up for the loss on the smelting charges in order to stand up to the low price for metal, and so an effort should be made to redeem the Cloncurry field from the fate that has befallen it and the Northern Territory.

What happened there? It was shamelessly over capitalised by Horatio Bottomley in 1890, when the Territory got its bad name in the world on the London Stock Exchange on account of the Bottomley operations. They did not develop the Territory goldmines, nor did they call the shares Northern Territory Goldmines. They called them Northern Terrors. As inevitably happened, the money was spent in London and not in the mines of the Territory. That meant that the mines were abandoned and reverted to the Chinamen, who did not carry on mining in a miner-like way but gouged for immediate profit. I do not believe that there is one shaft in the Northern Territory that is more than 212 feet deep, and most of them have been so worked that they cannot be reopened.

This links up with the fact that at least a part of the Territory must be worked from Queensland, and so this State stands to profit. I was out a few months ago on the Midland field, 105 miles west of the Queensland border and 225 miles form the railhead at Dajarra, which the Commonwealth Government propose to extend into the Territory and up the Rankine, bringing this field within 100 miles of rail.

There I found a field that had the greatest surface exposures of ore since I first saw Broken Hill in 1887. It has been largely obstructed by the fact that an attempt has been made to work it from the South Australian end. There are 250 miles of very rough country from the Hartz and Macdonnell ranges down to Alice Springs.

These unfortunate prospectors are great men. One man, Hanlon, has got all the endurance of an aboriginal and camel combined.

because there would be a greater percentage of cures than there are at the present time.

The Bill provides for certain types of patients who are not catered for in our existing legislation. I refer now to voluntary and temporary patients. The present Insanity Act covers only those who are certified as being insane. I am glad that the hon. member for Ipswich drew attention to the fact that it was not necessary for a man to be certified as incurably insane before he could be admitted to a mental hospital, because a great number of cures are effected in those institutions. There would indeed be no need for the Government to introduce this Bill if they were concerned only with the incurably insane.

In overseas countries both voluntary and temporary patients avail themselves of facilities similar to those we propose to offer here. These institutions are of such a nature that the surroundings are congenial, every facility is provided for the treatment and wellbeing of the patients, and in most cases a complete recovery is effected after two or three months treatment.

At the present time there is a great deal of hesitancy on the part of the medical practitioner to certify that a man is insane if he thinks that he is only a borderline case, because to do so might conceivably involve him in legal proceedings. A civil action might be instituted against a practitioner who certified that a man was insane and it could be established that he was not. By this provision for voluntary patients that objection can be overcome. I feel confident that when the department provides this private accommodation at our institutions a large number of people in Queensland will be taking advantage of those facilities.

It is necessary, of course, that those facilities that are being provided should be of such a nature as to make them of material assistance to the patients recovery. I am convinced from reports that I have read that by adopting this line of attack this very desirable result will be achieved.

The next point of interest is the question of accommodation. Hon. members of the Opposition who have spoken this morning have complained that one serious defect in this Bill is that it does not provide for the establishment of an intermediate institution. I pointed out earlier in my speech that the Bill does not concern itself with details—these are matters for administration and for departmental officers—but merely provides the machinery whereby these reforms may be instituted. An intermediate institution could be established under the powers conferred by this Bill. No doubt that question will receive consideration in due course.

The principal opposition to the Bill was taken by the Leader of the Opposition, who said that he wanted a definite assurance that the proposed intermediate institution would be established as soon as possible. I wish to quote from a report that was submitted to the Minister by Dr. Stafford.

The recommendation contained in that report shows that Dr. Stafford is alive to the need for a better classification of patients in these institutions, the department, therefore, is fully seized of the importance of the matter and intends to make provision to meet the difficulty. Dr. Stafford says—

> "I consider it would be more economical to classify hospitals so that treatment and care can be specialised, and suggest that a suitable classification would be—
>
> Goodna.—Admission hospital.
>
> Continuous treatment patients.
>
> Neurosyphilitic and malaria centre, pathology, etc.
>
> Farm colony for chronic male patients.
>
> Willowburn.—Admission hospital.
>
> Chronic custodial patients.
>
> Epileptic psychopathic patients.
>
> Ipswich.—Delayed convalescents.
>
> Criminal psychopathic patients.
>
> Children. (Idiocy and low grade imbecility.)

It will be seen that provision is made to meet those cases to which attention has been drawn.

Mr. Moore: Those are only the patients we have now.

Mr. DUGGAN: Contemporaneously with this Bill we shall have a Mental Defectives Bill to discuss, which will deal with other types of cases, and I believe that when both Bills become law adequate provision will be made for these cases to be dealt with by the department.

Hon. members opposite are continually objecting to the expenditure of money on hospitals, dental clinics, and so on throughout Queensland, but if we accepted their recommendation and built mental institutions, increased expenditure would be involved. To be consistent, the Opposition should not advocate this additional expenditure. However, the question of accommodation is important and steps will have to be taken by the Government to increase the accommodation at the existing institutions, which is severely over-taxed. For the expeditious and efficient carrying out of the treatment recommended by the medical officers attached to the department it will be necessary to have more and more suitable wards.

