

Legislative Assembly.

Tuesday, 2nd October, 1923.

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The SPEAKER took the Chair at 4.30 p.m., and read prayers.

QUESTION—PEAK HILL, GEOLOGICAL SURVEY.

Mr. MARSHALL asked the Minister for Mines: 1, Is he aware that his promise of two years ago to the district of Peak Hill for a geological survey is, as yet, unfulfilled? 2, Will he immediately take the necessary steps to have this work commenced? 3, Is he aware that other work is being given preference, although the Peak Hill district survey was to follow without fail that of Youanmi? 4, Will he alter this state of affairs and have the work carried out in the order promised?

The MINISTER FOR MINES replied: 1 and 2, Yes. Unfortunately other very important work requiring immediate attention intervened, and owing to shortness of staff it was impossible to detail another officer to undertake the Peak Hill survey. The matter has not been lost sight of, and the Government Geologist will proceed there at the earliest moment. 3, Yes, but the matter could not be avoided. 4, It is hoped to commence the Peak Hill survey at an early date.

QUESTION—BOX-MAKING FACTORY DISPUTE.

Mr. MARSHALL asked the Minister for Mines: 1, Why were seven girls who were in no way violent, arrested and police-handled thirty minutes after the disturbance which took place at Herbert Stone's box-making factory? 2, What provision exists in law which enables policemen to break past a householder and drag into the street, children suffering from fright caused by an angry mob, and ultimately throw them into the lockup? 3, In the event of these charges against the police being substantiated, what punishment will meet the crime? 4, Will he take immediate steps to have these charges inquired into?

The MINISTER FOR MINES replied: In connection with the disturbance at Stone's box factory a number of persons, including seven females, were arrested and are being charged with disorderly conduct and other

offences. The matter will be dealt with in the Police Court and, pending inquiry by the Magistrate, it is sub judice.

QUESTION—AGRICULTURAL IMPLEMENTS, PERTH SALES.

Hon. W. C. ANGWIN asked the Minister for Works: 1, What is the total value of sales made by the Perth store of agricultural implements and spare parts for the year 1922-23? 2, What is the total value of sales made by commission agents, of agricultural implements and spare parts for the Government for year 1922-23?

The MINISTER FOR WORKS replied: The following table will supply the answer to the hon. member's question:—

	AGENTS.			TRAVELLERS.			OFFICE.			TOTAL.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Delivered ...	20,850	14	11	15,238	0	8	23,442	2	9	59,540	7	4
Cancelled ...	7,037	0	0	22,922	5	0	2,449	0	0	32,408	5	0
Walking advice forwarded de-livered ...	3,375	0	0	12,639	15	0	700	9	0	16,720	15	0
	£31,271	14	11	50,800	0	8	26,597	2	9	108,669	7	4

MACHINE ORDERS BOOKED AND DEALT WITH BY OFFICE STAFF AT MURRAY STREET, PERTH, FROM 1st JULY, 1922, TO 30th JUNE, 1923.

QUESTION—TAXATION, MINING COMPANIES.

Mr. CHESSON (for Hon. M. F. Troy) asked the Premier: What was the amount of dividend duty and income tax collected from gold-mining companies and mine owners for the year ended 30th June, 1922?

The PREMIER replied: 1, £16,727. 2, £3,169.

BILL—OPTICIANS.

Introduced by the Colonial Secretary and read a first time.

ANNUAL ESTIMATES, 1923-24.

In Committee of Supply.

Resumed from the 27th September; Mr. Stubbs in the Chair.

Department of Public Works (Hon. W. J. George, Minister).

Vote—Public Works and Buildings, £81,557 (partly considered):

Mr. A. THOMSON (Katanning) [4.40]: I do not intend to take up much time in connection with these Estimates. I regret that the Government have not seen fit to introduce a main roads Bill. I understand the department have considered the matter for some time past. As the main road problem is such a big and difficult one for the road boards to deal with, it is time a measure such as has been in existence in Victoria for some time past should be introduced in Western Australia. One road board in my electorate has 180 miles of main road to look after. It is a heavy task for a board to maintain such a vast stretch of road, particularly in view of the small revenue that body receives. If a main roads Bill were introduced and the construction of main roads handed over to a board, much of the maintenance necessary to-day would be obviated on account of the extra supervision that would be forthcoming. During the last week-end I travelled for 286 miles over some of our main roads. Water is to be found running along the wheel tracks for hundreds of yards at a time. If a board such as I refer to were established, men with motor bicycles could patrol the main roads and turn the water off the thoroughfares. The Minister will agree with me that during the winter month's more damage is done by water than by traffic.

The Minister for Works: Quite true; that is the secret of the trouble.

Mr. A. THOMSON: When he is replying, I would like the Minister to tell the Committee what the intentions of the Government are regarding this important question. I understand we have 6,000 motor vehicles in Western Australia, and I believe the majority of those owning the vehicles would cheerfully pay an extra pound or two as additional wheel tax provided the main roads were put into repair. Some portions of our main roads are not creditable to the State. We do not have to go far from the city before we reach the Armadale-road. If the Minister desires a rough ride, let him borrow somebody else's car and attempt to negotiate the road between Perth and Armadale for a distance of about 18 miles. No one could suffer more exasperating agony than that experienced during such a ride.

Mr. Underwood: You should go on the track outback!

Mr. A. THOMSON: If the Minister is not aware of the state of that road already, I would impress upon him its dangerous condition. Next week the Royal Agricultural Society's show will be held and large numbers of motor cars will be driven to the metropolitan area. Something should be done to make this road decently passable. That is the only artery from the city to the South-West.

The Minister for Works: It is possible to go through Fremantle and via Mandurah.

Mr. A. THOMSON: And it is the artery leading to Albany.

Mr. Underwood: But you could go by train.

Mr. A. THOMSON: I am dealing with roads. I trust the Main Roads Bill will be introduced so that municipal and road board authorities may be placed in a better position. There is no gainsaying that a considerable amount of embezzlement has been committed by road board clerks. I do not know whether it is due to any policy of economy, but a large percentage of the road boards have not had their accounts audited for a period of three years. The average road board member is not an accountant, and we know that even expert business men are at times defrauded by people they have trusted. I hope the Government will not permit the present state of affairs to continue. If they do not feel disposed to appoint new and expert auditors, the Act should be amended to insist upon a qualified accountant carrying out the auditing duties.

The Minister for Works: They are supposed to have qualified men now.

Mr. A. THOMSON: At present a man offers himself for the position and is elected by the ratepayers, and often men that are not qualified are appointed. We in the Katanning district know this to our cost. The Katanning man was fortunate enough to get off. In Broomehill, too, there was a considerable shortage, but the clerk there did not get off. While the board must accept the moral blame, the fact remains that road board members do not profess to be accountants and are entirely in the hands of the auditor appointed by the ratepayers. Therefore they look to the auditor of the Works Department to provide a check. There are many road boards scattered throughout the State, and while I do not wish to suggest laxity on the part of the Works Department, something should be done to obviate the difficulty. I congratulate the Minister upon having explained the policy of his department.

The MINISTER FOR WORKS (Hon. W. J. George—Murray-Wellington—in reply) [4.50]: No one is more desirous than the Government as a whole or myself as a member of it that a Main Roads Bill should be introduced and passed into law. There can be no question that the care of the main arteries of the State is beyond the resources of the average road board. The funds they are able to collect from their ratepayers are barely sufficient to maintain the side roads that lead to the main roads and, as a result of this, the practice of granting a subsidy was begun. It became necessary to cut down the subsidy considerably, and the highest we now give is £300 a year, which in many instances is totally inadequate to maintain the roads in order. A main roads Bill has been on the stocks for several years, and could be completed in a few days if there was any chance of bringing it before Parliament. It is simply due to the amount of work before us that this pet lamb of the Works Department has been deferred. I believe that next session, should the present Government be returned to power, of which there is every indication, this Bill will figure in the programme. At any rate,

whether I am here or not, I shall be pleased to see such a measure brought forward. The Bill is ambitious, but its ambition is curbed with modesty. Had we been able to get it through and get the organisation prepared, there would have been little trouble in dealing with the Commonwealth grant when it comes to hand. However, when we get the Commonwealth grant we shall deal with it. We would be able to deal with double the amount. There are many well-meaning people in the State, some of them with good ideas, a few with ideas not so good, who have their suggestions, but one association was rather officious and would not listen to common sense; otherwise this Bill might have been presented to Parliament some time ago. Still it has not been lost sight of. On the question of charging higher fees for motor vehicles, I agree with the member for Katanning. People owning motors would be prepared to pay more if they could be assured of good roads. The fees at present charged may appear to be high, and the principal justification for charging them is that the motor vehicles do considerable damage to the roads. As we collect the money, however, motor owners on their part have a right to expect the fees to be expended to keep the roads in order, and this is the policy that has been operating in the metropolitan area regarding the traffic fees we collect. I was quite interested in the hon. member's description of the Armadale road, and more than interested because it fully confirms statements that other persons have made. The Government provided a certain amount of money to each of the three road boards concerned—Cannington, Gosnells and Armadale—stipulating that the money should be spent in such a way as to result in permanent good, rather than that the work be spread out lackadaisically simply to give a semblance of a good road. The money has not been sufficient to enable the whole of the road to be made, but it has been sufficient to make a fair length of road.

Mr. A. Thomson: Riding over it you would think you were on corrugated iron.

The MINISTER FOR WORKS: I am not surprised that the hon. member's imagination soars to corrugated iron; mine is kept to mundane matters such as roads. The local government branch of the Works Department has 115 to 120 road boards to look after, and it has been difficult to get auditors who could do this work. We can get any number of people to go into an office and make a red ink or blue ink tick and add up a column of figures, but that is not auditing. A road board auditor must not only see that the funds are properly accounted for, but he should have judgment to say whether they are being properly used. Our auditors make a report of the operations of the board, and if anything requires explanation, they get it before they come away, and thus we arrive at a pretty fair idea as to how a board is carrying on. The salary we have been able to pay—about £300 a year plus a little allowance for travelling expenses—has not been

sufficient to attract the men of the ability and experience required for this work, and even when we have secured them, it has not been sufficient to retain them. During the last two years we have sent out auditors who have so impressed the people with their ability that they have been snapped up. Consequently certain road boards have secured really good secretaries and we have lost really good auditors. We were unable to get suitable men and had to carry on with a few men and thus the work fell into arrears. Now I believe we have a full staff once more and last week I was informed the department was practically up to date with its audits. The delay that may have taken place regarding any particular audit, and delays have taken place—

Mr. A. Thomson: Three years in some cases.

The MINISTER FOR WORKS: Yes, unfortunately, that is so. When the best business men of certain districts were appointed as auditors, we had reason to believe that they were looking after their business properly, but in one particular case that the hon. member has in mind, the books disappeared or were burnt. No audit would have prevented that. The books simply disappeared and it was only after a great amount of work on the part of our officers that we were able to get things ship-shape once more. In one instance a person, who I would prefer should not remain in a responsible position, was kept on by the board and he is in his position to-day, although the board know the view of the department, supported by evidence, is that it would be better if that man devoted his abilities to some other district. I daresay the member for North-East Fremantle (Hon. W. C. Angwin) had some experience of this.

Hon. W. C. Angwin: No; I let the boards manage their own work. It is better than interfering with them so much.

The MINISTER FOR WORKS: If the Works Department took all the action laid down under the Act when dealing with road boards, political influence would be brought to bear. I do not refer to any one district; this has occurred in several districts. The member for East Perth (Mr. Hughes) spoke about the necessity for erecting a retaining wall along the foreshore and laying ashes down. The suggestion is sensible, and has had consideration. The matter is still being considered, and some day, when money is available, the work will be carried out.

Mr. Hughes: Could you not do a little each year?

The MINISTER FOR WORKS: If a proper retaining wall could be built, and the ground about there reclaimed, it would go a long way towards exterminating the mosquitoes which find that a good breeding place. There would also be provided convenient sites which could ultimately be laid out as has been done in Melbourne and other places. The hon. member spoke about the need for railway bridges at Melbourne-road and at East Perth. The question is not a new one, and if it were

possible to construct these bridges, they would go a long way towards eliminating the danger which exists at the present time.

Hon. W. C. Angwin: Why not build the railway on the south side of the river?

The MINISTER FOR WORKS: Of course when we get aeroplanes it will be possible to do everything. Anyhow, the matter is under consideration, and when the time arrives that it will be possible to find the required funds, the work will be carried out. The hon. member referred, also, to the bad roads that exist in the metropolitan area. He attributed that fact to the refusal on the part of the Government to amend the Municipalities Act, and to alter the system of rating. There has been no refusal on the part of the Government to alter the Municipalities Act; a Bill for this purpose has been ready for a considerable time, but it has not been possible to bring it forward. Possibly the Government that will succeed us will have the opportunity to do so.

Mr. Hughes: It would only take half an hour to submit the amendment.

The MINISTER FOR WORKS: The member for Sussex (Mr. Pickering) alluded to the roads in the South-West as being impassable, and particularly referred to Group No. 52. His remarks were sensible, but I do not know that money has been wasted, as he seemed to think, because the Department I control does good work when it is possible to get the money with which to carry it out. Another department which is carrying out work in connection with those roads may not have been so successful; I do not know. Wherever group settlements are, an immense amount of carting has to be done. There is being transported timber and iron for houses about to be erected, as well as provisions, and all the necessary things required at the groups, and unless the roads are good in the first instance, it is impossible to expect that they will remain intact. They must be cut up, especially after a heavy winter such as that we have lately experienced. The roads are broken up, the water gets to work and it is good-bye to the road. With regard to sidings to which the hon. member referred, no representation has been made by settlers or anyone in the district without its having been fully considered. If the hon. member has any other siding in his mind, let him trot along the proposal to the Public Works Department, and it will be investigated, and if proved to be necessary, the work will be put in hand, or he will be told the actual position. He also referred to the Busselton electric lighting system. I am sorry he did that, because the Busselton people, I think, are fully satisfied that they have been well served. Competent judges express the opinion that rating there could be considerably reduced, but this is what happened: Mr. Williamson, the electric engineer of the department, submitted an estimate for a certain plant, and he put that in. The people of Busselton, however, persuaded him to do other things which were required, but which were not included in the estimate, and he was not able

to do that work without the expenditure of additional money. The Busselton people have obtained full value for what has been done, and I am sure will not kick up any further bother. The member for Bunbury (Mr. Money), as usual, had some remarks to offer about bad roads. He said that no solid attempt had been made to deal with the subject. He is wrong altogether. Solid attempts have been made, but funds have not been available to the extent that we would have liked. What is the use of crying out as if the Government were not doing everything in their power with the funds at their disposal.

