

Question put and a division taken with the following result:—

Ayes	..	..	..	17
Noes	..	..	..	6

Majority for .. 11

AYES.

Mr. Bath	Mr. Munsie
Mr. Collier	Mr. O'Loughlen
Mr. Gardiner	Mr. B. J. Stubbs
Mr. Gill	Mr. Swan
Mr. Green	Mr. Turvey
Mr. Johnston	Mr. Underwood
Mr. McDonald	Mr. A. A. Wilson
Mr. McDowall	Mr. Foley
Mr. Mullany	(Teller).

NOES.

Mr. Lefroy	Mr. A. N. Plesse
Mr. Male	Mr. F. Wilson
Mr. Monger	Mr. Layman
	(Teller).

Question thus passed.

House adjourned at 4.58 a.m. (Thursday).

## Legislative Assembly,

Thursday, 26th September, 1912.

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

### QUESTION—SAVINGS BANK, STATE AND COMMONWEALTH.

Mr. WISDOM asked the Premier: 1, Is he in a position now to state how far negotiations have gone with the Commonwealth Government in the matter of the State Savings Bank and the nature of any agreement which may have been

made? 2, In the case of no arrangement having been made, what are the Government's intentions with regard to the future of the Savings Banks?

The PREMIER replied: 1, Negotiations are now proceeding. 2, This question cannot be answered until finality is reached.

### BILLS (2)—THIRD READING.

1, Public Service Amendment.

2, Fremantle Harbour Trust Amendment.

Transmitted to the Legislative Council.

### BILL—SHEARERS AND AGRICULTURAL LABOURERS' ACCOMMODATION.

Report of Committee adopted.

### BILL—RIGHTS IN WATER AND IRRIGATION.

#### Second Reading.

Debate resumed from the 24th September.

Mr. THOMAS (Bunbury): It affords me a great deal of pleasure to have an opportunity of taking part in the debate on the Bill, for a variety of reasons, one of which is that it is a proposal the principle of which is approved by both sides of the House. There may be some little details in respect to which a small measure of disagreement will be manifested, but the great broad principle of the necessity for irrigation in this State is generally approved by all, and I trust when we reach the Committee stage, and these small details have to be adjusted, it will be done in an amicable spirit. The Bill is of far too much importance to Western Australia to allow of party feeling to creep into its discussion. Hitherto the development of Western Australia, if I may say so, has gone along the lines of least resistance. Previous Governments have opened up wheat belts and developed Western Australia in various directions, but it has been the proud privilege of a Labour Government

to introduce this, one of the most important measures yet introduced into this Parliament, and if it be carried into effect, if it be pushed vigorously forward, as I make no doubt it will be by the Minister in charge of the Bill, he will earn for himself a lasting reputation. The introduction of the Bill marks a new era in the development of Western Australia. When we remember the figures quoted to us by the Minister for Works the other evening, it opens up a vista of almost unlimited possibilities. It almost intoxicates one's imagination to think what really can be done for Western Australia by the development of a vigorous irrigation policy. I listened to the member for Murray-Wellington very closely when he was addressing himself to the Bill, and I was pleased to note that, with some few exceptions, he approached the question in a broad spirit and dealt with it in the manner which the occasion demanded. I want to draw attention to one or two little things to which the hon. member took exception, because in several instances he was, I think, slightly mistaken. He spoke about the question of small streams and creeks running through one's property, and declared that one would lose one's control of these water courses by the fact of this Bill passing. He seemed to be under the impression that it would be the object of the Government to take control of every swamp and water course which might happen to be upon one's property. In looking carefully through the Bill I find that Clause 4, Subclause 3 provides that in the case of any stream rising on one's property, it cannot be interfered with by the Government until after it has passed the boundaries of that property. This clause, I think, will be found to provide a fair amount of protection for those interested. The hon. member also declared—although I do not think he was quite serious on this point—that by taking over these rights the Government would interfere with the private individual who might be going in for a little irrigation on his own account, and the hon. member spoke of the possibility of a man run-