The opinion is prevalent that inmates of these institutions should do heavy manual work, and that to have them doing something is conducive to their wellbeing. Dr. Stafford points out that in institutions overseas mechanical contrivances are installed for the purpose of relieving the drudgery of heavy manual work. If a patient has an intelligent interest in his work, that is a considerable help to his recovery. I believe that the department could well install some of these appliances, which would be welcomed by the staff and the patients. To illustrate the need for such things, let me point out to hon. members that the mental hospital at

far as prospecting is concerned the money is wasted. Additional assistance is given to prospectors by providing them with dynamite and fuse, when these are requisite for their work.

There is no gainsaying the fact that to-day the Mount Morgan mine, reopened after a closure of years, is in a favourable position, and it is interesting to find that ores showing 1½ dwt. gold to the ton are being treated at a profit. Modern methods of mining and scientific treatment have enabled this to be done. The company has up-to-date plants for treating sulphide and oxide ores, and I am pleased to know both are showing wonderful results, and also that in the near future the smelter stacks at Mount Morgan will be belching smoke, as it is the company's intention to smelt its own concentrates, and not consign them overseas for treatment. The company has decided to do this on account of the irregularity of shipping for sending concentrate shipments overseas.

The date and the amount of money granted to the company by the Government were brought into discussion this morning, and I point out that it was a Labour Government who advanced £15,000 to that company. Of course, hon. members opposite maintain that it was their Government that made this available, but that is not so, because the authority of the Executive Council for the loan to Mount Morgan was given on 23 June, 1932. That was only an election promise of the then Government. It was on the report of Sir Herbert Gepp that hon. members, now sitting in opposition, said that the amount would be given to the Mount Morgan company, but it was not till 23 June, 1932, that Executive Council approval was given for a loan of £15,000. The elections were held on 11 June, 1932, and it can thus be seen that it was a Labour Government who made the advance to carry out treatment tests, which proved so successful that it was not long before the company repaid the loan to the Government.

Mount Morgan is producing a considerable quantity of gold and giving a great deal of work to the men of the State. I am hopeful that within another few months the company will be able to give employment to still more men. The public do not realise just what this company is doing. Mount Morgan is breaking 36,000 tons of sulphide ore and 35,000 tons of oxide ore each month. That is treated in the company's own plant and good results are being obtained. When one considers the nature of ore that they have to treat one realises that it is only by the adoption of modern methods of mining and treatment that they are able to show a profit.

To-day that company is treating sands that have been treated by previous companies. These sands were treated by the original Mount Morgan company and treated again later by other companies. To-day they are being processed by the present company with good results. In years gone by the gold had to sink to the bottom of the table before it could be recovered. To-day a disturbing action is set up in the water and the gold is caught in the bubbles on the surface. It is worth visiting these works to see this operation in progress.

The company is building smelters to treat its own concentrates instead of having to send them overseas.

Figures that I have before me show that the Mount Morgan company obtained a gold yield of a total value of £442,680 for the year 1937, and a total yield of gold and copper to the value of £573,382. It is encouraging to know that in Central Queensland we have various minerals such as copper and lead and a large amount of gold.

I urge upon the Minister the advisability of ascertaining whether it is possible to give the prospectors greater consideration. Like other hon. members of this Committee I believe that there is a possibility of reopening some of the fields that were worked years ago. I have in mind one field just outside the township of Wowan. A number of men were employed there some years ago, but to-day there are only a few prospectors. I know of one old man who put in a battery there on his own, but he died and it has never been worked since.

In and around Rockhampton too, there are a number of small shows that could be worked profitably by a few men if they had a little more help from the Government. I am certain that some of them would give employment to a few men for a great number of years.

There are various other shows in the Central District, I have in mind the old Mount Chalmers show, which, I believe, could be rehabilitated so as to give a number of men employment. It is pleasing to know that there are a few men in Rockhampton who are interested in the old Mount Chalmers field, which used to be worked by the Fitzroy Mining Company. The men who have interested themselves in the show have received every assistance from Mr. Reid, the geologist at Rockhampton, and I am hopeful that in the not-far-distant future that show will eventually turn up trumps and will be the means of employing a number of men.

There are other deposits round Rockhampton, such as the old Morinish goldfield, which at one time gave occupation to a large number of men at alluvial digging, with handsome returns. There are still some prospectors there, and I maintain that the Morinish field is one where the Government should consider setting up a boring plant, because I believe there is an unlimited alluvial bed in that district, and I should like to see it tested out.

The Labour Government—we cannot get away from it—have given great assistance to the prospector, as is proved by the quantity of gold recovered. They have also given help to some of the companies that have been engaged in mining. They have given grants for machinery, and that has been of assistance to companies, and I am certain that Queensland has had good returns for the money invested in that way.

I heard my friend the hon. member for Cook speaking of the State smelters in Chillagoe this afternoon, and I agree with him and others who mentioned it, that while Chillagoe smelters may not be showing a profit we know of the benefits that the people of North Queensland and of the North-West are obtaining from the operation of those smelters. The Cloncurry field is supplying a large amount of ore to Chillagoe, and if it were not for those smelters it is likely that the Cloncurry field would not be as active as it is.