Mr. Wilson: Is the South-West getting its fair share?

The MINISTER FOR WORKS: I think all the districts have had a fair share. The member for Bunbury said that America had spent millions on roads. That is true. They also spend many millions on motor cars. But we are not America. We have a population of merely 350,000 people—men, women, and children. How, therefore, can we be compared with America, with its population of one hundred millions. I agree that the Commonwealth grant might have been more, and I shall do my best to endeavour to make the Federal Government see the error of their ways. The hon. member also complained that the traffic fees were collected and kept in the metropolitan area. If he had made the slightest inquiry he would have found that the fees which were kept in the metropolitan area were only those which were collected there. If they are collected in a particular district, it is only right that they should be spent in the district which provides the money. The fees collected in Bunbury are spent in Bunbury, and so on with regard to the various districts. The member for North-East Fremantle (Hon. W. C. Angwin) was very kind as usual, and I need not refer to what he said. The member for Perth (Mr. Mann) spoke about providing better office accommodation for the officers engaged on traffic work. That matter is being looked into, and will receive early attention. The member for West Perth (Mrs. Cowan) supported the member for Sussex in his remarks respecting roads, and also the provision of hospital accommodation. I have nothing to do with the latter, and will therefore let it go. The member for Wagin (Mr. Stubbs) had something to say about the condition of the Perth-Armadale road. I know that anyone who has travelled over it, if he does not feel very sore after having done so, ought to be sore. The member for East Perth (Mr. Hughes) spoke of the appointment by this Government of Mr. Justice Draper as President of the Arbitration Court. I would have been glad if he had refrained from making any reference to the matter.

Mr. Hughes: I wish you could have seen your way clear not to appoint him.

The MINISTER FOR WORKS: The appointment of Mr. Justice Draper was made by the Government in the exercise of the functions possessed by them, and because that

gentleman was regarded as a suitable person for the position. So far as his personal character is concerned, no one can say anything against it; neither will anyone challenge him in regard to his legal knowledge. Mr. Justice Draper was a colleague of mine for some time, and if there is one thing I was struck by in that period, it was his essential fairness respecting the way he tackled any subject that came before him. Personally I was indebted to him on many occasions for pointing out where I, in my enthusiasm, was perhaps overstepping the mark. I consider that Mr. Draper's appointment to the Bench was a good one, but I am not prepared to enter into any discussion respecting his decisions, because I hold that a judge must have the respect of the leading men in the public life of the State; otherwise the office he holds may be undermined. When judges of the Supreme Court are referred to with contumely, or are treated with disrespect, or are attacked, then indeed will it be a sorry time for human nature. There are, of course, periods in history which claimed infamous judges, such as Jeffreys. Thank goodness, however, in the last century or more the judges have been respected by every section of the community equally in Australia as in the Old Country.

Item, *Salaries generally, £23,481:*

Mr. A. THOMSON: Is it an economical proposition to construct railways as they are being constructed to-day?

The CHAIRMAN: I cannot allow a discussion of that kind on this item.

The Minister for Works: Give notice of motion and the matter can be discussed.

Mr. A. THOMSON: I think I can ask whether it would not be more economical to construct railways—

The CHAIRMAN: The hon. member must not discuss railway construction on this item.

Mr. A. THOMSON: Why not? The Estimates show that there is an increase provided of £1,952 in salaries.

The CHAIRMAN: I am not going to allow such a discussion to take place.

Mr. A. THOMSON: Why, Mr. Stubbs—

The CHAIRMAN: The hon. member can discuss the item but not railway construction.

Mr. A. THOMSON: Surely we are permitted to discuss the work the men are doing as well as their salaries.

The CHAIRMAN: Not after the main discussion has closed. On this item I decline to allow the hon. member to continue upon those lines.

The Minister for Works: Wait till the Loan Estimates.

Mr. A. THOMSON: All right.

Item, *Accountant, £456:*

Hon. W. C. ANGWIN: I am not concerned about the salary of this officer, but I think it would be better if his work were, as previously, confined entirely to the Public Works Department.

The Minister for Works: Practically the whole of his time is given to that department.

Hon. W. C. ANGWIN: I know that, and it is for that reason I make my suggestion. I believe the officer is also in charge of the store in Wellington-street. That fact led me to ask certain questions, which I cannot discuss now. Balance sheets which have been produced here, disclose a cost of 20 per cent. for sales. That fact, in turn, shows that the officer is not able to give his time to the two departments. One gentleman told me that when selling implements he had a commission of 15 per cent., out of which he had to stand all losses. Hon. members will agree that 20 per cent. is too high a cost for selling agricultural implements.

The MINISTER FOR WORKS: This officer, Mr. Brodribb, has for the last two years devoted practically the whole of his time to the State Implement Works, State Quarries, and State Brickworks. Someone must look after those undertakings. For several years I have wished to be relieved of responsibility with regard to those State trading concerns, and I have had to call more and more upon this officer to take the responsibility.

Hon. W. C. Angwin: He is showing very poor responsibility when the cost of selling is 20 per cent.

The MINISTER FOR WORKS: That matter can be dealt with when we come to the State trading concerns. Someone must hold the position.

Hon. W. C. Angwin: In my opinion there is no necessity for that particular work.

The MINISTER FOR WORKS: Mr. Brodribb gives the necessary time to the work. I have no doubt that if he were there with Mr. Young, the position would be much easier.

Mr. LATHAM: Referring to the salaries of road board auditors, for which there is no particular item, I observe that the subdivision in which they are included shows a reduction of £136, and I wish to know whether it is intended to reduce the salaries of those auditors. Throughout the road board districts it is recognised that the auditors do very good work.

The MINISTER FOR WORKS: There is no intention of reducing those salaries. If it were possible to increase them without coming into collision with Public Service regulations and questions of seniority, I would give these auditors each £100 a year more. They are highly trained men, and they do not merely add up columns of figures and count the cash, but do a great deal more.

Mr. Hughes: I never heard that the civil servants could prevent you from giving these men more money.

The MINISTER FOR WORKS: It is not the civil servants, but the system. I have been trying for more than three years to get advances for these local board auditors, but the Public Service Commissioner will not give them a bean. That is the worst of our eastern system. It may have been devised to

prevent patronage and favouritism, but the effect of it is that a good man is kept in a state of disappointment until he goes outside the service, generally to receive a bigger salary.

Vote put and passed.

[This concluded the Estimates for the Works Department.]

Department of Mines, Forests, and Police (Hon. J. Scaddan, Minister).

Vote—*Mines Department, £62,824:*

The MINISTER FOR MINES (Hon. J. Scaddan—Albany) [5.25]: Hon. members will see by the printed Estimates before them that there is very little change in the expenditure proposed for the current year under various headings, as compared with the expenditure of the previous year, although there is a net decrease of £3,625. That estimated reduction in the expenditure is not in a direction which will, I think, prove detrimental to the industry, but represents economies shown in various branches which have no direct bearing on the mining industry as a whole. May I take this opportunity of remarking that most of the representatives of goldfields districts in the Assembly are sitting on the other side of the Chamber, and that I think it due to them, and courteous to the Committee generally, that I should outline the present position, as I understand it, of the mining industry, and give my forecast of its future. No doubt all members, irrespective of what constituencies they represent, are greatly concerned about our mineral production. Our total area is approximately a million square miles, and our proclaimed goldfields cover something more than 490,000 square miles—very nearly one-half of the total area of Western Australia. Areas which have not been proclaimed goldfields, but on which minerals are found and recovered, embrace a considerable tract of country in addition. After all, our mineral production is not really understood by the community in general, not even by those of us who enjoy in a large measure the benefit of the State's mineral production. Since the advent of responsible government in Western Australia something like £159,000,000 worth of minerals have been produced here. That is no small item, and a fair percentage of it was produced when our population did not exceed 250,000. For the total production, of course, gold and coal are chiefly responsible. To the end of August our gold production had totalled £149,390,000, or nearly 150 millions sterling, a figure which will be reached this year. Our coal, which is sometimes depreciated by people who ought to know better, has yielded a production totalling in value £3,683,000. Other minerals account for £5,271,000. I mention those figures to show the Committee, and through the Committee the public, that the mineral production of Western Australia is of tremendous importance to all the industries of our people. Irrespective of whether a man is carrying on the occupation of farming, or an

ordinary business in trade or commerce, the mineral wealth production of the State has a great bearing upon his particular welfare. I suppose it can be fairly said that when we passed through the trying period of four years, the gold produced in Western Australia had a greater bearing on the action taken by Australia, and the success achieved by Australia, than anything else except its actual man power. In this State we produced, during every month of the war period, something over 300,000 sovereigns, minted in our local mint from our own gold. For each of those 300,000 sovereigns produced every month, the Commonwealth were able to provide, for claimants other than those resident outside Australia, three printed one-pound notes and still be well within the margin of safety. From that fact we may estimate the value of Western Australia's gold production to the Commonwealth and the banks and financial institutions during the period of the war. We are not in that position now, but have to rely upon the ordinary stable market. As the world has demanded certain commodities, such as food and clothing, in excess of the quantity being produced in different parts of the world, much of the man power having been withdrawn for war purposes, the prices of those productions have increased. Our agricultural friends know quite well that our wheat, as the result of war conditions, brought a very much higher price. When sitting in Opposition I once said, and I have no hesitation in repeating now, that most of the commodities of the world are based in the matter of price on the cost of wheat. Wheat is the stable commodity on which other things largely base their value. As wheat increases in price, so do other commodities rise side by side, and with them the cost of living. Unfortunately the mineral industry, particularly gold-mining, and some of our best mines in an especial degree, suffered very materially because the cost of producing the same value had increased enormously. Where prior to the war it was possible by spending 20s. to produce 25s. or 30s. worth of gold, the position was reversed, and it required 25s. or 30s. to produce 20s. worth of gold. Thus a number of mines which had been foremost among our producers had to decrease their output materially, and thus the gold production of Western Australia has fallen year in year out at a rate so rapid as to be almost alarming. After all, gold is the greatest known man-magnet. Many members of this Chamber, like a very large proportion of our present population, were drawn to Western Australia by the lure of the gold mines. I think it may be said that the gold discoveries made possible the commencement of what may be termed Western Australia's existence as a known State. Prior to those discoveries Western Australia was practically unknown. The discovery of gold assisted towards the development of other industries, which otherwise would probably have remained very much neglected. Without our gold, Western Australia would probably have remained for a lengthy period, though of course not permanently, a country with a small

population principally engaged in grazing operations. It was the discovery of gold that led to the establishment of other industries. I suppose the production of gold has done more than anything else to establish the outposts of Empire. Now that we have reached a stage where the position is not quite as promising as it was in the past, it is the duty of all members to give their best support to a possible revival of the industry. Not that I fear that support will be withheld; I have found no difficulty in obtaining from members a good deal of practical help in promoting the welfare of the industry. The production and export of gold has a material bearing on our trade and commerce generally. For whatever we receive in the form of commodities, we have to pay in kind; we have to export our excess commodities in order to pay either interest or capital. The exports from Western Australia have been largely in the form of gold and other minerals. I have before me a return of those exports. Outside our own use of minerals, and not including coal, we have exported over six million pounds worth, largely copper, tin, silver, pig lead and bunker coal. Very little is heard of some of those minerals. The value of the total exports from this State at the beginning of the present century was £8,515,623. Of that, minerals accounted for £6,920,118, or 81.27 per cent. At the end of last year the total exports represented £216,563,858; the mineral exports, exclusive of coal, totalled £124,236,961, or 57.37 per cent. For last year the total exports ran to £11,848,025, of which minerals, exclusive of coal, represented £2,875,402, or 24.27 per cent. So, where in the past we have depended largely on the export of our minerals for the purpose of balancing trade, that mineral export is steadily falling, and in consequence we must give additional encouragement to the production of our minerals if we are ever to get the balance of trade in our favour. Our annual export trade has increased nearly 100 per cent. Without our gold production our trade could not have expanded to the extent it has. But while our general trade has been expanding, our mineral export has been reduced by about 57 per cent. Therefore, as I say, the mining industry, which has done so much for the State, should now receive assistance from members and the public generally. The evidence that our mining industry has declined is clearly shown in the statistics relating to the number of men employed. At the end of 1922 there were employed in the industry 6,776 men as against 7,084 during the previous year, or a decrease of 308. Of the decrease 232 were in gold mining and 76 in other minerals, principally coal, tin, and copper. There was an actual increase in the number of miners engaged in the lead mines. The number of men at Kalgoorlie, the principal gold producing centre, has remained practically unaltered. The chief cause for the reduction in our output has been the abnormal increase in the cost of production, due to the equally abnormal increase in the cost

of commodities required in the industry, and of material that had to be obtained largely from overseas. All this has had the effect of reducing the output, or, alternatively, of increasing the value of the ore taken out. Some of the mines fell below the point at which they could make ends meet. Others, to be able to carry on, had to take a quantity of richer quality ore for treatment. The average value of gold produced per man was £408 in 1922 as against £378 in 1921, while the tonnage raised per man was 153 tons as against 147 tons. So, to carry on at all it was essential to increase either the quantity or the value raised per man. As compared with 1921 the tonnage treated during 1922 showed a decrease of 7,388 tons. The following goldfields have shown an increase:—Peak Hill, 9,024 tons; Yalgoo, 17,838 tons; and East Coolgardie, 20,605 tons. That the decline is due to increased costs can be better shown by giving the figures submitted by the Chamber of Mines, as follows:—In 1915 the cost per short ton raised was 19s. 9d., in 1916 it was 22s. 3d., in 1917 it was 23s. 7d., in 1918 it was 24s. 8d., in 1919 it was 26s. 2d., in 1920 it was 29s. 6d., and in 1921 it had risen to 38s. 7d. Last year the costs were certainly not lower than in 1921.

Mr. Marshall: Where did you get those figures?

The MINISTER FOR MINES: From the Chamber of Mines. From what other source could they be obtained?

Mr. Marshall: But those costs are compiled by the Chamber of Mines, the employers.

The MINISTER FOR MINES: Well, how could the employees, the miners, compile them? They are based on the cost of wages and materials. The miners could not have said what the costs were.

Mr. Marshall: Neither do they have a say in it.