ning two or three or a dozen little irrigation schemes on his own property. Personally, I do not know of any such instance in Western Australia. The hon. member also seemed to set his mind a great deal on the question of compensation. He appeared to think it was unjust for the Government to enter in and take control of these rivers, because it was possible that by so doing they might interfere with some imaginary right now possessed by some individual. However, in the interests of the people as a whole the Government will be quite justified in doing so, and there is no individual who can carry on irrigation in his own little way to as much benefit to himself as he could if his private scheme became part and parcel of a larger scheme initiated by the Government. So the loss, if any, would be very little to the individual, while the gain would be enormous to the community, and in this case an individual must take second place to the welfare of the community as a whole. Even supposing that one should have a property fronting on a river; that in itself does not give him the right or power to use the whole of the water in that river. The individual a little lower down the stream has the right at common law to apply for an injunction to restrain the settler located higher up the stream from using an undue quantity of the water.

Mr. George : It is merely a question of riparian rights.

Mr. THOMAS : Yes. I am trying to point out that under the existing conditions an individual has not unlimited right to the use of any particular stream if the gratifying of his desires is likely to prove a disability to anyone lower down. The rights to the water are common rights to all with a frontage on that water; so when the Government take charge of the water it will not prove to be any great disability to individuals. I have made some inquiries as to the manner in which these questions are dealt with in other States, and I have been informed on good authority that in every similar Bill in every Parliament in Australia practically the same provisions are made, because it has

been found that unless the Government are given complete control it is impossible to carry on any comprehensive scheme of irrigation. In those circumstances, I cannot see that any very great hardship is likely to be placed on the land-owner by the passing of this Bill. I know that there are one or two debatable provisions, such as the question of leasehold in preference to freehold, and the contention that all repurchased land should only be let out on leasehold principles, but that is a point we need not discuss at any great length just now; we can deal with it in detail when the measure is in Committee. In regard to the general benefits that may be derived from the introduction of the Bill, we have been supplied with some very interesting information by the Minister. He gave a number of figures which are intensely interesting to me because they relate very largely to my district, and the country bordering on the electorate I have the honour to represent. Taking the Collie-Roelands water scheme which will be used for the one purpose of supplying Bunbury with one million gallons per day for a domestic service, there are three schemes: one which will provide power to conserve 100,000,000 gallons, the second 400,000,000 gallons, and the third 40,000,000,000 gallons of water.

Mr. Underwood: Hear, hear.

Mr. THOMAS: I am glad to hear that interjection from the learned member for Pilbara, because I regard him as an irrigation expert because of the experience which he gained at 20-Mile Sandy. I have been reading up the figures in connection with the Burrenjack scheme in New South Wales, and I find that they are able to conserve there 200,000,000,000 gallons of water. The water passes through about 1,000 miles of pipes and drains, and it is anticipated that it will irrigate 300,000 acres of land. If those figures are correct, and I have no reason to believe they are otherwise, comparing them with the figures quoted for the Collie-Roelands-Bunbury scheme, I find we will be able to conserve by this one proposal one-fifth of the quantity of water they are able to impound in that gigantic scheme in New South Wales. Consequently, if they are able to irrigate 300,000 acres along the

banks of the Murrumbidgee, we should be able with this one scheme alone, having its source near Roelands, to irrigate 60,000 acres of land in the South-West.

Mr. Male: Would it not depend on the condition of the land; is it suitable?

Mr. THOMAS: Yes. I am not prepared to say exactly how much of the land is available for that particular purpose, but I have no doubt that there is an ample area there, as much as can be utilised for many years to come. As I understand the Minister, the Government propose, as far as they can, to establish one of the smaller schemes to commence with, and to irrigate two or three or four thousand acres, and that basis can be enlarged upon continually without making any loss, until the time arrives when the larger area can be utilised, and then the bigger scheme can be established. I understand that this is not a policy that can be introduced *holus bolus*, that it is not possible to settle an enormous area in a short time, and I think it would be wise that in this matter we should progress somewhat slowly, so that we may have ample opportunity of testing the possibilities of the soil before any very great expenditure is embarked upon. I have it on the authority of an expert that between the Serpentine River in the North and the Collie River in the South there is sufficient water available for irrigation to provide for 120,000 acres of land, and I have also the statement of another expert that the land I am referring to in the South-West, carrying an unimproved value of at least £10 per acre—the rich alluvial areas immediately adjoining some of the river banks—will, when water can be made available, have a value uncleared and otherwise unimproved of £20 per acre. The hon. member for Murray-Wellington may smile, and think those figures ridiculous, but I am quoting the opinion of a gentleman who would command the respect of all, and whose opinion is well worthy of consideration in connection with this matter. At any rate, I am prepared to accept a good deal of what that gentleman has said.