Prospectors throughout the North are aided by the smelters, and it is the means of keeping the population in the district. I am certain that the Government are doing the right thing by keeping the smelters open. There are small shows that two men are working in my own electorate from which the ores have to be sent to Chillagoe smelters to be treated, because it is impossible to get them treated anywhere else in the State.

I should like to draw the Minister's attention to the way in which prospecting assistance is granted. It is necessary for the applicants to go to the warden, who in some cases has not much idea of prospecting, and the first thing the prospector is told is that the locality he suggests is not suitable for prospecting. I am one of those who have done enough mining to know that you cannot always say that minerals will not be found in certain districts.

At 3.30 p.m.,

Mr. KING (Maree) one of the panel of Temporary Chairmen, relieved Mr. Gledson in the chair.

Mr. CLARK: Years ago we were told that where there was ironstone or granite there was no gold, but I can point to places at Mount Morgan where gold has been found in ironstone and in granite as well. A large number of prospectors have complained to me that the warden has turned them down immediately they mentioned the areas where they proposed to prospect. I think the matter should be further considered by the department.

I agree to some extent with the remarks of the hon. member for Isis concerning the Mount Perry field. I was in that field from Reid's Creek, the other side of Mount Perry, right through to Geeta. There are several areas in that district that it would be worth while developing, but unfortunately they are not very big. They are only lodes and in some cases there is gold in the copper ore. I worked for the Queensland Copper Company there some years ago but the field was unpayable and the company closed down. There were two or three small shows carrying good values in gold, but I believe that they could provide employment for a number of men if assistance was given for prospecting. At one time the whole field, right along the line from Mount Perry to Wombah, through Harper's Hill to Geeta, was producing copper of high grade. There is molybdenite at Wombah, but up to date not very large quantities have been obtained.

I believe that with the aid of prospecting further values would be found in the district. I understand that the old fields carry enough ore of reasonable value to employ a number of men. As long as I can remember there were prospectors on the Cracow field looking for something of value, but it was not until 1932 that something was found. I believe that there are other potential fields throughout the length and breadth of Queensland and the prospector is the man to find them.

In conclusion, I should again like to thank the Minister and his staff in Brisbane, Rockhampton, and Mount Morgan for the courtesy and help they have extended to me on all occasions.

Mr. NIMMO (Oxley) (3.33 p.m.): We have had a variety of speeches on the vote for this department.

First of all, the Minister exhibited graphs that I was very interested in. I do not go in for mining operations but if I did and wanted to get a mine off I should copy some of those graphs to show what could be produced from a mine. I do not know who was responsible for the preparation of the graphs or whether the Minister has deluded himself into believing that the increased production has been greater than it really is. Usually, graphs have a line indicating how something has increased or improved but on the Minister's graphs there were lines beginning with the thickness of a pin's point and rising sharply and broadening until they were about 2½ inches wide at the top. They would serve as good graphs for go-getters. If their object was to convince the Minister that great progress had taken place in the industry during his term of office and that of his predecessor, then the Minister should be satisfied.

A speech was also delivered by the hon. member for Warrego. It was brimful of interest and I enjoyed it very much. I agree with the hon. member that something should be done by the Commonwealth Government to help to develop the Northern Territory.

He made one remark, however, I did not agree with concerning the Commonwealth shipping line. He said that the Bruce-Page Government had sold this national line and that Australia had suffered a great disability as a result. We know that this line was losing a large sum of money annually. What does it matter if we must pay higher freights instead of incurring heavy losses as a result of giving subsidies to industry? We arrive at the same result in the end.

Mr. Bedford: But the Commonwealth line was sold for next to nothing, and the Government did not get all of the sale price.

Mr. NIMMO: It was a Godsend for the Government to get rid of it.

Mr. Bedford: The wool people are paying three times the freight now to what they did then.

Mr. NIMMO: They have now the benefit of the 25 per cent. exchange which is really a subsidy. The hon. member for Warrego referred to the wonderful results accruing to the holders of the 14 shares in Broken

Hill. The thought passed through my mind, "Why growl at the man who makes a huge profit out of an investment in mining?"

Mr. Bedford: I did not growl at him.

Mr. NIMMO: I admit the hon. member did not, but many persons do. They usually say, "These people are making too much money altogether," but the fact remains that much money is lost before any is won.

Mr. Bedford: Of course.

Mr. NIMMO: The men who stick to mining right through deserve every reward. The original shareholders in Broken Hill who struck it rich deserved every credit for their optimism. They stuck to the job. Probably the 10s. a week these 14 men put into the syndicate was an amount they could hardly afford, and the result of their investment has been a valuable asset to Australia.

The hon. member for Fitzroy made reference to Mount Morgan. My study of the gold production figures in Australia convinces me that the Labour Government in this State can take very little credit to themselves for any increase. The "Queensland Government Mining Journal" for July gives the total gold production for June, 1938, a very fair return to take for my purpose. This return discloses that we have in Queensland three gold mines producing over 2,000 oz. of gold a month, namely, Golden Plateau 2,172 oz., Mount Coolon 2,515 oz., and Mount Morgan 4,775 oz. The total production for June was 13,148 oz. If we deduct the production I quoted from the three principal mines, a production of 3,686 oz. is left for all the other gold mines in Queensland. Charters Towers has been producing gold for quite a long period. Even after its collapse Charters Towers produced gold on a small scale before 1929. That field produced 1,096 oz. in June last, so that all the remaining goldfields in Queensland produced only 2,590 oz.