The MINISTER FOR MINES: I ask members to accept from me the statement that the Chamber of Mines asserts that the costs were as I have enumerated. The list shows a pretty high increase, and that increase has had the effect of reducing the tonnage and causing ore of a higher grade to be taken out of the mines. Alternatively, it has caused mines to close down altogether. Some people say, "Oh, wages were high." Wages were high because, with the increased cost of living, men could not live on the old rate of wages. The general cost of commodities required for the purpose of producing gold had increased, while the value of gold raised had not increased to anything like the same extent. Of course there was a subsidy, but it was not a large one.

Mr. Marshall: And it was very late in coming along.

The MINISTER FOR MINES: That is so. I know that exactly the same complaint was made in other parts of the world, where industries have suffered because the price of the commodity produced did not increase to the same extent as did the cost of the com-

modities required in the production. I shall not say much on this point, because I know the member for Coolgardie (Mr. Lambert) will make extensive references to it: and can do so with a good deal of knowledge. We have centred attention largely on the production of gold and it is necessary that we should continue to do so. There are required in other industries in the State minerals that can be found in abundance in Western Australia. We ought to give attention to the production of those minerals to a greater extent than has obtained in the past. The agricultural industry requires potash, gypsum, sulphur and lime. We must give greater attention to the winning from our own areas of those minerals necessary to the increase of the productivity of our agricultural soil. Farmers sometimes forget that even the spade, the plough and the harvester are manufactured, first by the application of labour in the bowels of the earth to the winning of the necessary metal.

Mr. Latham: I wish we had more of it in this State.

THE MINISTER FOR MINES: That is what I am trying to explain, that we ought to be sufficiently patriotic to remember that if a commodity can be locally obtained at reasonable cost, it ought to be given preference. Attention should be given to the fact that by using our own products we are increasing local employment.

Mr. Wilson: How are you going to meet the swamping from the Eastern States?

THE MINISTER FOR MINES: I am afraid most countries are faced with a similar difficulty. Almost everybody imagines that something produced overseas must be better than the local article. People frequently declare, "Oh, you cannot compare the local article with that produced in Sydney or in America." When asked whether they have tried the local article, it is a thousand to one they will admit that they have not tried it, but will insist that they know it is not as good as the imported product. That is quite wrong. Whilst we may not, at the outset of the establishment of an industry, produce as good an article as can be produced elsewhere, in places where people have been specially trained for the purpose, we can, in the gross, produce in Western Australia raw material and, by the application of science and labour, we ought to be able, and we can do so, to produce quite as good an article as is found in a similar way in any other part of the world. The extent to which our mineral wealth is created in this State is too frequently overlooked. People imagine it would not matter very much to the metropolis or to the agricultural areas if we had no mining industry. I hope we shall be able to show that it is of tremendous value to everyone. That is why I ask that some little sympathy should be extended to the industry at the present moment.

Mr. Marshall: You are in the position to do that.

THE MINISTER FOR MINES: I am, up to a certain point. I do not anticipate, how-

ever, that in the near future I shall be appointed a dictator or a Czar so that I may be able to say "Jim come here," and "Jones go there." I am called upon to account for my actions as a trustee. I have to answer to the whole community in the first instance. Although my special care is the mining industry, I cannot forget that I am a trustee. Requests come to us that, we are told, will lead to something very beneficial to the State, but which will more particularly benefit those concerned. There are times when in my position of trust I have to take the view that the time is not opportune, nor are the funds available, to enable me to render the assistance asked for. We are too frequently circumscribed by lack of capital with which to carry out our desires. We cannot always do what we want. I am sure the hon. member frequently has propositions submitted to him that he has to pass over. Because the person submits a proposition in good faith it is not always proof that it is good enough to go on with. The assistance rendered in the production of mineral wealth is in a category altogether different from financial assistance rendered for the production of other forms of wealth. I have no desire to set one industry up against another, but let me take the agricultural industry as an illustration of what I mean, and to show how people misjudge the situation. We may provide a sum of £2,000,000 for the assistance of agriculture, and only £60,000 for the assistance of the mining industry. In the former case the money is in the nature of a loan against the future productivity of the soil, and tends to increase the value of the asset.

Mr. A. Thomson: It was only a loan after all.

THE MINISTER FOR MINES: Yes. The security for the loan lies in the land.

Hon. W. C. Angwin: Not in all instances.

THE MINISTER FOR MINES: No. I was speaking in the gross.

Hon. W. C. Angwin: It amounts to a million and a half now. It is merely a gamble on the seasons.

THE MINISTER FOR MINES: While it remains there we have some security for it.

Hon. W. C. Angwin: Bad crops are not securities.

THE MINISTER FOR MINES: That does not represent a large amount. If there is a million pounds outstanding against the agricultural industry there is something approaching that amount outstanding against the mining industry.

Hon. W. C. Angwin: It is £6,000,000 in the case of the agricultural industry.

THE MINISTER FOR MINES: I am not speaking of bad debts which cannot be recovered. We take risks in advancing money against mining properties on a basis entirely different from that of advances on agricultural properties. The mine is the security. If it cannot produce the gold in order to repay the advance the whole thing is written off and the security is gone. In the agricultural industry, if Jones fails as a farmer,

and the loan has to be written off, someone else can still produce from the land. If that were not the case we would have made a tremendous blunder in letting anyone attempt to produce from the land. Too often members who do not represent mining constituencies view advances made by the department to the mining industry on the basis of whether the money will be returned or not. The most we can expect is to get back the capital and the interest. Where we may get it back in one case we may not get it in ten or even more cases. If others have faith in the proposition and are prepared to back it, it is essential under existing conditions that we should render assistance if it is possible. Other industries, which have been able to take advantage of our mineral wealth, should now be prepared to exercise some little generosity on behalf of the mining industry. Money for mineral investments is not so easily obtained as heretofore. True, large sums of money have been made out of mining, but many people have lost money. Taking it in the gross, mining does not to-day produce the same as an investment as it did in years gone by. Most men who go into mining to-day do not expect to become rich in a year or two because of some discovery. Practically the only man who expects to make anything out of mining is the vendor. In some cases a prospector will renay himself after a year or two of hard living in the bush. The vendor, however, endeavours to make a large sum of money out of the prospector. Very frequently the public, who subscribe the money afterwards, find that all they have is an option over some mine, which often has been acquired from the vendors, who are doing well.

Mr. Marshall: By manipulating the scrip.

The MINISTER FOR MINES: Unfortunately there often is that manipulation. The only way to get back to the old order of things is for the State to nurse the prospector in his early discoveries, and not to permit him to be made a kind of catspaw of by the vendor. A way of overcoming this difficulty is to assist the prospector in the initial stages so that he may prove the mine. When it is proved, we can declare that the prospector is entitled to get as much as he can in return for his labour, and that the public will have some prospect of getting a return for the capital they have put up for the development of the mine. We should not permit a man to sell a lease until it has been proved.

Mr. Wilson: It is the manipulators who get the money. Some of them ought to be in gaol.

The MINISTER FOR MINES: Too frequently it is the vendor who makes all the money. He does nothing except hire a motor car to go out to some show, and get an option from the prospector over his holding.

Mr. Wilson: There is oil as well as gold.

The MINISTER FOR MINES: This happens in the case of gold, coal, and oil. I want to make some reference to the aid that is rendered by the Government. The time has arrived when we must call upon others, who

have been directly benefited by the mining industry, to lend a hand. I do not suggest they should subscribe capital to mining ventures, but that they should give moral support to the Government to enable them to render more liberal assistance to the prospector, in order that our mineral wealth may be more thoroughly tested. Prospectors are often looked upon as men who carry the swag, billycan, and pick and shovel. He is not the only man who prospects. Others, who are continually assisting prospectors by sending them into remote parts of the State at their expense, delving into the earth, or attempting to uncover possible mineral wealth, are prospectors as much as the man who carries the swag. If we do not get assistance from backers, I am sure the prospector will have a bad set back. Nearly every genuine prospector, who goes out into the bush with his cart or camel, is backed by someone who is carrying on a business or in other ways is earning more income than the prospector. We have to consider these men. Then we come to the stage when a discovery is made. Until the find develops into a mine, and a company is floated and labour is employed, it is still a prospecting show. There is a fair percentage of our mineral country held by men who have been struggling along on a small diet attempting to win through, by probing into the earth to obtain that which they believe to exist there. If that man has sufficient faith to provide his own labour at this work, and keep himself going, because of his faith, the State ought to back him up as well. It is not everyone who will give the Government a fair deal, but in the main we do not often get slipped up. The man who goes out into the mining districts, and remains there for a long time, is generally the man from whom we do get a fair deal.

Mr. Wilson: Ninety-five per cent. of the prospectors will give you a fair deal.

The MINISTER FOR MINES: Yes. Although a man may have faith in his prospects we must expect failure at times. If everyone was successful no one would come to the State for help. If I was certain that someone would find a veritable gold mine, if I assisted him to the extent of a few pounds, I would be most anxious to give it to him, but there is no certainty about such propositions and people must come to the Government to enable them to carry on operations. Hundreds of men are receiving some sort of assistance from the Government, and this may mean much in the way of discovering new mineral wealth in different parts of the State. Parties have been equipped by the Government. The old method was to provide the prospector with equipment and nothing else. We have lately provided sustenance as well as equipment. There is, however, a danger in that. An application for equipment and financial assistance may be made by a certain individual, but on probing the matter we may find that a syndicate with capital has already been formed, and that the application is merely for the purpose of saving money to that syndicate by getting it from the Government for equipment. Under such condi-

tions the State may not derive any benefit from the financial assistance rendered, not even securing the return of the capital laid out. Those who were sitting behind the prospector, as sleeping partners, would reap the reward. When a prospector obtains assistance in that way he should not try to double bank it on the Government. The more liberal we are in our assistance the more often we may be taken in. In our desire to be liberal we may have done something that is not in our best interests, but we must not overlook the fact that the backer of the prospector has made new discoveries possible. We ought, therefore, to continue to encourage him. Anything we do to the contrary will probably be detrimental to our general welfare. We have sent out a number of parties known as the State prospecting parties. A difference of opinion exists regarding the desirability of sending out fully equipped and paid parties such as I refer to. There is an advantage in pursuing this course, so long as it does not reach such a limit that there will be no other method of prospecting. More often than not a prospector has no well-defined ideas regarding his work; he merely gets it into his head that at a particular point he may secure gold. He may be quite in earnest in his belief that he will find gold there, and he may obtain assistance from syndicates or business men. In other cases he may secure assistance from miners or from the Mines Department. If such assistance is forthcoming, he prospects at the particular point he has in view. If he discovers nothing, the prospector wanders back, and that is the end of it. Under the improved system of prospecting, such as we have introduced in connection with the State prospecting parties, a certain area is mapped out. We have made our geological survey of the country, and the nature of the rocks to be found there is known. Under that system it is known that, given certain rocks or rock formations in a district, certain results may be expected. It is useless to prospect for gold in places where we know, from the nature of the rocks in the locality, it is practically impossible to find gold. On the other hand, we know that in other parts it would be useless to prospect for tin. Too often prospectors have walked over country hundred of times where, if they knew the nature of the rocks in the locality indicated, there would be a possibility of finding gold. They have gone on further afield and failed. The State party practically prospects on a face, and the man with a fair knowledge of geology and of what is, and of what is not, to be expected, is joined up with the practical miner. Thus, although some of the country has been travelled over hundreds of times by prospectors, we have been able to make some discoveries. The find at Jutson's would probably never have been made but for these methods. Thus by the system of joining up the men prepared to give their labour with the men of science—practice with theory—we have arrived at the only way by which we can get the best results. We have

succeeded in finding more than one field. Since March, 1921, through the central and advisory boards which we appointed to deal with prospecting, 397 prospecting parties, comprising 696 men, have been assisted by the issue of equipment, rations, explosives, etc., at a cost of £15,035. A specially equipped party of ten was despatched east of Laverton at a cost of £1,790. That party made discoveries of gold-bearing reefs at Jutson's and Lang's Rocks, which the State Mining Engineer reports as promising and deserving of being proved by an adequate amount of mining work. They are endeavouring to get capital, and already something has been done in the direction of further proving this particular find. Water is essential in connection with the mining industry. It is more essential at the present time than in the past, and I hope the difficulty will not be prolonged to such an extent that any serious trouble will be caused. The absence of water delayed the opening up of the Jutson field. We gave instructions to the Water Supply Department, directly the control was handed over to the Mines Department, to sink wells along the track to Jutson's, so as to supply the district with water sufficient to enable the prospectors to continue their work. Wells have been sunk at Jutson's, and at Lang's Rocks. Then again, we took advantage of the good season in the Ashburton and Gascoyne districts, and a well-equipped party has been despatched to prospect the Ophthalmia Ranges in that part of the State. The member for Pilbara (Mr. Underwood) and the member for Roebourne (Mr. Teesdale) know that these parties have been sent out, and that there are magnificent prospects in that portion of the State. Recently the member for Gascoyne (Mr. Angelo) brought under my notice the development at the old field of Bangerall. Some discoveries have been made there that promise to re-establish that field.

Mr. Chesson: That is where Lambies' find was made.

The MINISTER FOR MINES: That is so. People on the coast have no idea of the cost of operating in a distant field such as Bangerall. The cost of materials is greatly increased as they have to be handled and re-handled, and then the cost of transport is also exceptionally heavy. Prospecting is proceeding in those wonderful mineral areas along the coast line of the Ashburton, Gascoyne and Pilbara districts. A second party will leave Onslow at an early date to prospect an area north of Mt. Bresnahan on the Ashburton River. Another smaller party of four is working in the neighbourhood of Brookling Hills, to the west of Mt. Ida. These parties are additional to the ordinarily assisted prospectors of whom there are 78 parties, totalling 117 men, now in the field. Some of the small parties have been fairly successful. We do not expect all of them to succeed. If they were to succeed in every case, there would be no necessity for State assistance. At Doyle's Well in the East

Murchison goldfields, 109½ tons have been treated for 457 ozs., as the result of a small prospecting party's work. At Kuananling, 21 tons were treated for 111 ozs.; at Bulong, 19 tons were treated for 214 ozs., and at Coolgardie, 3 tons were treated for 65 ozs. Then again, at Mt. Monger 17 tons were treated for 101 ozs., and at the Mistletoe Find, north of Meekatharra, 500 ozs. were doliied, the party there having struck a promising mine. This furnishes evidence of what can be done. Probably a small percentage of those assisted will actually succeed. Taken in the gross, however, the interests of the State are conserved, not in actual cash but in the development of something which adds to the wealth of the community. Under the Mining Development Act, assistance has been continued and last year £62,457 was spent in an endeavour to revive the industry. That is the largest sum expended in that direction in any one year during the history of self-government here. In some cases, money has been spent in large sums, probably on one or two mines in particular districts. It is infinitely preferable to find sufficient money to enable one mine to be definitely established, than to distribute the same amount of money in smaller sums which enable nothing beyond what I term "pig-rooting" to be done in various districts, with nothing permanent resulting. It is better to employ 300 or 400 men on one big mine than to have money expended on smaller ventures, only to find 95 per cent. of failures. Advances for development work and for the purchase and erection of machinery have entailed an expenditure of £32,788. On prospecting, £7,499 has been spent; on investigations, sampling mines, etc., £842; on subsidies to batteries, £297; on rebates to prospectors, £904; on carting long distances to batteries, £217; on water supplies to goldfields, £3,810; on boring for coal, £411; on purchase of Calyx plant for boring, £500; on a water supply for the Lloyd George mine, £785; on experimental plant, £2,106. The provision of this experimental plant gives considerable promise of unravelling one of our greatest mining problems, namely, the economical treatment of refractory ores. Kalgoorlie is one of the best examples. To-day we are probably using the most expensive known method of treating refractory ores, but we have reached a stage at which it would not pay to adopt some new system of treatment. I am certain that different methods applied to some of the new fields will produce great results. I am urging the Premier—I am confident he will agree to the proposal—to arrange for a Parliamentary visit to the Gwalia mine when it re-opens shortly.