[*The Deputy Speaker (Mr. Holman)*  
took the Chair.]

Mr. O'Loghlen: I do not think he is farming.

Mr. THOMAS: If he is not farming, he has done a good deal of it. The hon. member must not forget the fact that at the Brunswick farm there is an area of 30 acres under irrigation, and I have been informed by Mr. Connor that it has received no manuring of any description, nothing but lime and water, and yet we see that they are able to get off that area eight cuttings of lucerne per annum of one ton per acre per cutting, and the value of that crop has been estimated for one year at £64.

Mr. George: I have had cuttings like that on sand.

Mr. THOMAS: That may be so, but does the hon. member wish to tell me that rich alluvial soil which will produce £64 per acre per annum is not worth £20 per acre?

Mr. George: The Brunswick farm does not pay.

Mr. THOMAS: I have not the slightest doubt that the farm could be made to pay and will pay in the near future, but it is used as an experimental farm for the benefit of others, and under those conditions it would be unreasonable to expect that it could be made a highly profitable proposition. One of the great advantages for the South-West, or of any part that can get the benefit of irrigation, is the fact that this policy will bring about closer settlement and intense culture. There is no doubt in my mind that the people of the South-West have a very sound grievance against previous Governments. Whilst the wheat belts have been exploited, and other parts of the State have been pushed forward, the South-West with its magnificent possibilities, its grand climate, and rich soil, has been almost entirely unattended to. No portion of what should have been done has been done towards developing the possibilities of that country.

Mr. O'Loghlen: That is why you are here.

Mr. THOMAS: I believe that the hon. member is largely right; the neglect of the previous Government opened the eyes of the people of the South-West and they

turned down the Liberal candidate and sent me here to represent them. For years past we have heard regrets expressed that so much money has been sent out of the country for dairy produce generally, and the Minister for Works repeated figures which we had heard frequently before, as to the exact amounts paid for imports. There can be no question that this is a very regrettable state of affairs, and in introducing this Bill as a preliminary step towards a vigorous irrigation policy, the Minister has taken the only course possible to check that vast amount of money which is flowing out of the country at the present time. We have the soil, the climate, and all the possibilities for the initiation of a successful dairying scheme, and the only thing we need according to my way of thinking is a little Government assistance in various directions.

Mr. Male: And the people to work the land.

Mr. THOMAS: I have not the slightest doubt that once we provide the conditions we will find the people to work the land. In fact I understand that one individual proposes to come to the West and start dairy farming with a herd of 500 cows somewhere in the district represented by the hon. member for Murray-Wellington. If we are to get the full benefit from irrigation and the soil such as we have in the portion of the State I am speaking of, it will be necessary for the Minister for Lands to initiate a special policy to deal with this matter. In my own opinion, and in that of men who have been settled on the land in this district for a number of years, 30 or 40 acres would be ample for any individual with a wife and family to make a comfortable and prosperous living. If we can irrigate this enormous area, and induce the Minister for Lands to initiate a policy of rendering suitable assistance to intending settlers, such as supplying them with dairy cattle and stock, and assisting them in their early efforts on their farms, it should be only a few years before we have a great number of settlers entering the dairying industry, which would bring prosperity not alone to them and the dis-

trict but to the whole of Western Australia. If the figures I have quoted are correct, and it is possible to irrigate 60,000 acres, and 20 acres of irrigated land is sufficient for an individual to make a good living on, this irrigation policy should be the means of settling 2,000 families on the land in that district, to say nothing of many other districts that can be settled by the same means. That would mean a very largely increased population and greater prosperity for all. In addition butter factories, bacon factories, canning factories, and industries of various description would spring up in the district. I have been informed, in discussing this question with the member for Pilbara, that the possibilities of irrigation in the North-West are much greater than have ever been anticipated. I dare say the member for Kimberley who represents portion of that territory knows a great deal more than I do about it, but it often happens that where there is a scanty rainfall, the soil is of a very high quality, and if, even on limited areas, irrigation could be supplied in portions of the North-West it would go a long way towards solving many of the problems that exist there to-day.