The point I wish to make is that when the Moore Government assumed office mining was at a low ebb. A small amount of gold was being obtained from a few fields, probably as much as is produced to-day. The activities of the Moore Government were the means of establishing the Mount Coolon, Golden Plateau, and Mount Morgan mines, although the Moore Government may not have been altogether responsible for Golden Plateau. Credit for that may be given to the prospectors' good fortune in discovering the Cracow field. When it was discovered investors got behind it, found capital, and enabled it to be developed. The fact remains that these three mines were definitely set going by the Moore regime.

The hon. member for Fitzroy made the statement, too, that the Government were responsible for the recommencement of operations at Mount Morgan. I want to settle this question once and for all. I remember the discussions that took place in the party rooms of the Moore Government with regard to the reopening of the Mount Morgan mine. It was very definitely decided to reopen Mount Morgan before the elections were held at all.

The Rockhampton "Evening News," Saturday, 12 March, 1938, contained an article relating the history of the reopening of Mount Morgan and part of that article reads as follows:—

"On 5 May his Government had formed a State Employment Council of eleven to advise it in respect of works to be carried out from the sum of £620,000 which was part Commonwealth grant and part the proceeds of a loan. The Council met on 6 May, on which day Sir Herbert Gepp—who had been advised to be prepared—left Melbourne for Mount Morgan. Sir Herbert presented his report to the Moore Government on 31 May, 1932, which report was adopted by the State Employment Council on 9 June, 1932. The State Employment Council, at its third meeting held on 16 May, 1932, the then chairman (Mr. H. E. Sizer) informed the meeting that Mr. Gepp considered the Mount Morgan application a suitable one for the council to support; at the fourth meeting of the council, held on 9 June, 1932, there were present Messrs. H. E. Sizer (chairman), W. H. Austin, J. R. Kemp, J. D. Story, W. L. Payne, H. C. Quodling, E. T. Campbell, J. H. Stanley, T. J. Barry, and J. P. Bottomley. Mr. Kemp reported:

"Advance of £15,000.

"The Industry, Mining, and Works Committee met yesterday and considered the Mount Morgan proposal, and the following decision was arrived at:—

"(1) That a first advance of £15,000 be granted on terms and conditions to be arranged between the Government (to the Department of Mines) and the company, such terms and conditions to be based generally on the recommendations of Mr. Gepp as contained in his report of 30 May, 1932, and to be subject to the concurrence of the Employment Council.

"(2) That the question of the granting of a further advance (if any) be considered from time to time based upon specific applications which may be made by the company and upon progress reports and recommendations which may be furnished by the Department of Mines or other approved authority.

"(3) That until otherwise determined a further sum of £43,000 be hypothecated for the purpose.

"(4) That the terms and conditions of employment should be given consideration by the council.

"The resolution was adopted by the State Employment Council with the alteration in paragraph 3, whereby the sum of £43,000 was reduced to £25,000. In regard to paragraph 4, relating to the conditions, it was agreed—

"The department concerned negotiate with the company and report back to the State Employment Council.

"It was also agreed—That the Press announcements should be confined to the contents of the first two paragraphs together with a short explanatory note.

"Mount Morgan Advised.

"On 10 June, 1932, the Under Secretary, Department of Labour and Industry, informed the managing director, Mount Morgan Company, of the council's decision to make a first advance of £15,000 and on the following day was held the general election, at which the Moore Government was defeated. The Forgan Smith Government assumed office on 16 June, by which time any Government that was in power was committed by the Moore Government to at least £15,000 for the purpose of re-starting the Mount Morgan mine."

They were all very excellent men on that State Employment Council, but they were nearly all scrapped after the Labour Party assumed office. I hope that in future the Labour Party will give the Moore Government credit for having established that mine.

The Secretary for Mines: Who paid over the money?

Mr. NIMMO: The hon. gentleman's Government were forced into the position by the action of the Moore Government.

The Secretary for Mines interjected.

Mr. NIMMO: The fact of the matter was the Moore Government got Sir Herbert Gepp to go up and inspect the mine and report to them.

The Labour Party make a great song about the increase in gold production. The increase in gold production is not as stated by hon. members opposite. The three mines referred to have no doubt been great gold producers, and I am sorry to hear that Mount Coolon is likely to recede in production, but one never knows what the future may hold, and our hope is that a rich vein will be discovered.

The increase in the price for gold is tremendous, and to measure the increase in gold production by monetary value of the gold yield is deceptive.

The Auditor-General's report shows losses at—

	£
Bowen coal mine	6,689
Styx	5,427

That proves once again that it is useless for a Government to try to run any enterprise. So far as I am concerned, I should have liked to see these mines sold and handed over to private enterprise when the Moore Government were in power. Certainly, the Moore Government performed a valuable service in inducing the Mount Mulligan miners to work on tribute, but, so far as the State is concerned, Mount Mulligan was a tragedy. According to the Auditor-General's report, a small profit is shown for Mount Mulligan, and hon. members should agree that it was better to have these men working on tribute rather than the closing down of the mine. No doubt, had a Labour Government been in power the mine would have been closed down inasmuch as before the Moore Government came to that arrangement with the miners the losses were startling in the extreme. An amount of £117,692 was written off Mount Mulligan, according to the Auditor-General's report. That was a tremendous loss to the State.