Mr. Heron: On the 19th of this month.

The MINISTER FOR MINES: The object of the visit will be to show members that, although the mine experienced a calamity—it may not have been as great a calamity as originally estimated—the introduction of new methods will probably extend the life of

the mine very considerably. The same thing applies to other districts. Apart from Kalgoorlie, there is no gold deposit in Western Australia to compare with the Wiluna field.

Mr. Marshall: It is on its own!

The MINISTER FOR MINES: From the Wiluna mine at Lake Way, £800,000 worth of gold has been obtained to the 100ft. level.

Mr. Heron: And they are still doing well.

The MINISTER FOR MINES: They will probably produce a million pounds worth of gold from the first hundred feet, and if the value of the mine continues at depth, and it carries its present values down to 3,000 feet or more—that would be equivalent to some of the older mines on the Golden Mile—it will be a great thing for the State. We have to bear in mind, that the difficulty experienced at the mine has been in the treatment of the ore.

Mr. Heron: And owing to the lack of railway facilities.

The MINISTER FOR MINES: The refractory nature of the ore has made it impossible of treatment, unless a large amount of capital is available. It is estimated that £300,000 will be required to equip the Wiluna mine. I mean £300,000 in actual cash, not a company floated with a nominal capital of that amount. The cash will be required to properly equip and work the mine because of the refractory nature of the ore. It is intended to instal modern methods of treatment. We have had complaints that areas up there have been held up, when men were forthcoming who desired to work them. I do not know of a single acre held up that could have been worked by ordinary prospectors or miners. It was no use allowing miners to take up areas when we knew that the ore could not be treated. That is what happened at Wiluna. I am in the happy position of saying, however, that matters are moving rapidly regarding the Wiluna field. A number of men who have been interested in mining have undertaken, subject to their own check borings showing the values to continue at depth, to find the necessary capital up to £400,000 for the purpose of equipping the mine.

Mr. Marshall: You will soon have trouble about a railway.

The MINISTER FOR MINES: The hon. member need not worry on that score. If this mine can produce £800,000 worth of gold down to the 100ft. level, a Government who would refuse railway communication would stand in their own light. The district need not be equipped with a standard line, but should be given transport facilities to enable the field to be worked on a successful and economical basis.

Sitting suspended from 6.15 to 7.30 p.m.

The MINISTER FOR MINES: I was endeavouring to show that notwithstanding the setback to the mining industry during the

last few years, the prospects at the moment are very encouraging.

Member: Exceedingly bright?

The MINISTER FOR MINES: I would not say exceedingly bright, but they are better than for a number of years. I know some districts have difficulties not easy to surmount. Members representing goldfields districts remote from railway communication know the great handicaps due to cost of transport beyond the rail head. Even those districts on the railway system, but some distance from the seaboard, are handicapped by the high cost of transport over the railways. That is unfortunate, but it is not easy to amend. The member representing Leonora, the very end of our railway system in the North-East Coolgardie district, realises the great handicap to the industry there, but the difficulty, which he will appreciate, is that the cost of hauling over great distances has increased tremendously, due in no small measure to the cost of driving our locomotives, and the member for Collie will extend us his sympathy in that connection. The member for Leonora will understand we are doing our best, and I think doing fairly well, to bring the railway system to the point when we shall be able to reconsider freights and fares in order to revert to pre-war or something approaching pre-war rates. I am not hopeful that the day is fast approaching, but we are certainly getting nearer to it. When we can do that, I propose to submit that those people living in the more distant parts of the State that have suffered most owing to the cost of haulage and the consequent handicap to industry shall be the first to receive consideration in any reduction of freights and fares. Some of our fields show good promise, particularly the Wiluna field. The refractory nature of the ore below the 100ft. level made it almost impossible to work those mines economically under existing conditions, but the fact that they have been able to work to the extent they have and produce £800,000 worth of gold, notwithstanding that they are 120 miles east of Meekatharra—the nearest point on the railway—and 230 miles distant from Leonora, distances over which it is necessary to cart by teams or camels, is evidence of the magnificence of the field. If the ore can be treated economically, this field, with railway communication, gives promise of becoming, if not a second Kalgoorlie, the best field outside of Kalgoorlie that we have had in the State. London investors who in the past put their money into Western Australian mining ventures have in recent years diverted their attention to other dominions, principally Canada. Anything we can do to redirect that flow of money for mining investment purposes to Western Australia would be to our advantage, and the Government will do anything within reason to attain that end. We have been asked whether we would be prepared to give the Wiluna mines railway communication in the event of developments proving to be what is claimed for them. All we

could say was if it could be shown that the ore bodies exist at depth and continue to carry the values they have shown to the 100ft. level, subject to sufficient capital being made available—it must be a fairly heavy sum of money—and the necessary plant and method of treatment being satisfactory, railway communication could not be withheld. So far difficulty has arisen over the method of treatment, but the Wiluna mines are now approaching a method that has been adopted for many years in the United States, where, by a method of flotation and concentration, the cost of treating refractory ores has been reduced. This is largely a matter of studying the specific gravities of the different metals, and by the method it is possible to treat economically minerals that otherwise could not be profitably dealt with. Kalgoorlie is treating 100 per cent. of stone by a very costly method. About 220,000 tons of firewood is taken out of the forests yearly for mining purposes there, whereas, by adopting more modern methods, the quantity could be reduced by perhaps 50 per cent. Generally speaking, the Kalgoorlie mines have proceeded too far to adopt modern methods. Except in one or two instances where plants are being remodelled, it will be necessary to continue the existing methods. I was discussing with the Premier the question of arranging for members of Parliament to visit the Sons of Gwalia mine on the occasion of its re-opening. It would be worth while for as many members as possible, even those representing agricultural constituencies, to make the trip.

Mr. Latham: We are having a field day at Merredin on the 19th.

The MINISTER FOR MINES: Put it off.

Mr. Latham: We are always learning something from field days.

The MINISTER FOR MINES: The mining industry can do with a little encouragement and it would be well if members showed their interest in it by visiting some of the more remote goldfields in order to judge of their possibilities. Such a course, I am sure, would meet with the approval of the hon. member's constituents.

Mr. Heron: When the Gwalia mine plant was remodelled five years ago the costs were reduced 5s. per ton.

The MINISTER FOR MINES: The cost of mining operations in the Transvaal are 24s. to 25s. per ton and there is a big margin between that and the 38s. to 39s. obtaining here. We cannot long continue to permit our mines to be practically ruined by taking out only the rich shoots of gold and leaving the balance because of the rather obsolete methods of treatment employed. The plant on the Sons of Gwalia mine has been remodelled and I believe it would be to the interest of members generally to visit the mine and obtain a proper appreciation of what modern methods of treatment mean to the industry. Last year we advanced £62,457 to assist the industry, the largest sum advanced in any one year for mining development. During the last three years the Government have expended

£135,765 under the provisions of the Mining Development Act. The average for the three years is greater than the amount provided in any other single year. To illustrate the benefit arising from this assistance, I may quote the Lloyd George mine at Coolgardie. We assisted that mine to the extent of £2,535 and the gold yield has been augmented by £32,512, 48 men have been kept in employment and nearly £1,000 of the advance has been repaid. We have assisted the Surprise mine at Northampton in the production of lead. There again the amount of assistance granted was fairly extensive, but it has been the means of keeping 76 men continuously employed and producing a large quantity of lead. True, the ore has been exported, but we have succeeded in getting established a mine that was threatened in its youth. It is opening up well and promises to be for many years one of our best lead producing mines. Unfortunately conditions arose that necessitated the lead ore being exported instead of being sent to Fremantle to be smelted. The margin between the cost of operating and treating and the price in Europe was so great that smelting operations at Fremantle had to be discontinued. The disparity worked out at about £2 14s. per ton of lead. Consequently the lead ore has been shipped away during the past twelve months, but it has been possible to keep the mine going where otherwise it might have been closed down.

Mr. Pickering: Was there no chance of reducing the cost at Fremantle?

The MINISTER FOR MINES: While the Fremantle smelter can do the work, I am afraid it cannot treat the ore as economically as can the up-to-date smelters in other parts of the world. We were advised that the charge to the mine could not be reduced, and the disparity was too great to justify a continuance of smelting at Fremantle.

Mr. Corboy: Has anything further been done with regard to getting a central smelter for all ores that need to be smelted?

The MINISTER FOR MINES: That is a problem that has not yet been solved. Unless there is sufficient ore likely to come forward, we cannot see how we can give advantage to the mining of base metals in Western Australia. If we can open up additional mines, we may be able to lend valuable assistance by providing an up-to-date electrical process for the purposes of the reduction of lead and other ores. Regarding the State batteries system, hon. members are aware that, like other branches of mining operations, it has fallen on evil days to the extent that the tonnage coming forward is considerably reduced. In some cases batteries have been closed down while in others the batteries have been moved from one district to another. We have changed that policy to the extent of providing that if there are prospects of a revival in the district, we do not move the battery. We may close it down, and we do that because of the absence of regular crushing. Should a sufficient quantity of stone

be forthcoming, the battery will be re-opened. We have done that in several instances.

Mr. Lambert: That policy has not been followed at Siberia.

The MINISTER FOR MINES: We have retained the battery there, but I am afraid we cannot leave it there much longer. In any case, there are other facilities there. We cannot go on indefinitely providing new batteries in districts and allow plants to stand idle if they are required elsewhere. The battery has not been removed from Siberia.

Mr. Lambert: Its removal is threatened.

Mr. Heron: You threatened to close down Leonora battery, but many tons of stone have been treated since.

The MINISTER FOR MINES: Hon. members should complain when the threats are put into execution.

Mr. Lambert: It is too late then.

The MINISTER FOR MINES: If hon. members followed my example they would not lose much sleep over threats. The State battery system has been of great assistance to the industry. It is true that the system is not in some instances wholly an advantage. Prospectors may continue operating on a mine without any capital, relying entirely on taking out a few tons of stone, and making a living by having it treated at the battery. That kind of thing may have the effect of retarding the industry in a district. But notwithstanding that, the effect of the battery system has been beneficial, and has been responsible for the production of a great amount of wealth. I do not like to think what might have been the result if the State batteries had not operated in many of our distant mining districts. Generally speaking, when a property gives evidence of becoming a mine in which capital can be used, and which can very well maintain a plant of its own, in most cases the plant is provided, although the State battery may remain in existence to assist in the development of smaller mines held by prospectors.

Mr. Heron: Members would be surprised to know the number of prospectors that are in the outlying districts of the goldfields.

The MINISTER FOR MINES: I know there are a great many. During the year ended the 30th June last, 35,722 tons of gold ore were treated at State batteries for a return of 32,736 ozs. of bullion valued at £116,540. From the date of the inception of the State battery system to the end of 1922, the number of tons of auriferous ore treated was 1,354,000. For that period the gold won by amalgamation was valued at £4,626,000, by cyanidation £687,000, by the treatment of slimes £238,000, and by the treatment of residues £9,353. I am giving these in round figures. In State tin dressing plants the value of black tin recovered was £92,000, the residues being worth £572. The value of the ore treated under the State battery system from the date of its inception to the end of 1922, including the treatment of tin, was, therefore, £5,654,957. We have to-day something approaching 26,363 tons of sands

and slimes which have accumulated at State batteries. The estimated contents, according to the assays which have been made, of the accumulated slimes, is 9,148 ozs., which at £4.0s. on a 75 per cent. extraction would be worth £30,000. We have actually advanced to the prospectors on the gold contents of these slimes £15,944. In these slimes and sands which are still available for treatment, there is a difference of £14,199 allowed for the cost of treatment. It is estimated that we ought to derive anything up to £6,000 or £7,000 to cover the interest charges which have accumulated since we commenced to make payments for the gold contents of the slimes. This is an asset which must be set against the advances to prospectors for the treatment of sands and slimes. Although we do not treat the sands when they accumulate, or when the stone is being put through, in most batteries we advance against the gold contents, deducting a certain percentage for treatment, which we recover from the gold. When we do treat the material we claim upon the gold contents. Our base metal portion of the mining industry depends almost entirely upon the conditions prevailing in other countries, over which we have no control. It may be prospering this year, and next year get a setback. That may happen in a month. We are not always able to see what is likely to occur. It is not as stable as gold, and there is greater difficulty, therefore, in obtaining the necessary capital. It is possible that copper ores, and copper ores with gold contents, such as at Phillips River, may be treated by a local process that is likely to be brought into use in the near future. A local company has taken an option over one or two copper shows in the Carnarvon, Roebourne or Pilbara districts, and proposes to equip these shows with a treatment plant of its own, introducing its own process. This process is said to be, and I believe it will prove to be, a more economical system of treating such ores than any other process known. The company is also discussing the question of obtaining an option or some control over a group of mines at Phillips River, and installing a treatment plant there. This may mean a revival of the industry at Ravensthorpe, and if this occurs it will mean something to the State. I hope it will be found that the process will have this effect. I propose to make a brief reference to coal. I admit that Collie coal is not, taking it by and large, quite the coal that is produced in Newcastle or Wales. Collie coal, however, is very much more valuable than it is given credit for. It has unquestionably assisted in the development of many of our industries. For some purposes it is even more suitable than Newcastle coal. It has defects, but I do not think these are insurmountable. In the United States people are using pulverised coal in a very extensive way. It would appear that Collie Coal is as suitable as any other for use in a pulverised form.