Mr. Male: I prefer to go down to the South or South-West for a start.

Mr. THOMAS: If the hon. member is satisfied for the Government to centre the whole of their attention on the South-West I, as one of the representatives of that favoured district, will raise no objection.

Mr. Male: I think it is a right policy for a start.

Mr. THOMAS: One of the things also that will be necessary, in order that the people should be able to utilise the full benefits of these streams, is that some method of scientific teaching should be provided for the farmers. I understand that the Government have some such intention, but so far as it has not materialised. I trust that in some centre in the South-West—I should think somewhere on the Brunswick farm—there might be established an agricultural college, because I am satisfied that, even with all the facilities of expensive irrigation

schemes and what else we might think of, unless all these forces of nature are used to the greatest possible extent and used scientifically, we shall never get the benefits which we should derive from the expenditure. There is no other occupation that needs scientific teaching and training more than that of farming, and yet throughout Western Australia hitherto, very little has been done to place the opportunity of acquiring that knowledge within the reach of the man struggling on the land. I trust the time will not be very far distant, after this Bill has received the approval of Parliament—

Mr. O'Loghlen: We have more experts than the other States.

Mr. THOMAS: I do not know what experts the other States have, but we may not have the same opportunities of disseminating the knowledge to the people requiring it as some of the other States. It seems to me that with a vast population settling on the land, making homes and developing a new country, nothing is more essential than that they should be provided with the best means of acquiring the most up-to-date knowledge in the occupation which is going to do so much to create the future prosperity of this State. I do not desire to discuss this Bill at any greater length. It is a kind of Bill to which one cannot do otherwise than give one's entire approval. I consider the provisions of the Bill are in every way excellent and democratic; protection is given right throughout the Bill in a reasonable manner to the landowner, and full protection is given also to the interests of the community as a whole. I think when it comes to be discussed clause by clause, very few serious faults will be found with it. As I said at the outset a very great deal of credit is due to the Minister who introduced the Bill. After many many years of waiting while Liberal Governments, the supposed advocates and supporters of the farmer have been in power, absolutely nothing has been done to further the schemes of irrigation in Western Australia, and it comes to the lot of a Labour Ministry a few months after attaining power to introduce a Bill which will enable us to em-

bark upon a vast, comprehensive irrigation policy. It seems to argue strongly that the present Ministry have the true interests of the people on the land at heart.

Hon. Frank Wilson: What about your party aspect now?

MR. THOMAS: I am referring to the Bill, and the great policy which it makes provision to initiate and carry into effect, and I am giving the credit to the party to which it belongs. I trust the hon. member does not object if one gets on to the political barnyard fence, and flaps one's wings vigorously and does a little crowing. We are entitled to do so. This is a big occasion. I consider that nothing better has been introduced into this Parliament. I am proud that this Bill has been introduced by a Labour Ministry. If the Minister has the courage, and I believe he has, to carry this Bill through and use the opportunities vigorously for the development of the country, he will leave a reputation behind him that will last for very many years to come. This opportunity has been dangling before the eyes of other politicians for a long time, and has not been seized. To-day marks the advent of a new era in the prosperity of Western Australia, and I am proud that all the credit attaching to it belongs to a Labour Ministry. I feel sure that when the leader of the Opposition criticises the measure he will, with his usual generous spirit, give the Minister full credit for his efforts. I wish the Bill a prosperous course through this House with very little alteration, and I sincerely trust that it will be carried in another place, and I hope soon to find the Minister for Works vigorously pushing forward this policy so that in the near future Western Australia may be deriving the benefits from these irrigation schemes.