I find that the indebtedness of the three mines operating in 1937 amounted to £247,639, increased to £260,724 in June, 1938—an increase in capital expenditure for the past year of £13,085 on two mines that showed a loss. Could anyone call such a state of affairs good management? It is not, and the sooner the Government get rid of these mines the better for the State.

The hon. member for Aubigny drew attention to the fact that the Bowen coalmine sells coal to the Bowen coke ovens at a loss of 5s. a ton, thus enabling them to show a profit. Did anyone ever hear of such a method of carrying on business? The sooner it is discontinued the better for Queensland. It is alarming in the extreme.

By the creation of the coal boards the Labour Government have done something that is not in the best interests of the community. Certainly, many things have been done by the coal boards that I agree with in principle, but I certainly am opposed to the creation of a close corporation by which the industry is penalised and, in the final analysis, will lose much trade. Some consumers take coal that is unsuitable for their purpose. If an industry is consuming, say, 100 or even 500 tons a week, should it not be allowed once a year to make a test of the different classes of coal available in the district to ascertain which is the best suited for its purpose? Under the present procedure this is not allowed, although men in other industries are being thrown on the unemployment market because of the unsuitability of the coal supplies a consumer must buy.

In one instance a company was getting coal that was not as suitable for its business as another coal owned by another colliery. This company decided that it must have the better coal, and eventually a compromise was arrived at whereby it was supplied with the coal it wanted, but the supplier of the coal had to pay the owner of the quota 1s. a ton for the privilege of supplying this company. It must be perfectly obvious to every hon. member that if one colliery can pay another 1s. a ton for the right to supply coal then coal must be 1s. a ton too dear, and therefore the consumers of electricity, gas, and other products of coal, are paying too much.

The Secretary for Mines: You have not got a proper understanding of it at all.

Mr. NIMMO: The Minister knows very well that I have. I discussed this matter with him, and I believe that he is perfectly satisfied that it is wrong that one colliery proprietor should have to pay another 1s. a ton for the right to supply a customer.

I realise that there are difficulties to contend with, but we must not do anything to hamper the coalmining industry. If people

find that they cannot get the coal that is best suited to their requirements then the industry must slip back. We must give people the coal that they want. If the Minister decides that he is going to fix the price autocratically, or that he is going to allow the district coal boards to fix it at £1 a ton or 19s. a ton, or at whatever figure they decide to adopt, then he should let the consumers call upon the proprietors to furnish samples in order that they may test them to ascertain which colliery can supply them with the coal best suited to their requirements. Although coal from a certain colliery may have been of the right type five years ago, in the course of time its quality may have altered, the bands of stone in the seam may have increased, or a better coal may have been uncovered. Why should not any business have the right to buy the coal it thinks best suited to its requirements?

At any rate, I leave the matter to the Minister, but I hope that something will be done to bring about some improvement of this state of affairs.

I should like to suggest that it might be to the benefit of the industry to conduct experiments with a view to ascertaining whether it is not possible to run rail motors on coal. I do not know whether the Minister is having any such experiments carried out, but I have been told that rail motors can be run quite efficiently on coal. It may be that the coal is pulverised, but I do not know about that. If we could discover some way of using locally-produced coal for the running of rail motors it would be a great boon to the State.

Mr. WELLINGTON (Charters Towers) (3.54 p.m.): I think hon. members on both sides of the Committee will agree that increased production of gold means greater wealth for the State and, in turn, enables the Government to give more help to the mining industry. Married men engaged in mining to-day are given £2 a week and explosives by the Government. If they happen to be working low-grade ores they are granted a concession of 6s. a ton for crushing and 6s. a ton for cyaniding.

The hon. member for Aubigny mentioned the loss at the Venus State Mill. There is actually no loss in the mill. The mill at Charters Towers has been reconditioned, and as it stands to-day it is an asset to Charters Towers, to those people who want to crush their ore, and to Chillagoe, in that the crushed ore concentrates are treated. During the last 12 months 385 separate parcels, amouting to 6,493 tons, were treated there, yielding 3,690 oz. of retorted gold, worth £8,910, and concentrates and tailings of equal value. Since the reconditioning of that mill there have been no complaints in regard to crushing. The cost of crushing at the Venus mill is 13s. a ton for fairly large parcels and 14s. for small parcels. I think the Venus mill is one of the best 25-head stamper batteries in Australia.

In regard to the cyaniding, I think a more up-to-date plant could be erected at the State cyanide works at Charters Towers. In a certain class of ore too much gold is left in the sands after treatment. Some classes of ore have a residue of 3 or 4 or even 8 dwts. The cyaniding process has been found satisfactory at Mount Coolon and Cracow, where they have up-to-date treatment plants, but the plant at Charters Towers is somewhat primitive in regard to recovery either by the cyanide or some other process. They have already felt the need for a more up-to-date pulverising treatment plant.