Mr. Lambert: Something like 50 per cent. of the coal used in America is used in pulverised form.

The MINISTER FOR MINES: It is used in locomotives in that form. The industry here has not reached the stage when sufficient capital can be found to treat the coal and use it in that form. When we have reached that stage, and we can get a sufficient turnover in our operations, I believe the coal will be used in pulverised form, and will then be found to be of more value than people give it credit for, even those who have a knowledge of coal in this form. Collie cannot make any complaints against the State for the treatment that has been accorded to it.

Mr. Wilson: It does not.

The MINISTER FOR MINES: I am glad to hear that, because I was going to make a complaint against Collie. I thought the hon. member would make out some case against the State that would have the effect of preventing me from making my point.

Mr. Wilson: Let us hear the complaint.

The MINISTER FOR MINES: It is not a complaint. Collie coal is a Western Australian deposit. It belongs to the people of the State. It should be available in Western Australia for the assistance and development of local industry, just as Newcastle coal is available in New South Wales for the development of industries there. It ought to stand or fall on that position. Unfortunately, comparisons are too frequently made between Collie coal and other coals, the calorific value of the Newcastle coal being said to be greater than that of Collie coal. These things do not influence me. I claim that Collie coal ought to be made available at the cheapest possible price to enable industries to be established and maintained here.

Mr. Wilson: How are you to make it cheaper?

The MINISTER FOR MINES: I know what the hon. member would suggest, and I am not going to get so near to the point as to permit him to make the suggestion. To-day some of our industries are suffering seriously because of the cost of transport. I am speaking largely from a railway point of view. Our Railway Department—and in this connection I wish to give due credit to the Commissioner of Railways—have introduced, as a matter of policy, the almost entire use of Collie coal on our railway system, even during the summer months. It is hard, however, while we pay 18s. per ton for Collie coal, four tons of which are claimed to be worth three tons of Newcastle, to know that the New South Wales Railway Department, with which comparisons are made by the users of our railway system, can get the three tons of Newcastle coal at approximately 11s. to 13s. per ton.

Mr. Wilson: Railway freights in New South Wales are about half of what they are here.

The MINISTER FOR MINES: That does not affect the position. My point relates to the price paid at the pit's mouth. The price of Newcastle coal at the pit's mouth has got

down to about 12s. per ton for railway purposes.

Mr. Wilson: At Newcastle wharf the price is 20s.

THE MINISTER FOR MINES: Free on board, and not at the pit's mouth, and not for railway purposes. I could astonish the hon. member by telling him the price paid by New South Wales for some of its railway coal. Surely we ought to be able to review the position in regard to one of our native products so essential to the cheap transport of commodities over our extensive railway system. We have to carry that coal right up to the Murchison and the Eastern Goldfields, deteriorating it in the process, and the people have to pay for it. In view of those facts we ought to consider the position from the standpoint of how we can help Collie and how Collie can help us. It would be a great advantage to the State to increase the use of Collie coal for bunkering purposes by 200 or 300 per cent. We should encourage steamers to come to Western Australia specially for bunkers, instead of taking merely a few tons of Collie coal when they call here for other purposes. The Collie people should cut their prices to the finest possible point, and railway freights and port handling charges should also be cut to the finest possible point, with a view to inducing a bunkering trade. By that method we could, I believe, so increase the output of the Collie mines as to admit of a reduction in the price of the Collie article to the Railway Department. The member for Collie would do well to give consideration to that aspect, and I know he will do so. I have no wish whatever to do anything that will damage the Collie industry, the value of which I appreciate. At the same time I do not wish to cause Collie to do anything against the interests of the State. If the railway system is cut out, Collie is cut out. But cutting out Collie does not mean cutting out the railway system. Therefore the railway system is of greater importance, and we should do our utmost to extend the railway system and thus encourage industries that to-day are suffering from a lack of adequate facilities of communication.

Mr. Wilson: With the power station established at Collie, things will be a great deal better.

THE MINISTER FOR MINES: I am not so certain of that, but I do not propose to discuss the point on these Estimates. I have purposely refrained from speaking on other minerals of lesser value than gold and coal. No doubt attention will be called to that point by the member for Coolgardie (Mr. Lambert). We have deposits of asbestos equal probably to similar deposits anywhere in the world. I know that Canada is mining asbestos in great quantities for fibre. We can produce asbestos in quality quite as good. In that connection we propose to make a good display at the British Empire Exhibition, with a view to inducing investment in our asbestos deposits.

Mr. Marshall: The Canadian supplies of asbestos are declining, and will soon give out altogether.

THE MINISTER FOR MINES: After mentioning some of the minerals which we have in Western Australia, I shall conclude by a reference to the goldfields water scheme. Among the minerals of Western Australia are gold, silver, copper, tin, coal, lead, asbestos, antimony ore, arsenical ore, bismuth, cobalt ore, fireclays, graphite, pottery clays, iron ore, manganese, magnesite, mica, molybdenite, scheelite, tantalum, wolfram, felspar, barytes, gadolinite, jarosite, and corundum. I warrant there are members of this Committee without the remotest idea that some of these minerals exist within the four corners of Western Australia and can be mined. Some exist in such quantities that one cannot mine them, simply because the world's market would go flat. One of the most important manganese deposits to be found in the world exists in this State. But nobody has ever paid any attention to it. Similarly, there are deposits of other minerals. These lesser minerals have not received attention because we have been doing so well out of gold. A little hardship sometimes compels people to look in other directions to make good. When we can obtain attention for some of our lesser minerals, a great deal of capital will come to us, and secondary industries will follow. I hope that the British Empire Exhibition will create an opportunity of attracting capital to our lesser minerals. As evidence of the Government's desire to help the gold mining industry, we have recently revived the question of the cost of water at Kalgoorlie. I had an anticipation, which was not disappointed, that as soon as an announcement was made to that effect, some other mining centres would ask for similar consideration. One can never do a good turn to an individual without his coming back to ask for a second good turn. When the Government propose to provide something like £40,000 a year for a number of years to enable cheaper water to be provided for the centre which has produced the greatest proportion of our gold, it must be accepted as an earnest of our desire to help. No sooner did we announce that decision, than other centres came along and asked what we were going to do for cheap water and cheap other things in their behalf.

Mr. Corboy: One mine in my electorate, 100 miles this side of Kalgoorlie, has to pay 10s. per hundred gallons.

THE MINISTER FOR MINES: Subject to Parliament accepting the conditions under which the reductions shall be made, the reductions will operate as from the 1st July of this year. The matter is only pending a decision on the Loan Estimates to be introduced shortly. A readjustment will be made accordingly of the charges now being levied. The difference between the conditions prevailing at Kalgoorlie and the conditions prevailing elsewhere is this: A large sum of money was borrowed on the credit of the revenues of this State to enable a scheme to

be provided to serve Coolgardie, Kalgoorlie, and the adjacent mining industries. It is true that the intervening agricultural districts were joined up later. For a number of years the scheme did not pay working expenses, interest on capital outlay, and sinking fund charges. But the sinking fund charges amounted to 3 per cent. on the main loan, a very heavy burden on the consumers. It was, in my opinion, too heavy; and it has proved to be more than necessary. But as the main loan does not fall due until 1927, the position obtaining until recently was that although the sinking fund was short of only about £27,000, the State still had to pay sinking fund charges on the total of the loan. The Treasurer, when in London, made some adjustments with the Sinking Fund Trustees, and thus was enabled to make a saving. But it is now proposed that the scheme shall eventually carry the difference by carrying forward to 1927 some capital expenditure and overhead charges at present met out of the Mining Development Vote. The money, however, will accrue to the scheme, so that the users will have to pay it; but they can get a reduction of the charges as from 1st July of this year instead of waiting until 1927. This arrangement will not cost the State more than the interest to be provided each year. The position of gold mining is serious. It is not a question of the water charges. From that standpoint the Government would not have been warranted in making any concession under existing conditions. But the Kalgoorlie mines had proceeded so long on the basis of struggling for an existence, taking out rich patches and following rich chutes, and leaving other grades of ore in the mine, that the ore reserves were being seriously reduced. When I first approached the matter I asked to be supplied with information from the mines on the basis of information supplied to me by one mine. I said to the representatives of that mine, "I want to know from you what are your estimated ore reserves and what is the estimated cost of operating, taking your mine as a whole. For one thing, you have 140,000 tons of ore of a certain grade, and working costs will be 39s. Another mine has 250,000 tons of ore reserves, and its working costs are 35s. I have to view the position from the standpoint of the Kalgoorlie district as if the two mines were one." I must have the figures of the total estimated ore reserves of all the Kalgoorlie mines. I must know, firstly, the total of the ore that can be taken out of all the mines at the present working costs. Then I must know the total tonnage that can be added to that figure if the cost of treatment, or of mining and treatment, is reduced by 1s. per ton. Though I do not want to stress the point too much, I found that even the Kalgoorlie managements themselves were astonished to discover what a very short life they had under existing conditions—shorter than is desirable for me to state publicly. It was, therefore, essential that something

should be done. In the case of one mine the ores in July last amounted to about 140,000 tons; that is, ores that could be treated. It is true that the mine had hundreds of thousands of tons below, but the value of these fell below the actual cost of mining and treating, so that they could be worked only at a loss. But taking the higher grades with some of the lower grades, it was found that the tonnage which the mine could actually operate at a profit amounted to 140,000 tons. In June, when this review was made, the mine in question had actually taken out 72,000 tons of the 140,000 tons. Therefore the mine then had ahead of it approximately six months' operations on a paying basis. Six months in the life of a field like Kalgoorlie—I am referring to one of the biggest mines there—means much and no Government would fail to give immediate assistance to relieve the position and extend the life of that mine if possible, should an opportunity arise. It is not entirely a question of extending the tonnage week by week, month by month or year by year, but of actually extending the life of a mine. The action we have taken has, I believe, extended the lives of the mines for practically 12 months. This will give the mines an opportunity to add to their known ore reserves. In that direction, I believe it will be found that we have given new life to Kalgoorlie, although it may not be in accordance with what some people would like to see. With the tonnage increase and a material increase in the gold output, the position of the mines will be considerably improved upon what it was in June of this year. The same thing applies to other mines, but perhaps not to the same extent. We have given the same advantage to mines operating from Southern Cross to the eastward. I believe it will make a material difference to the Southern Cross mines and that some of those closed down now will operate because of the advantage of a cheaper water supply. The Government must go on doing these things. If we stop with one effort it will not materially help the mining industry. We must continue to give assistance in different directions and thus, we will find that one industry will help another and gradually tend to bring them back to something approaching the pre-war basis. By doing that, we shall help the mining industry that has done so much towards the development of the State generally.

Mr. LAMBERT (Coolgardie) [8.18]: Members representing mining constituencies must be very pleased with the encouraging remarks of the Minister for Mines, particularly in view of the fact that the Government have recently announced their intention to reduce the price of water for mining purposes in the Kalgoorlie district. That relief will be of considerable assistance to those mines and will result in the profitable working of ore that would otherwise be left in the ground. Before I proceed to discuss the mining industry in

general, I would like to say, in contradistinction to the opinions generally held on the goldfields, that the officers of the Mines Department from the Under Secretary, Mr. Calanechini, downwards—I think members representing the goldfields constituencies will agree with me in this—are always courteous and desirous of assisting, as far as possible, all legitimate claims for assistance. I would also like to pay a tribute to the State Mining Engineer, Mr. Montgomery, to the Government Mineralogist and Analyst, Dr. Simpson, and the Assistant Mineralogist and Chemist, Mr. Bowley. It matters not whether we, as laymen, or other mining people, take samples to those officers; they are always ready to assist in determining whether the samples have any economic value. Goldfields members find themselves imbued with a sense of obligation to those officials. It is unnecessary to say much regarding the past history of mining, the State battery system, the methods of encouraging mining in the past and the results gained. As to the gold mining industry, in common with the Minister, I believe that more good will be gained by encouraging the opening up of some of the bigger and better known gold deposits of the State, rather than by sending out prospectors promiscuously north, south, east, and west in the hope that they will locate an auriferous belt of country. While I am not unmindful of the good work prospectors have done, and are still doing, in opening up sometimes in an unsystematic manner belts of country previously unknown, I am firmly of the opinion that we must go back over our ground and retrace our footsteps. The member for North-East Fremantle (Hon. W. C. Angwin) will probably agree that there is no greater truism than the Cousin Jack saying with reference to gold: "Where it is, there it is." The known auriferous gold belts are sufficiently well defined, but nevertheless it is necessary to go over them again and conduct a more minute investigation of the gold mines in those areas. The other day I had the pleasure of taking the Premier to Coolgardie. He commenced his inspection by a visit to the Lloyd George mine, already referred to by the Minister. A Sydney company took an option over the leases with the idea of exploiting the reef, which had been worked previously by prospectors. The reef that prompted them to take over the mine proved of doubtful value, but a parallel reef proved of such great importance that it justified the Government in rendering assistance. That mine produced the gold which was referred to by the Minister a few minutes ago. The next day we went to Burbanks. Although over half a million pounds worth of gold had been produced from the Burbanks Main Lode, 150ft. away in the water shaft, a reef, 4ft. wide, containing over an ounce of gold to the ton, was left untouched. That mine has been called the Burbanks Oversight, and gives promise of being equal in value to the parent mine which was abandoned 10 or 15 years ago. On the following day we went along the pipe track

to Bonnievale. We looked at a new property known as the Jolly Briton, where they are crushing over one ounce to the ton. That lode was discovered as the result of the rusting of the pipes and made water available for loaming and enabled the prospector to locate the reef which may ultimately turn out to be very valuable. The Premier rightly asked if the prospectors were charged for the water. When he was answered in the affirmative, Sir James, with his practical turn of mind, said, "Prospectors who do this class of work should get the water for nothing." If we can only drive into the mind of the present Administration—it should not be necessary to use a superhuman effort in that direction—the necessity for such an attitude towards mining generally, I believe we will witness a revival of mining which will be very encouraging. The Government should assist gold mining by an approved method of boring systematically in known gold bearing country. There is a big field for operations north of Kalgoorlie and probably to the south as well; there is a big field in the Menzies district, and a promising field in the Coolgardie area. The same can be said of nearly all the important gold mining centres in Western Australia. The country is sufficiently well-known geologically to justify the employment of three or four boring plants working continuously either in mines at present operating or those that have been abandoned, according to the requirements of the various fields. Such operations would make better known the possibilities ahead of the different mining areas. The Minister briefly referred to Wiluna. I do not think hon. members have any conception of the unexplored wealth that must lie in those mines.