MR. MALE (Kimberley): I would like to say a few words on this Bill. The Title of the Bill gives us a fair idea as to its scope and intentions. We find that it is to determine the rights in our natural waters and to make provision for the conservation and utilisation of water for industrial irrigation, and for the construction, maintenance, and management

of irrigation works, and also incidentally for other purposes. It will therefore be seen that the primary objects of the Bill are to give the Government absolute control of all the natural waters of the State, and to empower the Government to use these waters, or to cause them to be used by a board or some other body for industrial irrigation. That the Government should have such power to control our natural waters is, I think, recognised as necessary by all of us, and, further, the need of our natural waters being stored and controlled and regulated is every day brought more and more clearly before us when we hear and read and understand the wonderful results which have been obtained by irrigation in other countries such as Egypt, India, America, Java, and even on a small scale, in the Eastern States. We, more especially in the South-West portion of this State are favoured with a good rainfall, but unfortunately at the same time we are faced with a long dry summer. To obtain the best results from our lands in the South-West district, and to be able to initiate the dairying and other kindred industries which go with it, we ought to recognise that we can only do so by some systematic and general principle of irrigation so that we can get these valuable lands watered in the summer months, and instead of, as at the present time, having no feed for our stock during these months we shall have a plentiful supply of green fodder, and thus be able to keep up the supply of milk and cream necessary for the starting of butter factories, and other industries. The member for Bunbury in the course of his remarks took occasion to point out that nothing had been done in connection with irrigation in this State, and that the present Labour Government were the first to step into the breach and to do anything in connection with this matter. I think that I am right in pointing out to the hon. gentleman and to this House that previous Governments have done something, and have not been entirely ignorant of the matter. It was not possible in the earlier days of this State with a small population, and very few people on our land, for any Government to start out on a

vigorous policy of irrigation. We first had to feel our way. We had to find out that our land was capable of and suitable for irrigating. We had to find out that we had the necessary water, and I think some credit is due to the late Government for the efforts they made in carrying out the preliminary work in connection with irrigation in this State. Some years ago they put into operation in a practical form—true, only in a small way, but these things can only be started in a small way—a scheme for the assistance and encouragement of irrigation amongst our farmers. Little was done, it is true, until irrigation was started at the State farm at Brunswick, and there the late Government, and not the present Government, demonstrated to the people of this State what could be done with the assistance of an irrigation scheme. If I remember rightly, some two years ago when I made a visit to the State farm at Brunswick I was informed by the manager that they had cut as much as 60 tons green weight of lucerne per acre on the irrigated plots. What has been accomplished at Brunswick in a small way I feel sure can be done and will be done elsewhere, and on a larger scale. To further assist in that developmental work, let me point out that the late Government appointed Mr. Scott as our irrigation expert, and after Mr. Scott demonstrated to us that he understood irrigation work, inasmuch as the work he did at the Brunswick farm, we all must admit, was eminently successful, and after he had demonstrated that our lands were capable of irrigation what did the Government do? They made Mr. Scott's services available to any settler wishing to start a similar scheme, with the result that at the present time we have in the South-West portion of the State a number of small private irrigation schemes that have been started as a result of the work of the late Government, and not of the present Government. With the rainfall which we have in our South-West district, with the climate and the soil which we now know we possess, it does seem monstrous that we should be continuing to import from the Eastern States the whole of our supplies of butter, bacon, eggs, tinned milk, and other similar products such as were referred to by the