In reference to the erection of a new plant I do not say anybody is doing anything wrong, but I have spoken to the Minister about the matter. The Assistant Inspector of Mines and the Inspector of Mines at Charters Towers have made a report, and I hope something is to be done in the matter. More will be heard about it if there is not.

Arrangements were made whereby a battery was removed to Ravenswood and the Government allowed £1,266 for re-erecting it. I waited at Ravenswood for four days for it to begin operations, but apparently there was some small defect. The mill is running well now, however, and is being used to treat small low-grade mullock dumps. In addition to that, they are dewatering the mine at Ravenswood. In eight months the Sunset Extended will be down to No. 1 level, where there is room for 50 men to work. The battery at Ravenswood will supply concentrates to Chillagoe very rich in sulphur, which is good for smelting.

Another mine at Ravenswood to which the Minister has given assistance is the Little Grand Junction. I suggest that a rock hammer, one of the latest drills, should be sent there, because the men are hard workers and would value that assistance. There are no loafers there, and if they do not get help some blame is to be laid at the door of the Department of Mines.

The assistance given to Charters Towers has been appreciated by those in need of it. The Government have helped to the extent of £9,301 together with subsidy on machinery amounting to £789, making a total of £11,090. This was a great boon to 380 men. Charters Towers was the premier goldfield of Queensland at one time and no doubt will attain that importance again. The field produced 6,712,652 fine oz. of gold of a standard value of £4 11s. an oz., and over the same period Ravenswood produced 890,820 fine oz.

It is true that gold production has increased since 1928. These figures show the annual production from the Charters Towers field—

Year.	Fine oz.
1929	219
1930	367
1931	1,335
1932	2,415
1933	3,880
1934	4,670
1935	5,441
1936	7,994
1937	12,933

In the years gone by the old experienced miner stopped at nothing that was worth getting,

and to-day there is every inducement for further operations in view of the increased price for gold and financial help from the department.

The Government have given valuable help to the Black Jack mine. It has been so well conducted and its returns have been so good that it has been able to repay that money and declared a first dividend on 28 May last. It is about to declare a second dividend. The ten-head mill has worked well; 2,354 tons of stone were crushed during the year which yielded £9,906 from concentrates and £1,272 from amalgamation. Amalgamation using wells and copper plates—not pans—was first started about the middle of last March owing to the finding of good specimen stone in the No. 4 south level. Since 30 June, 1938, the amount of gold received from amalgamation has considerably increased. The Government have been interested in the erection of a mill and also the erection of the cyanide plant. At the cyanide plant they treated 2,034 tons yielding £7,661, and the residue is worth less than 1 dwt. to the ton. During the year seven vats of a capacity of 18 tons each, have been used continuously during fine weather for treating the sands by percolation, with the result mentioned. The cost of emptying the pits, screening the sand, filling and emptying the vats is 10s. a ton, and the time for treatment is two weeks, whereas at the Venus mill it is costing 14s. a ton plus 25 per cent. for loss of tailing. That is why something should be done in connection with the Venus mill cyanide works at Charters Towers.

The Black Jack, after repaying the money to the Government and declaring the first dividend, has taken up fresh ground, the area of the lease having been increased by the purchase of claim No. 10643, known as "Minty" (about 2 acres), and arrangements have also been made to buy claim No. 11050 known as "The Ringer" (about 4 acres). Claim No. 10643 adjoins the south-west end of the Black Jack lease, and Claim 11050 adjoins the Black Jack western boundary near the Black Jack shaft.

They are drawing water from about 1,400 feet. The mine they are drawing water from was abandoned, and after de-watering it was never bottomed on the reef.

The Black Jack mine is registered in Queensland. During the year it was decided to open a Queensland share register, and a large number of Queensland shareholders have taken advantage of the opportunity thus afforded to them. At the present time 278 share certificates have been transferred to the Queensland register, comprising 26,414 shares in the company, nearly all of which are held in Brisbane.

The owners have received assistance from the Government for the New Venture mine, Broughton, and they send ore in bulk to Chillagoe, and make a profit. Mons Meg, on the Lolworth field, also sends a certain amount of concentrates to Chillagoe. George Gordon, of the Daybreak mine, sells his tailings at Charters Towers.

The Mount Leyshon mine was worked years ago. It has not been properly tested by boring. To-day the Government are attempting in a fair way to determine the future possibilities of mining at Mount Leyshon by a drilling campaign. We all hope that success will attend their efforts. One hole is now down over 215 feet, and another 165 feet. If these two drill holes are unsuccessful in locating any payable lodes I hope that the Government will not remove the plant to some other field without testing the four corners of the field. In that manner they will give the field a fair deal.

The first hole that was drilled gave a considerable amount of trouble. Difficulty was encountered in getting the machinery up the hill. No horses were available for the purpose, and the whole of the machinery had to be taken by a tractor to the scene of operations. If the drilling campaign at Mount Leyshon proves unsuccessful the public will then have no cause of complaint on the score that the field was not properly tested. They should be satisfied with the drilling campaign.