The Minister for Mines: Hear, hear!

Mr. LAMBERT: Just fancy a mine producing over three-quarters of a million pounds worth of gold down to the 100ft. level! I was speaking to one of the principal mine managers on the Golden Mile this afternoon, when I was at the Mines Department. He told me that possibly there was no mine on the Golden Mile that had the favourable history possessed by the Wiluna mine. The gentleman I refer to was Mr. McDermott, the manager of the Ivanhoe. He is interested in the field and I think, although he did not tell me as much, he desires his company to become interested as well. He is not prepared to accept the view apparently generally held by most mine managers on the Golden Mile, that all the gold in Western Australia is contained within the four corner pegs of the Golden Mile. If we could get the cash reserves of a big mining company such as the one I refer to, behind developmental work at Wiluna, the Government would be justified in providing transport facilities, so that this known area could be profitably exploited. I only hope the House, including the Country Party members, will support the Government in their desire to assist mining.

Mr. Latham: Country Party members always acknowledge the benefit of the mining industry to the State.

Mr. LAMBERT: It would be pleasing if they showed it in a more practical way. I was interested in the reference made by the Minister to the experiments in ore flotation being carried on at the School of Mines. The Government are to be commended for the formulating of some policy in this respect. A week or two ago I was speaking to a prominent mining manager who thought it was exclusively for the mine managers of the Golden Mile to experiment and formulate a policy for the treatment of their ore. I say it is of far greater importance to us as a State if the Government can properly develop a process that the mine managers will have to follow. If their boards of directors in London afterwards find fault with them for not adopting up-to-date methods for the treatment of their sulphide and refractory ores, that is their look-out, not ours. It is gratifying to know that the Minister realises the importance of the application of advanced metallurgical methods in an endeavour to overcome difficulties in the treatment of refractory and sulphide ores. There is a very profitable field for the chemical application of the more advanced metallurgical methods employed in other parts of the world. They are roasting 100 per cent. of the sulphide product to-day, whereas all the gold is practically contained roughly in from $7\frac{1}{2}$ to 10 per cent. of that product. It is essential that the State should point the way to the more effective application of the flotation methods of gold extraction. To that extent the policy of the Mines Department must be commended. When I was at Kalgoorlie the other day the staff of the School of Mines seemed only too pleased to show me the result of their experiments in copper separation. Without going into the merits of its chemical application, I believe that it, too, has sufficient promise to justify a searching inquiry. The Minister was good enough to say that I intended to refer to some of our other minerals. Members generally are very patient in their attitude towards me when I am on this subject. Even the member for Roebourne (Mr. Teesdale), who often differs from me, will sometimes assist financially in focussing attention on these other minerals.

The Minister for Mines: He disagrees with that; he says, not sometimes, but at all times.

Mr. LAMBERT: Recently a writer said that China offered the greatest paradox by being at once the richest and the poorest country in the world. The attention paid by the other nations to the heathen Chinese can be summed up in the value of the mineral resources of China. Those resources have been and are still the envy of the civilised world. To an extent Western Australia, apart from the exploitation of her gold wealth, is in a similar posi-

tion, offering a paradox in being at once possibly the richest and yet the poorest State of the Commonwealth; for there is scarcely a mineral of any economic value that cannot be found within this State, and is not badly wanted in the other more fully developed States. Advanced countries have long realised the necessity for encouraging mineral production. Let me read the following article that appeared in the "West Australian" of a recent date on the mineral production of the United States:—

American industrial methods are well exemplified in a recent event that has taken place in connection with her non-metallic mineral industry. Approximately £200,000-000 is annually spent by American industry for minerals in which the metal content is of little or no significance, for example, minerals such as clay, lime, gypsum, asbestos, graphite, mica, talc, etc. The demand for such materials is increasing, and now calls for a close control of the chemical as well as the physical properties of the product. This control demands a new type of supervision and research other than can be given by the ordinary metallurgist or mining engineer unless such people undergo a further period of specialisation. The U.S. Bureau of Mines has accordingly established in New Jersey a new experiment and research station, which will specialise in the problems of production and utilisation of non-metallic minerals. It is considered that the production wastes that will be eliminated and the by-products that will be developed will doubtless more than pay the producing industries for their increased investment in supervision and research. For some time past the Commonwealth Institute of Science and Industry has been concerned with similar problems in Australia, and is now endeavouring to co-operate with the various State Mines Departments in order to ascertain what further steps are advisable.

Sir George Knibbs, Director of the Bureau of Science and Industry, once came here for about 24 hours.

The Minister for Mines: And that was 24 hours too long.

Mr. LAMBERT: As a matter of fact the Bureau of Mines of the United States can be held up to the world as an object lesson in research and investigation, covering the whole range of the metallic and non-metallic groups of minerals of economic worth. Some of their bulletins give in broad outline much of the knowledge required in the successful utilisation of many of these minerals. I should like to refer to the total mineral production of Western Australia. From 1901 to 1922, out of a total export of the value of £216,000,000 minerals, exclusive of coal, represented £124,000,000, or roughly over 50 per cent. We have produced 156 odd million pounds worth of gold. Think of what that has meant to the development of the State! Probably nine-tenths of our people and nine-tenths of our legislators were drawn from other States by the attraction of the gold

discoveries in Western Australia. The Minister rightly said that considerable assistance has been given to mining. Let us consider that side by side with the assistance given to the agricultural industry. Since the inception of the general loan fund development of mining to 1922, assistance to mining has cost £352,995, of which £80,233 has been repaid. The total expenditure, as explained by the Minister last year, in 1922 was £34,747. When we consider that the State since 1890 has produced £156,000,000 worth of gold at a direct cost to the State of a couple of hundred thousand pounds, the position from our point of view is indeed satisfactory. It is certainly a great achievement. As against that, take the amount advanced for agriculture. Under the Agricultural Bank, on soldiers' account, and the Industries Assistance Board, less repayments, there have been direct advances totalling £6,748,000. Of the loan expenditure last year exceeding 3¼ millions, 66 per cent. represented direct advance to the agriculturists. I would point out to the Premier that an equally great field of opportunity offers in the exploitation of our mineral wealth.

Mr. Davies: No.

Mr. LAMBERT: Anyone who doubts the value of our mining deposits can say no. Some people tell us the country is too small, or that we ought to wait until we get more population. What greater attraction could we have than the possibility of exploiting our mineral wealth? What attracted to Western Australia the gems of manhood that braved the desert and opened up fields of industry, which men like the member for Guildford and I trod many years afterwards. The opportunities are yet great, and so are the possibilities of the successful manufacture from our own minerals by our own factories. Mr. Bowley, who is doing good work in marshalling mineral exhibits for the Empire Exhibition, has lent me a number of photographs taken during his travels. Some of them will prove of interest to all members, because I am convinced everyone here is seized of the value of our mineral deposits. As to alunite, which is usually known as alum rock, the Government did a little to ascertain whether, by calcination, the potash content could be made available on a commercial basis for application to the soil. That work was commendable, but the Government did no go far enough. With a potash content of five or six per cent., or even possibly eight or nine per cent., it would hardly be a commercial proposition, but an expenditure of £5,000 or £6,000 on a plant for the production of alum from alunite would be justified. Not much alum is used in Western Australia, but there would be a big market for it in the Eastern States. Even if we did not sell one pound of alum in the Eastern States, it could be shipped to India, where it is used as a mordant for the fixing of dyes. I had a difference with the Minister regarding the possibilities of producing potash from alunite. The information, however, could have been

obtained by writing to the Director of the School of Mines at Utah. We have valuable deposits of alunite that have been mined and are stacked ready on the surface. Its utilisation for the production of alum is quite simple. It calls for no great chemical knowledge, and the plant required, with the exception of crystallisers, could be supplied in Western Australia. The Government should encourage the establishment of this industry, for once established it might be possible to utilise the banxite found in the Darling Ranges for the production of alum and other purposes. In the Eastern States quartzite is used for the production of alum, but it is much more expensive than when manufactured from alunite. The Minister referred to asbestos. We have deposits that will compare in quality with the asbestos produced in any other part of the world. It is hard to realise the great wealth in the big asbestos belt running from Roebourne to Nullagine. In extent this belt will compare favourably with the best known in the world, while in quality it is equal and, in some instances, superior to the asbestos of Canada and other countries. I sent to Lane & Sons a sample from the Sherlock Station, 35 miles from Roebourne, and they valued it at approximately £350 per ton. Since then, the price has dropped a little. But what are the Government doing to encourage the production of this raw material, or its commercial utilisation? An American publication recently stated:—

A new asbestos plant 150ft. wide by 1,000ft. long, is to be erected at once at Asbestos, Quebec. For some considerable time the feasibility of manufacturing asbestos products in Canada close to the source of raw material has been considered. Heretofore the raw product has been shipped to the United States, and Canada imported the manufactured goods. This will now be changed, and the manufacturing will be done in Canada.

The Government have done a little to encourage the production of raw asbestos. They have assisted in the shipping of the raw material, but more could be done. We have deposits that could produce manufactured goods to replace those now being imported into the Commonwealth. The Commonwealth is importing asbestos goods to the value of at least £300,000 or £400,000 a year.

Mr. Teesdale: And there is a paltry five per cent. duty on them.

Mr. LAMBERT: More could not be expected, because no attempt has been made to utilise the local deposits.

Mr. Teesdale: But the crowd running the American stuff would block us as much as possible.

Mr. LAMBERT: People in this State are buying boiler lagging which is only the refuse from asbestos mixed with magnesite or other binding material and are paying £20 per ton for it, whereas there are hundreds of tons of it available locally that cannot be disposed of. Many other minerals might be mentioned. The Government should try to for-

mulate a policy on sound lines with the amount of money they could make available and also encouragement of the investment of further capital and the establishment of some of these industries. In the Southern Cross district and in Coolgardie there are very valuable arseno-pyritic ores and arsenical ores. Some of the arsenical ores in Coolgardie contain nearly 25 per cent. of arsenic. The member for Kimberley should be interested in this for it is of great importance to the pastoral industry. There is nothing difficult about the distillation of arsenic. Arsenic has a great bearing on many other industries. To-day every pound of arsenate of lead, a material that must be used in our fruit industry as a fungusite, and every pound of sheep dip used in the pastoral industry is brought from some other part of the world. Not one pound of arsenic is being produced from our raw material to-day. In 1921, when there was a shortage of arsenic in Victoria, somewhere between 1,000 and 1,500 tons of arsenical ore was exported from Southern Cross to Victoria, and probably after treatment was brought back here as arsenate of lead, or in the form of sheep dip. This industry lends itself to proper exploitation. It should be established on sound lines, but this can only be done if we formulate a policy. Along the Great Southern line there is barium sulphate. It has scarcely been touched, some 20 or 30 tons only having been exported. Barium sulphate is largely used in the paint-making industry. It is worth thousands of pounds per annum to South Australia and some of the other States. This shows how unmindful we are of our own great mineral wealth. It is not difficult to produce barium sulphate. It may be dried and ground fine, or ground and slimed wet and dried afterwards. We can produce crude barium sulphate for between 50s. and 60s. a ton. The unfortunate Crystal Glass Company, when it was operating, had to pay about £14 a ton for all barium sulphate that was used in the manufacture of glass here. This shows that some of our mineral deposits could, if properly worked, be very useful to our secondary industries, and assist in the establishment of many others. I have referred to bauxite and have dealt with alum. Seeing that we have alunite deposits here, I see no immediate commercial value for our bauxite deposits, but it is important to know that they occur in this State. In connection with the manufacture of cement, we have clays in which the alumina content is low, and we have bauxite which probably could be used in rectifying some of the deficiencies in our silicious alumina clays.

Mr. A. Thomson: What is the use of manufacturing cement when the people here will not use it?

Mr. LAMBERT: I understand the cement company received a check when it used the lime from our lakes. The opening up of these lakes by means of a railway cost the country a great deal of money, and was the subject of bitter recriminations in the House. To-day, however, the cement works

are producing a material equal, according to standard tests, to anything produced elsewhere. Why the company was not successful when it used the lime in our lakes for the production of Portland cement, I cannot say. I am convinced that the day will come when we can show the rest of Australia that from our limestones, and our sedimentary clays, from the decomposing of the granitic rocks in the Darling Ranges emptying into the Swan River that we can manufacture Portland cement in sufficient quantities to supply the whole of Australia. The day will also come when the Swan River, because it contains such immense lime and clay deposits, in addition to silicious alumina clays from other parts of the State will form the basis of a wonderful Portland cement industry. Most of our Portland cements are manufactured as a result of the systematic dredging of rivers. I know of no river so extensive or so adaptable for the purpose as the Swan River. The Minister has referred to our felspars in the Coolgardie district and at Jacoby's Well. This is a very valuable asset. Felspar has been mined in a small way for some of our local potteries, but not to the extent that is warranted by the value and extent of the deposits. When our electric light and power system expands we should be able to manufacture insulators. I should like to know what the high tension insulators used at the power station have cost. I believe they cost about 15s. a piece.

The Minister for Mines: The cost is pretty heavy.

Mr. LAMBERT: Our felspars are unsurpassed in any part of Australia. Together with the domestic use to which we are putting our high grade felspars in the making of china, porcelain, etc., and in the manufacture of high tension insulators, we should be able to establish an important industry here. North, south, east and west we find high grade clays that are almost untouched but are well known to the Geological Department. These two essentials could mean the establishment of an industry that would be worth £100,000 a year to us.

Mr. Davies: They are being used at the Calyx Porcelain Works.