Minister when introducing the Bill. We have, as we know, all the facilities and all that is necessary lying at our very door waiting for development. The Eastern States and other countries have seen the necessity for placing the control of all water and irrigation schemes in the hands of the Government or of a board, presumably appointed by the Government, so that the waters may be used to the very best advantage. Further, by having the full control of our streams, it gives them the opportunity to initiate large schemes and put them in hand so that they may be constructed on a scale which will be most economical and most easily worked. I think we all admit that a Bill that will assist in doing that, or whose general principles tend towards that end, should meet with the approval of the House; and for that reason the Bill before us is worthy of our attention. Our agricultural and fruit experts are telling us daily of the need for irrigation. Whether it be for fruit growing or for dairying, it is equally needed. They assure us that these industries cannot be properly developed in this State and that they cannot meet with the success to which they are entitled until we have irrigation schemes made available for our settlers. It seems to me the Bill savours very much of confiscation in some parts; and until the Minister has given us more information, we shall hardly be able to allow a number of the clauses to pass through without considerable discussion. As individuals we give up our rights slowly and reluctantly, and as landholders our riparian rights have always been regarded by us as something sacred, and we must see considerable justification before we shall willingly part with them. With farming and agricultural districts so well represented in the House, we can very well leave the Bill in its aspect relating to irrigation schemes in the south-western districts to the members representing those districts. Many of them, I believe, are landholders and many of them are practical farmers, and they should be able to tell us, so that we may realise it, how the application of this Bill will affect their particular portion of the State. Although the Bill was evidently introduced and intended for the purpose of

handing over to the Government the control of our own rivers, to enable them to construct irrigation works, yet I find that advantage has been taken to squeeze in a number of clauses referring to artesian bores and the control of artesian bores. The clauses referred to cannot of themselves be the result of our own experience; they cannot have been drafted on experience gained in this State, or through circumstances which have arisen here necessitating them. The question of the control and management of artesian bores is really a matter foreign to irrigation, more especially as experience has proved in other countries that more important results can be obtained from the use of artesian bore waters in connection with pastoral pursuits than in connection with agriculture.

Mr. McDonald: That is not the experience in Colorado.

Mr. MALE: In fact, I believe the water is very rarely suited for irrigation purposes. If my memory serves me correctly, I think it was only two or three years ago when a claim was put in against the Government, or the people controlling the artesian bore at Claremont, for the destruction of a garden over which the artesian water flowed destroying the vegetation in that garden. Therefore, if we refer to our own experience, I am afraid we shall find that for irrigation purposes artesian water is not particularly suited; and I would therefore like to emphasise this fact as being important in the consideration of this Bill, and I would ask members not to confuse the issue, not to regard artesian bores as methods of irrigation, but rather to regard them as methods of obtaining water for opening up our great pastoral areas. That the Government should have power of control over subterranean waters I do not for a moment question, but I do not go so far as to say that they should also have the powers they ask for over the artesian bores on our pastoral lands. The powers asked for in this Bill seem to me unusually severe. The Government wish to grant themselves the right to use and control the flow of all artesian wells and subterranean waters, and they further seek very severe powers of dealing

with artesian wells that are already constructed, whether privately or otherwise, as well as over those not yet constructed. A most interesting report has been issued by the Inter-State Conference on Artesian Water. We have been supplied with their preliminary report, and a careful reading of this will clearly show that the recommendations of that conference are not in themselves unreasonable. They are for the purpose of obtaining complete information in regard to artesian water and to prevent the unnecessary multiplication of bores. I wish to quote one or two paragraphs from their report. One of the reasons they recommend for giving artesian bores into the control of the Government is—

In order that complete information in regard to artesian water may be available, we strongly recommend that legislation be enacted to prevent any private individual putting down a bore without first having obtained a license. These conditions are already in force in New South Wales and Queensland, and it is most important that they should be adopted by the other States. That I quite agree with. I think it is quite right and proper that the Government should have all the information in connection with our bores. Further on we find the report says—

In those States where no provision has already been made by legislative enactment to prevent the unnecessary multiplication of bores, due provision should be made to secure the effective conservation of the underground water resources of the basin. For this purpose a board, composed of competent officials, should be placed in control of existing bores in each State and no new bores should be allowed without its authority.

That sounds to me quite reasonable. They say "legislative enactment to prevent the unnecessary multiplication of bores." That is the point I wish to impress on the House. They say further on—

Experience has proved that results more important to the community at large can be obtained from artesian water, in connection with pastoral



pursuits, than in connection with agriculture. It is believed that, if agriculture on a large scale were permitted with bore water in what are now regarded as pastoral districts (assuming that bore water can be advantageously used for this purpose), the demand would become so great that it would result, within a very short period, in the depletion of the flow to such an extent that sufficient water would not be available for pastoral purposes. We have been much impressed by the success of the operations under the New South Wales Water and Drainage and Artesian Wells (Amending) Act of 1906. These operations have resulted in obtaining the maximum usefulness of the water from each bore, and, at the same time, avoiding the waste which would ensue from the unnecessary multiplication of bores.