The Minister, with his complete knowledge of mining, has done his job well. The officials also have given loyal service in carrying out the policy of the Government. I may criticise the administration of the department, but I am sure that will be taken in the right spirit. I am quite aware that the department, before buying machinery to help in work of development and production, requires much information on the bookkeeping side, whereas the miners are more concerned with obtaining the machinery to enable them to get prompt results. Delays in such circumstances are irritating. If the department wants the miners to make a good job of their venture, it is useless to supply them with a blunt tool. Again, if a miner wants a pump to pump water from his mine it is idle for the department to attempt to force on him a type of pump he does not want. I know very often that the State Stores Board recommends machinery of a different type to what the miners desire, but I cannot emphasise too strongly that if results are desired the wishes of the miners should be given effect to as far as possible.

The SECRETARY FOR MINES (Hon. T. A. Foley, Normanby) (4.10 p.m.): Quite a number of points have been raised during this discussion that call for reply.

The hon. member for Oxley commented on the operations of the coal boards. He said complaint was made that consumers cannot get the class of coal they require, and they are often forced to take coal of an unsuitable class. One consumer, he said, got coal from a supplier other than his regular supplier at an additional cost of 1s. a ton. These are matters which come entirely within the jurisdiction of the coal boards appointed under the Coal Production Regulation Act. We have district boards and a Central Coal Board. Any consumer who is not satisfied with the quality of coal he receives can get redress by appealing to the Central Coal Board. As far as I can gather from the files of the Central Coal Board, in every appeal

every effort has been made to give satisfaction to the consumer. The quota system is the only possible system to use in such a scheme as this. The principle has been recognised that the quota of any colliery is its by right. Consequently, some difficulty has been experienced at times in obtaining a more suitable class of coal for the consumer's requirements. The complaint that 1s. a ton has been paid to a colliery proprietor whose quota has been supplied by another colliery proprietor is a matter beyond our control altogether. That has been arranged by the producers themselves, and it has been laid down by way of regulation under the Act.

It cuts both ways. I have in mind a case where one producer was held up until bad ventilation conditions were rectified. During that period his quota of coal was supplied by another proprietor, but he received 1s. a ton for the whole of the period that the work of ventilation improvement was going on. When the mine started to operate again an arrangement had to be made by the District Coal Board to adjust supplies to meet the consumers' requirements, and this proprietor immediately objected to paying 1s. a ton. He took it without any complaint in the first instance, but he objected when he had to pay it to another proprietor when he was supplying the quota of the latter. The principle has been adopted by the coal producers and has worked satisfactorily up to the present.

The hon. member for Isis suggested that I made an effort to mislead the Committee with regard to the cause of the increase in the value of the production of gold and other minerals in this State by suggesting that it was wholly due to the aid given by the Department of Mines. Any man of common sense knows that there are other factors that have a bearing on the matter; but I maintain that the chief factor in the increase was the generous assistance given to the industry by the Department of Mines. It is true that when prices increase people begin to consider investing in the industry; but none of the big mining investors will invest in any mine to-day until they are definitely satisfied that the necessary ore reserves and values are there. You have virtually to "hand it to them on a shovel" before they will invest 5s. Before a mine can be proved to be a good one, the small syndicate has to do the spade work, and it cannot do it, irrespective of the price for gold, unless it gets the necessary assistance. It is because of that fact that I claim the main factor in the increase in the production of gold and other minerals was the generous help given by the Department of Mines to the prospectors.

For instance, what can be done with a couple of thousand pounds in developing a big low-grade proposition? Nothing. The owners cannot carry out sinking and driving and invest in machinery, pumping apparatus, or drilling apparatus with a couple of thousand pounds. Day after day proposals are made to the department for a subsidy on a £1 for £1 basis to enable people to sink, drive, crosscut, investigate, and explore these big deposits. After they have done all that spade work with the help of the Department of Mines and have proved the mine, then big capital comes into the picture. Then you hear of them merging into a bigger company and working on a big scale. In the final analysis, it is the assistance rendered by the Department of Public Mines at the initial stages that brings about the results. That is what I implied throughout my speech, and I was right.

The hon. member for Isis also quoted a newspaper clipping indicating that a request had been made for the installation of treatment plant at Croydon, and referred to Mr. Cuthbert, one of the mining investors in the North, as supporting this proposal. It is true that Mr. Cuthbert put a proposal before us. He was a mining investor operating originally in Croydon, but now in the Etheridge district, and at his interview with me in Brisbane he was accompanied by another gentleman from Croydon. His proposal was to establish a 10-head stamper battery and equipment at Table Top, in the Croydon district. They claimed there were thousands of tons of ore, and gave the names of the old mines being worked and the values recovered therefrom. On investigation we found not one miner was operating at Table Top at the time, and consequently it was impossible to entertain a proposal for the expenditure of £10,000—to-day an up-to-date battery costs approximately £1,000 a stamp.

However, we did the next best thing, and offered to establish two small prospecting batteries, known as 3-head light batteries, and the necessary machinery and power to drive them, and to give a party of six miners prospecting assistance for six months to enable Table Top to be tested. Up to date that offer has not been accepted, and it indicates that if one took for granted everything one is told there would be "white elephants" all over Queensland.