Mr. LAMBERT: Only to a small extent. The directors, Mr. Mouritzen, Mr. Niblett and his colleagues, are to be commended for the manner in which they have persevered with their works, with very little hope of immediate reward, but with great belief in the natural resources of our State. Our felspars and clays provide the nucleus of an industry which would be of great benefit to the State. We also know there are deposits of fuller's earth here which, if prepared and put into containers, would be much used throughout Australia. Our lead ores are also of great value. The Government are to be commended for their policy in keeping open the Surprise Mine and others in the Northampton district. With lead of this de-

scription, why should we export it to Belgium? Why should we not utilise it here? It is free from silver and lends itself peculiarly to the manufacture of white lead, perhaps more so than any other lead in Australia. Two or three years ago, when I first referred to this matter, we were sending our raw materials to Tasmania to be sulphated and sold as a pigment there. In our lead deposits we have the basis of a big paint industry, and could enter into competition with any other State. In addition to barium sulphate we have iron oxide and high grade ochres. We also have amorphous limestone, a useful class of limestone in the Gingin district. All these are essential to the successful establishment of paint works. Mr. Whittaker, Mr. Snashall and others spent something like £2,000 in Subiaco on plant for grinding iron oxide. They then went to some of our wholesale distributing firms, each of which made the same reply. They said, "Your iron oxide may be all right but we are agents for the United Paint and other companies and are unable to handle your oxides; otherwise they will cancel our agency." Is not that an impossible position of affairs? In the Ravensthorpe district we know of valuable deposits of jarosite, which lends itself to the production of iron oxide as a pigment probably better than any other mineral of this nature in the world. America, at considerable cost, is producing synthetically iron oxide which would be no better than that which could be produced from the Ravensthorpe jarosite. Should we be satisfied to allow these deposits to remain idle? People write to me almost every day about oxide, ochre, and other things. We have in this State minerals which, collectively, present all the essentials necessary to sustain huge paint works on commercial lines. It is necessary for the commercial well being of this State that the Government consider a plan whereby these minerals can be utilised. Then we shall find manufacturers prepared to come to Western Australia with their chemists and their capital. But the work can be done only on properly organised lines. That is the consideration which to-night prompts me to speak on industries to which I have not previously made extended reference in Parliament. Every member knows that we have gypsum all over the State, in almost every lake. To South Australia the gypsum industry is worth £100,000 a year. Last year the South Australian Government spent £45,000 in building a railway to encourage the gypsum industry. I do not know whether our Government would spend anything like such a sum to encourage the exploitation of our gypsum deposits. The gypsum deposits owned by Millars' Company, and also by the Union Plaster company, in which I have an interest, is, for the production of plaster of paris, equal to any gypsum to be found in any other part of the world. The two companies hold at Dongarra 150 acres of high-grade gypsum rock, sufficient to meet the requirements of Australia for the next half-

century. Many people have been good enough to put in a few pounds by way of encouraging the companies producing plaster of paris. Three years ago every pound of plaster used in this State was imported from South Australia and elsewhere. To-day it is a rare thing to find a barrel or a bag of imported plaster.

Mr. A. Thomson: The local product is equal to the imported.

Mr. LAMBERT: There is no better supporter of local products than the member for Katanning. When he finds that he can buy a local article, he will not have the imported article in its place. He sends along his order and his cheque to the Western Australian manufacturer. At Mogumber there is an iron ore called ileminite of the class which, for the production of paint, finds extensive use in Canada and the United States. The attention of people with capital and expert knowledge should be drawn to the valuable Mogumber deposit. It is known to the Mines Department, but the information should not remain in the Government pigeon holes. We have iron and copper pyrites which sooner or later must find application as subsidiary to the manufacture of our superphosphate and many of our acid phosphates. Attention should be paid to the utilisation within the State of our Northampton lead ores, not only for their lead but for their sulphur contents. These have an important bearing on the manufacture of superphosphate and acid phosphates. The knowledge of our vast iron deposits at Yampi Sound is world wide. I need not elaborate on that point, but will merely express the hope that at the approaching British Empire Exhibition the Government will be able to focus such attention on these all-important deposits as will attract capital for working. Our limestone deposits are extremely valuable, and should be further exploited. I do not refer so much to the ordinary rock limestone as to the limestones in the lakes of this State. We have for instance, the Lake Clifton limestone, which I believe can yet redeem itself. Much talk is indulged in by Federal members about the defence of Australia. The first essential to the defence of a country is the possession of shooting irons and powder. It is within our province to bring before the Federal Government the need for considering the problem of making Australia self-contained as regards the production of nitrogen used in the manufacture of explosives. That can be done only by the application of science to the fixation of nitrogen. Every civilised nation in the world has equipped itself with plants for the production of fixed nitrogen from the atmosphere. The matter is important also for the production of suitable fertiliser. Germany, when she went to war with the world, was producing only about 100,000 tons of nitrogen per annum. When she was cut off from the Chilean nitrate fields, she started to erect plants for the production of nitrogen

from the atmosphere, the nitrogen being essential to the manufacture of high explosives. When the Armistice was signed it was found that Germany was producing at the rate of over 2,000,000 tons of fixed nitrogen per annum. I never hear of the Commonwealth Government facing its responsibilities in the matter of defence by considering this all-important aspect. We could not defend ourselves for 24 hours, situated as we are at present, because of lack of the necessary ammunition. If we cannot keep the gateway to Chili open under war conditions we are cut off from all possibility of defence, simply because of lack of the essential of ammunition. The matter is perhaps not within the range of the State Government, but it certainly is within the range of the Federal Government. It is for us to use our best efforts to prove to the Federal authorities the importance of our possession of these calcium deposits in our lakes from Fremantle to Busselton, for the production of lime nitrogen. These lakes are in close proximity to the great coal deposits at Collie. These factors lend themselves especially to economical production. At Bulong, Coolgardie, and Comet Vale we have magnesite deposits of very great value. Magnesite is used as a refractor in the steel industry. Before steel works can be started at Guildford, the first necessity is dead-burnt magnesite to line the furnaces. Although we have thousands of tons of magnesite exposed at Bulong and Coolgardie and Comet Vale, every pound of the magnesite to be used at Guildford will be brought from New South Wales or some other place where the importance of the industry is better recognised.

The Minister for Mines: The Guildford steel works are operating now.

Mr. LAMBERT: Yes, but not using our magnesite to line their furnaces. The Government should immediately offer a subsidy to someone prepared to exploit the magnesite deposits. If anyone is interested, I will show him in ten minutes in Kalgoorlie where he can get the whole of the plant necessary for calcining magnesite, as complete a plant as he can get in any part of the world. It is available second hand. England is paying an average price of £9 per ton for magnesite; and considering that a freight to English or Continental ports can be obtained at 25s. or 30s. per ton, our magnesite deposits offer possibilities to which we should not be blind. Magnesite has other uses in the making of artificial stone and paving. To-day there are buildings held up in this State because the builders are unable to procure the caustic magnesite needed for putting down floors, etc. Hon. members have not heard me say much about the manganese deposits lately. They are, however, a source of great wealth. I am hopeful that before long these will be exploited by a company with the necessary capital, and I know they have the power to absorb the production and place the working of these deposits on a commercial foot-

ing. I have received nothing but kindness and encouragement from the Government and from private members, in my efforts to put these deposits to commercial use. I believe they will yet prove to be of great advantage to the State. When we consider that every pound of ferro-manganese used in connection with the Guildford steel works must be imported and that to-day it is bringing 125 dollars per ton in America—the price is apparently on the up-grade too—hon. members will understand what the development of these deposits will mean to the State. The State Mining Engineer says that we have on the surface at Horseshoe, near Peak Hill, one and a-quarter million tons of good grade ore, valued at £13,000,000 sterling, and another reliable authority estimates that the working of them would show a clear profit of over £1,000,000. The Committee will probably understand the part this mineral will play in the export trade during the next quarter of a century. I will read a short clipping from a scientific journal referring to manganese. It says—

Over 800,000 tons of Russian manganese ore used to be exported annually in pre-war days. During the war this was largely replaced on the European market by Indian and Brazilian ores. But these ores cannot compete in quality with the better grades of the Russian product, and within the last 18 months considerable interest has been shown in the Russian ore. In 1921 the ore exported only amounted to 3,100 tons, while in 1922 it rose to 38,700 tons. The amount of high grade Nikopol manganese ore to be exported during 1923 has been fixed at 48,000 tons, and of the total production there may be as much as 75,000 tons available for export.

India produces one-quarter of the manganese of the world, most of which is far more distant from the sea board than is ours in Western Australia. This is an interesting feature that should tell in our favour in the future. Then we have some very fine deposits of molybdenite in Western Australia. With the exception of a paltry few tons, none of our molybdenite has been put to commercial use. I hope some policy will be formulated by which the Mines Department will render assistance in the development of these resources. Does it not seem to hon. members rather anomalous that we should be spending large sums of money in looking for gold while at the same time we are not producing a single pound of common salt used on our dining tables. Every pound of salt used by us, with the exception of a quantity of crude salt, is imported from some other place. We have some fine salt lakes all through Western Australia. Fancy the absurdity and stupidity of subsidising people to look for gold, when we show that we are incapable of producing ordinary salt that is lying in our salt lakes! It is a very simple matter to produce household salt. An ordinary evaporator and crushing plant is

required and yet we know that salt has to be imported from South Australia.

The Minister for Mines: But they get it from us first, from the Esperance district for instance.

Mr. LAMBERT: And then they send it back to us in due course. The production of salt for our population of 300,000 people presents no difficulty whatever. The Government should immediately take stock of our resources and consider whether they will permit the existing conditions to continue any longer. I am aware that something is being done with the deposits at Port Gregory.

The Minister for Mines: A shipment has just been brought down.

Mr. LAMBERT: But that is crude salt. I am not referring to that. I am referring to the table article. The salt requires to be washed in a centrifugal plant, dried, crushed and bagged. We are not even doing that. Should this state of affairs be allowed to continue? Side by side with the production of salt comes the production of caustic soda. In a speech I made on the 26th November, 1918, I said—

I am surprised that some of the officers of the Mines Department who have the necessary knowledge have not done so up to date and have not tried to utilise our big salt areas by the application of electrolysis in chemistry.

Then I went on to deal not only with salt, but with the electrolytic production of soda. Five years later Sir George Knibbs, in a statement reprinted in the "West Australian" of Saturday last, refers to the production of caustic soda by the electrolytic process.

The Minister for Mines: Tell him it is proposed to do something towards establishing the industry here, and he will kill it if he can!

Mr. LAMBERT: Nowhere are the prospects ahead of such production more favourable than in Western Australia, because not only have we the necessary deposits here but it forms the first link, as Sir George Knibbs points out in 1923—I pointed it out in 1918—in a very important industry to Western Australia, namely, the production of bleaching powder and the manufacture of chlorine, which is the first step towards the pulping and utilisation of our wood for paper production. If the Government were to subsidise the industry for some years in order to place it on a proper footing, we would be doing something of value for Western Australia. We have in the lakes extending along the coast the necessary lime for the manufacture of calcium carbonate and calcium chloride, which can be manufactured on a competitive basis. We have silica sands in Western Australia which are known to compare favourably with those found in any other part of the world. It is regrettable that the efforts made by a few men, who put their money into an endeavour to establish the glass industry, have failed temporarily. I hope the Government will not be unmindful of the interest shown

by those people and will not be backward in their regard for an industry which should be of great importance to Western Australia, and which should be working to-day. Then again our iron phosphates should be investigated. The desposits at Dandarragan should be developed, particularly in view of the production of phosphoric acid, which has been developed on a commercial basis in America by the electric furnace process. These deposits lend themselves to proper investigation. Only a little while ago I drew the Premier's attention to the fact that in America they were replacing the old acid process in the manufacture of superphosphates by the electric furnace method, which gave promise of being more economical and much cheaper. Seeing that the farmers in Western Australia are so dependent upon superphosphates in the successful production of wheat, it is important that something should be done along these lines. In referring to these various matters, I believe hon. members will recognise I am prompted by a desire to focus the attention of the investing public, who should not be unmindful of the commercial value of our varied mineral resources. It is not a question of party consideration but a desire to encourage people to utilise our resources. I intend to conclude by quoting a statement made recently by some of our friends to whom I have had occasion to refer already. Recently the Chamber of Commerce showed their recognition of the difficulty of our position in the following statement made by the president of the Chamber of Commerce:—

For the year just closed (1922-23) ore imports from overseas totalled £12,944,692, and our exports £10,973,833, an adverse balance of £1,970,859. From the Eastern States we imported commodities to the value of £7,277,343, and exported thereto a value of £1,131,675, a total balance of trade against us of £8,116,527. The most notable feature of these figures is the fact that we paid to the Eastern States £6,145,668 more than we received from them. This, with the exception of one year (1919-20) is the heaviest interstate balance against us recorded in the last decade, and its magnitude calls for our serious attention, especially when it is remembered that the imports consist largely of commodities which we should be producing for ourselves. Amongst these may be mentioned: Butter, £512,199; cheese, £69,308; bacon and ham, £156,511; condensed milk, £143,448; confectionery, £158,928; currants and raisins, £27,805; jams and jellies, £110,249; potatoes and onions, £75,821; wines, £60,596; boots and shoes, £335,882; furniture, £23,783.

The fact that the balance of trade is against us in Western Australia should evoke our best consideration. With the hopeful note sounded by the Minister, and the able assistance of his officers, I trust members will not allow the slipshod policy of halt and hesitation to continue; that some properly formulated

scheme will be announced by the Government, under which the commercial utilisation of our mineral resources will be fully exploited; that we shall have some confidence in our own resources, and take definite steps to assist Western Australia in her march to the great destiny awaiting her.

Mr. MARSHALL (Murchison) [9.47]: I support the last speaker in his commendation of the officers of the Mines Department. The State is very fortunate in having so efficient a staff. Nothing is any trouble to them. The only feature to which exception can be taken is the restraining hand of the Minister. But for him we should be treated even more liberally in the department. I offer my congratulations to all the officers of the department, right down to the telephone attendant. They constitute as fine a staff as the State has and I thank them for the consideration they have shown to me. The discussion of the Mines Estimates is an annual repetition. We can find but little fault in the administration, and so we are somewhat handicapped in our criticism. I was expecting the Federal Government to relieve the mining industry of taxation, but unfortunately I learn the Federal Government do not propose to do anything of the sort. It is too much to ask the State to relieve the industry of all direct State taxation, because after all it is the State that nurses the industry in its cradle, helps it in its adult life, and for ever cares for and fosters it. There is great expense entailed on the State in assisting the industry, but I am doubtful whether the Federal Government do anything at all for mining. They merely step in and, not only steal the golden egg, but make a bold effort to kill the goose that lays it. It would be unfair for any member of the House to advocate the abolition of all direct State taxation on the industry, for the State is at least entitled to a recoup of what it spends on the industry. If any Government are justified in relieving the industry of taxation, it is the Federal Government. I was sorry to see in the newspapers recently that an appeal made to the Prime Minister by Western Australian representatives failed to impress him with the necessity for relieving the mining industry. Apart from direct taxation, the industry is staggering under a burden of indirect taxation. While we have from time to time appealed to the Minister for relief in this respect, none has been forthcoming, at any rate not sufficient to benefit the industry to any great extent. As the Minister pointed out, a section of the industry recently received a pretty big concession. Apart from that, we have nothing to point to. Repeatedly and unavailingly have I suggested that concessions in railway freights should be given. The Minister has to consider such a suggestion from all points of view, and if he contends it is not possible, the matter ends.