The same hon. member also made reference to the fact that I had said English capital was awaiting investment in this State. As near as I can ascertain on inquiry the hon. member was referring to the Commonwealth Mines Preliminary Syndicate Limited, an English company that was interested in Queensland by an old gentleman, and the areas it wished to work upon were in the Maytown, Etheridge, Mount Hope, Gilberton, Agate Creek, and Woolgar fields, in North Queensland. The company was given every encouragement by the department to examine the areas, but failed to comply with the conditions of the concession, either as to work to be done or money to be expended. The total spent in prospecting in the first three years was approximately £8,000, or £22,000 short of the prescribed amount. Prospecting concessions provide that a specified sum shall be spent to justify the reservation of the area to a company for a period, and in this case, on account of the size of the area, the sum was in the vicinity of £30,000, and as I say, at the expiration of its term the company was £22,000 short. From what I can

gather it was not quite satisfied with its representation in Australia.

On the other hand, another English company is interested in the Hodgkinson field, and has done a large amount of work in that area. It has erected up-to-date treatment plant, and has reconditioned and dewatered certain mines there, but because each and every reef on the property did not turn out trumps or show payable values, notwithstanding that the General Grant has in sight approximately 12,000 tons of 15-dwt. ore, it, too, ceased operations. It spent £67,000, but because the mine did not come up to its expectations it issued instructions for the cessation of operations, and that plant and mine are now available to any other mining investors who care to negotiate for them. The syndicate in Great Britain did a great deal of work that will be of advantage to any other interests that may take up this activity.

The hon. member for Isis seemed to dispute my assertion that there was a definite improvement in mining production as a result of the generous policy of this Government in helping the mining industry of the State. The hon. member cannot get away from the fact that opportunities for adopting a policy to assist miners for the purpose of increasing the production of gold and other minerals of the State presented themselves during the three years of the Moore Government. As a result of their policy the production of minerals in the last year of their term of office was only 23,000 oz., as against 124,000 oz. for the year 1937 under a Labour Government. No further argument from me is needed. The figures speak for themselves.

There is only one thing that has been responsible for that increase, and I have already explained what it is. We set out to encourage first of all the man who has a knowledge of prospecting or the unemployed worker who has some idea of it. We encourage those men to go into the mining fields. We help them to do so. If we find that they have a proposal that is worth while and our inspectors recommend that sinking operations be undertaken, or that driving or crosscutting be done where the sinking has already been carried out, we then subsidise the work. Our system is to take into consideration the workers' time and labour, and to subsidise that £1 for £1. The result of this policy is that numbers of proposals are put through the Department of Mines for the development of various undertakings throughout the State. If, by pursuing this policy, we get one big mine in every three years, then the results justify what expenditure we have incurred on undertakings over the whole of the State.

The hon. member for Brisbane referred to tin consumption this morning, and read a rather interesting article, the effect of which was that tin consumption had decreased considerably in most of the overseas countries of the world. That is recognised throughout the tinmining world in general, and already what is known as a buffer pooling system has been established. That, in the opinion of most of the larger producers and men in the position to know, enables them to regulate and feed the market without in any way affecting the producers to any great extent, avoids periodical booms and depressions, and brings about a stabilisation of the price. They are endeavouring to stabilise the price at about £200 a ton, and if they are successful in doing so, conditions in the tinmining industry will be more stable.

The hon. member for Aubigny made reference to the need of further drilling operations throughout the State. The hon. member for Charters Towers also referred to the fact that we are carrying out a drilling campaign at the moment at Charters Towers. I have a statement here of the expenditure from 1 March, 1935, to 29 June, 1938. The allocations were—

	£
Croydon field	9,740
Clermont field	12,190
Cloncurry	750
	22,680

The work at Croydon was carried out after or in connection with the northern aerial geophysical and geological survey. At the moment that is held up because of the need to give attention to machinery.

At Clermont the work performed was to assist the individual alluvial miner. The sum of £4,900 was expended on the Black Ridge lead, and quite apart from the information that these boreholes will disclose to the miners, they are of great geological value. On the Miclere, £3,822 was expended, and this has saved a good deal of blind stabbing by prospectors. They have attempted to go out well ahead, particularly on the known leads, and put down their bore, and if the lead turns the bore will disclose the fact, and that saves the miner a good deal of work, because he would have to sink 120 or 200 feet, and it would be dead work. In one or two cases they got prospects of gold in the refuse from the boreholes, shafts were sunk on those sites, and good results followed to the miners.

Then there is the Wild Cat lead at Clermont. Boring was carried out there for the purpose of tracing the lead in what is known as the wet ground. They worked that lead for 2¼ miles and then a heavy flow of water developed underground, and it was impossible to work owing to the silting that took place. There was an underground river there. It is hoped at some future date that, as a result of that boring, if finances permit, the Department of Mines will sink an enlarged bore, possibly half a mile down the lead, to enable a pump of large capacity to be inserted in the borehole to pump out the area back to the dry ground. This would enable the prospector to sink on that half-mile of country, where we have a fair idea there are still values, with no fear of the ground's caving in when he reaches what is known as the silt strata. That programme will be continued so far as the finances at the disposal of the department will permit.

Progress reported.

The House adjourned at 4.32 p.m.