Mr. Heron: We think he is wrong.

Mr. MARSHALL: Being in Opposition, of course we do. In the reports of the Mines Department there is a ray of sunshine. We find that prospecting is becoming more active, and that this year about 7,000 acres additional have been taken up. Also, from various parts come reports of new discoveries. In the Murchison we have had two of some importance since the Estimates were dealt with last session. I hope that discovery at Mt. Egerton, which looks very promising, will fulfil expectations. Recently the original prospectors came into Meekatharra with 200 ozs. The unattractiveness of the industry is very apparent to-day. At one time there was no difficulty in getting experienced miners. Unfortunately, that is no longer so. A few practical men are looking for work, but they are not many, nor are they desirous of remaining in the industry, as they did in days gone by. Younger men entering the industry are merely taking what they call "a dead bloke's job," and are just becoming efficient when they leave the industry to go to other billets. The result is that the industry is continually taking in new and unskilled men who, economically, must be an expensive charge on the industry. I have previously mentioned this, but the Minister has not thought it worthy of a reply. I have urged that he should do something to make the industry more attractive to the men. With so large a percentage of the miners heading towards Wooroloo or, if Providence be kind, taken off suddenly, it stands to reason that no intelligent man will remain in the industry for long. One of the most unhealthy occupations in the industry is rising. Nobody knows better than does the Minister what rising means. To introduce reform at this juncture is to impose an increased burden on an industry already staggering under a cumulative burden; still, when it comes to protecting the health of those engaged in the industry, one is justified in demanding reform. The Minister could have framed some regulation compelling the mining companies to adopt the wet drill in rising. To-day men are sent up 25ft. into a rise, where they work with a shower of dust falling on them. Consequently they are rapidly approaching Wooroloo. The men have no alternative. Some members have said, "If a man knows he is rushing headlong to Wooroloo, he can leave his occupation." But he cannot leave. Economic pressure forces him to hold on. He cannot leave one job to look for another. Moreover, if a man shows any independence, he is told he is not wanted. I marvel that the Minister has not taken some definite action in respect of rising in our mines. There are other reforms, too, that might be adopted, but are expensive.

The Minister for Mines: Doctors say that most of those reforms, such as ventilation and the wet process, tried in other countries have been found to be of advantage, not only to the men, but to the mine owners.

Mr. MARSHALL: And those reforms are well worth considering here. I know that,

despite the Minister's statement, objections will be raised on the score of expense.

The Minister for Mines: I propose to send an inspector to make inquiries in South Africa.

Mr. MARSHALL: That is a reason why the younger generation do not take kindly to mining; it is not sufficiently attractive. Any reform that will result in better conditions to the miners will make it more attractive and thus benefit the industry. I have given up hope of the Government relieving the industry of the burdens it is carrying in the form of taxation both direct and indirect. The Minister drew comparisons between agriculture and mining, but he did not elucidate one of the problems I have in mind. He spoke of the great advantage that mining had been to Western Australia in its early days and of the assistance it had been in building up the agricultural industry. As mining has assisted agriculture, he said, so agriculture should assist mining in its hour of need. But when we ask for concessions to the mining industry similar to those granted to the agricultural industry, we find ourselves up against a brick wall.

The Minister for Mines: I should like to do it.

Mr. MARSHALL: We should all be pleased if the Minister would do it. It is remarkable that another industry should enjoy such concessions when the very industry the Minister has so eulogised to-night cannot obtain them.

The Minister for Mines: The trouble is we cannot make a reduction in railway freights to apply to mining operations alone.

Mr. MARSHALL: The Government cannot even make concessions to prospectors. Parties of prospectors have desired a small pump and boiler to enable them to cope with the water and thus prove the show on which they were working, and they have been called upon to pay railway freights up to the hilt. I cannot see that one industry is more entitled to concessions than another. The Minister should at least give some consideration to the prospectors requiring machinery. Notwithstanding the terrific burdens imposed upon the mining industry and the hard times it has experienced, I believe money will be made available and greater activity will result. Recently it was announced that a big London company were taking an interest in the Wiluna field. I was going to suggest that something should be done for Wiluna. Experts consider that it offers the best prospects of any field to-day. It covers a stretch of $2\frac{1}{2}$ to 3 miles, and from wall to wall the lode runs 100 ft. averaging 14 to 15 dwts. If there is going to be another Golden Mile, I feel satisfied it will be at Wiluna. Great trouble is being experienced in treating the refractory ore, and it might be worth while the department importing a man to investigate that problem.

The Minister for Mines: They can extract it all right, but the cost of roasting is the trouble.

Mr. MARSHALL: From what I can understand the experimental plants proved quite successful, but when an effort was made to treat the ore in bulk on the same principle the result was not so successful. If the treatment problem has been overcome and it is only a matter of £ s. d., it will not be long before Wiluna comes into its own.

The Minister for Mines: You can take for granted the information I gave you is pretty substantial.

Mr. MARSHALL: The Minister ought to know and I am prepared to take his word. In the near future, we can expect at Wiluna something that will be of great advantage to the State. I wish the Minister had told us what the Government intend to do to assist the development of the asbestos deposits. I know he was asked to assist in the installation of a treatment plant, but some uncertainty existed as to how a plant could be obtained. Recently I have heard nothing of the matter. The Minister gave us no information except to praise the quality of the asbestos. When he replies to the debate, I should like him to tell us what is being done. From 20 years' experience of the goldfields I am satisfied that unjust methods have been employed in the working of some of our gold mines. I do not wish to mention any particular company, but one company merely picks the eyes out of the propositions it takes up and, when the operations become too expensive, the mine is closed down. If these propositions had been systematically worked from their inception they could have been operated for many years. With a revival of mining, this company may come into prominence again and I suggest the advisableness of earmarking a percentage of the dividends, so that when a mine requires State assistance, funds will be available for the purpose. The Fingal is a case in point. The company paid thousands of pounds in dividends and has a splendid proposition to-day, but it will take thousands of pounds to work it properly. The mine has been torn over and pig-rooted out and so inefficiently managed that thousands of pounds will be required to sink a new shaft and work it properly. The State, however, assisted that mine. The Government should exercise some control over the development work of mines and insist upon certain development in proportion to the gold extracted. If this were done the State would be protected, and the companies would have to work their mines efficiently so that, when they were abandoned, all the gold would have been won. Numerous mines have been shut down prematurely. Some of them have been scarcely more than prospected, due to bad management in picking out the eyes. Wherever a big mine is discovered, the State has to supply water and all the facilities required by the community, and yet a company is permitted to shut down the mine when only a fraction of the gold has been won. I believe there will be a revival of mining in the near future, and I hope that when the opportunity is favourable, the

Minister will endeavour to protect the State in the direction I have indicated.

Mr. CHESSON (Cue) [10.15]: I should like some information regarding oil exemptions and oil prospecting areas. Applications have been made for the forfeiture of certain licenses for non-compliance with the labour conditions. These cases should be heard in the district affected. A big expense would be involved in bringing witnesses to Perth. The cases could be tried at the nearest Warden's Court in such a way that the people applying for forfeiture would have a chance of putting up a case, and the public be given an opportunity of knowing whether the conditions are being complied with or not. The whole of the State is mapped out in oil licenses, but very little legitimate work is being done upon them. The only opportunity the public have of getting information upon these matters is through the hearing of these cases in open court. When a case is heard in the Mines Department, with the Under Secretary acting as warden, it is like holding it in camera. The people who hold these licenses have ample protection if they find anything, and they should not be allowed to shepherd the leases for an indefinite period. They should be made to comply with the Labour conditions. This has not been done in the past. We know that the mining industry has been going down. One of the biggest factors responsible for the decline is the excessive railway freights on mining commodities. If we cheapened the freights on machinery we would greatly assist the industry. Machinery is just as essential to the success of mining as fertiliser is in a wheat proposition. Fertilisers are carried at a cheap rate, and the same concession should be made in the case of mining machinery. Many of the mining companies are languishing for want of up-to-date plants, and would be glad to be able to renovate their existing plants. Probably 1,000 tons of machinery would be required in some cases, but the freight on this would be enormous.

Mr. Heron: It cost £100 for four tubes for the Gwalia mines.

Mr. CHESSON: The Government are doing a good deal with their State batteries and also in the treatment of tailings. The cost of treating tailings, however, is excessive. The Government only pay on 80 per cent. of the tonnage, and 75 per cent. of the gold contents, and they take 3 dwts. for the treatment. There is not much left after the treatment of cyanide sands. If a man has 3,000 tons of tailings going 3 dwts. to the ton he could afford to buy a plant and treat it for the profit he would make. The Government could pay on 90 per cent. of the tonnage, but in nearly every case they pay on 80 per cent., the difference being allowed for moisture. The Government could assist prospectors if they reduced the cost of treating tailings. When there are 3,000 tons of tailings on the ground and the Government treat it, they often leave a lot of tailings and slimes

on hand. That accounts for a good deal of the high cost. At Peak Hill, Cue or Meekatharra assistance is required in the way of diamond drilling. Some of the fields have been rich and have turned out an immense amount of gold. I cannot believe there is only one Great Fingal in the Murebison. This company paid over £2,000,000 in dividends. All round the Cue district the reefs are very rich. This was one of the best poor man's diggings in Australia. There is a poorer zone after getting down to water. It would be money well spent if the Government would put in two or three diamond drills so that the big known payable lodes could be bored. This might be the means of opening up some big propositions, to the benefit of the railways and the State as a whole. How many men have been drawn out of the mining industry through the amendment to the Mining Act passed last session? This amendment gave the Minister power within a prescribed area to pull men out of mines when they were known to be suffering from miner's phthisis. Some provision was to be made, for those who were not very far gone, to be put on the land or given some healthier occupation than mining. What provision has been made for such men? We had a talk to two or three medical experts on miner's phthisis, and obtained a lot of useful information from them. Miner's phthisis is chiefly caused through bad ventilation. The remedy is to ventilate our gold mines, and use sprays to keep down the dust. Insufficient provision is made for the ventilation of our gold mines. In many of them there is a down cast and an up cast, and the air is brought through a winze to the surface without circulating through the working faces. The distribution of the air is bad. Practically all coal mines are well ventilated, and the air circulates through every working face. A stipulation should be made that the air shall so pass through a mine that it ventilates every working face. A gold mine can be made as healthy as a coal mine if the dust is kept down and proper ventilation is effected. There is no more difficulty in ventilating a rise by artificial means than in ventilating any other part of the mine provided sufficient air is brought down and it is well distributed. Every year the returns from our mining industry have become less. The population is dwindling and the people are coming to the city. We know that every ounce taken out of a mine means an ounce less left in it. Our young men are not going into the industry as their fathers did. No man who has followed up mining for many years will allow his son to follow the same occupation. The reason is the unhealthiness of the conditions under which miners work. Everything possible should be done to make mining as healthy as practicable, and to see that the mines are ventilated and the dust kept down. When the matter was brought up previously, we were met with replies as to the cost. When a mine goes down 2,000 or 3,000 feet, it is very costly to start a system of ventilation.

Ventilation should start at the surface, and be carried down. Thus mining could be made fairly healthy, and one would not find the young men tabooing the industry. With regard to prospecting, in the old days Western Australia had a big rush of prospectors—men who had been prospecting in many parts of the world. They pioneered our mining industry. Many of them even now are out prospecting. But the young men will not take to prospecting like their fathers did. The reason is the high cost of equipment to go out any distance in these days. Before the war a trip of six or nine months for a party of two meant an expenditure of £50. At the present time that sum would carry one no distance. The storekeeper, too, is not in the same position as a few years ago. He is not now able to assist the prospector and the miner as formerly. Indeed, before the war men working for wages were considerable factors in helping prospectors to open up mines in the back parts of the State. In view of excessive railway freights and the dwindling population, it now takes the back-country storekeeper all his time to exist; and there are comparatively few wages men left. So the prospector has not now the same chance of obtaining assistance. I realise that the Government are doing a good deal for the prospector. This evening an hon. member said that it was better to send out large parties. My experience is that small parties do much better. A big party often means disagreements, because one or two disagreeable men in a party are sufficient to break up the whole enterprise. A small party, provided it includes practical men with an understanding of the business, will do better than a big party. However, I give the Government every credit for what they are doing to assist prospecting. It is much better to have our population in the back portions of the State than in the cities. Besides, there is always the chance of a prospector opening up a new field; and we know what that means to the State and the railway system. I hope that the few points I have mentioned will be dealt with by the Minister when replying, particularly my question as to the number of men who have been pulled out of the mining industry in the prescribed area as a consequence of the medical examination imposed by the mining legislation passed last session. Further, I trust the Minister will state what provision has been made, or what steps have been taken, to place such miners on the land, or in some other healthy occupation.

The Minister for Mines: The Act has not been proclaimed.

Mr. CHESSON: Has it remained a dead letter, then? The Minister said that he would have a laboratory with X-ray apparatus established in Kalgoorlie, and that he would try to secure the Federal Government's co-operation in the matter. If the Commonwealth was not prepared to assist, the State was to go on by itself.

The Minister for Mines: It is going on.

Mr. CHESSON: The Minister ought to state what has been done. It is almost a year since the amending legislation was passed. Practical steps should be taken to bring tubercular men out of the mining industry, not only for their own sakes, but also because they are a menace to other miners.

Progress reported.

House adjourned at 10.37 p.m.

Legislative Council,

Wednesday, 3rd October, 1923.

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The PRESIDENT took the Chair at 4.30 p.m., and read prayers.

BILL—SUPPLY (No. 2) £1,050,000.

Read a third time and passed.

BILL — RECIPROCAL ENFORCEMENT OF MAINTENANCE ORDERS ACT AMENDMENT.

Third Reading.

The MINISTER FOR EDUCATION (Hon. J. Ewing—South-West) [4.35]: I move—

That the Bill be now read a third time.

Hon. A. LOVEKIN (Metropolitan) [4.36]: I am sorry to occasion further discussion on the Bill. After going into the matter further, I am so satisfied that the measure will hinder rather than assist the operations of the existing legislation in Western Australia that, if necessary, I intend to divide the House on the third reading. During the discussion of the Bill at the second reading stage and in Committee, I pointed out that the Bill runs practically upon parallel lines with the Interstate Destitute Persons Relief Act. Under the terms of the last mentioned measure, the department here has been working well for many years,