They say nothing about the control of the water from the bores that are already running, but where they fear waste will occur is in the unnecessary multiplication of these bores. Further, the report says—

In Queensland many bores are utilised for the production of power, by means of turbines, Pelton wheels, and other hydraulic prime movers, for *inter alia* operating sheep shearing, electric lighting, and wool-scouring plants, and also for domestic purposes. While we are of opinion that the most important primary use to which Australian artesian water can be put is in connection with the pastoral industry, we also think that its legitimate use for the above-mentioned purposes may be sanctioned.

That is reasonable also, because now we are using bores for the water supply in some of our towns. Another paragraph in their report says—

We are of the opinion that, where necessary, legislation should be enacted in order to ensure the effective control by the States of all existing and future bores within all artesian basins. Inasmuch as the interests of several States are involved with regard to

more than one of the artesian basins, we would recommend that any future legislation be drafted upon the lines of the Acts already in existence in New South Wales and Queensland, where provision is made for the granting of licenses for bores, for the supervision of boring methods, and for the periodic examination of all existing bores.

It seems to me the powers asked for in the Bill before us are very much wider than the powers referred to in this report, and it does not appear to me that the powers asked for, if they are given, would need to be exercised with considerable knowledge as well as with considerable care. Not only does the Minister ask for the control of the new bores, but he also seeks similar powers over those already in existence. Among the powers asked for is the partial closing of a bore if necessary. This is a power that would need to be exercised with considerable care and with a great amount of knowledge. I believe it is an understood fact that when a new bore is put down it should be allowed to run freely for a considerable time, otherwise there is a danger of its becoming silted up and the flow of the water stopped. Then again, in an old bore, unless special appliances have been used in its construction in the first instance, it would be a very expensive matter to fix appliances to control the water from that bore. I think experience has shown in nearly all cases that in the old bores the casing has disappeared owing to corrosion, more especially near the surface. That being so, it would be impossible to fix a cock to the piping which has already disappeared. In the case of one bore in the Carnarvon district, where the owners tried to control the water by fixing a cock on the bore, that presumably owing to corrosion or leakage in the casing somewhere, the bore water sprang up 30 or 40 yards away from the actual bore-hole, and it was impossible under those circumstances for anyone to control the water. In this connection, to satisfy the whim of a Minister, the owner might be put to considerable

expense and perhaps render useless the bore in existence. The conference pointed out that for pastoral purposes artesian water can be used to the best advantage. I maintain that a full supply is required; in fact, that is the only inducement in going to the expense of putting down the bore costing probably between £2,000 and £3,000. The inducement is to get a flow of water running into a natural dry creek, or into artificial drains which have to be constructed and which run long distances through pastoral land, so as to open up and make available large tracts of country, which, under other conditions, could not be put to any use. In every case where bores are put down on pastoral leases, the flow is required throughout the year, and in the Carnarvon district there are places where the drains run as far as ten miles, and pass through as many as five paddocks, each carrying 3,000 to 4,000 sheep. It is obvious, therefore, that any restriction of the flow of that particular bore would be that the water would not reach the last paddock, and a heavy loss would be the result. In these cases if the flow should be restricted and the water could not run the full length of the drain, the necessity would arise for other bores to be put down. This would defeat the recommendations of the Interstate commission, who wish to avoid waste of water, not from the actual flow of the bore so much as from the unnecessary sinking of too many bores, and further, by doing that, by making men put down more bores than are actually required, we would cause a considerable capital expenditure which is really absolutely unnecessary, and probably owing to that enormous capital expenditure which would be required, we would render it impossible to put down bores at all. It appears to me, on considering this Bill, that as regards bores on pastoral leases all that is required by the Government is that the Government should issue a license before a new bore could be constructed. Once that new bore had been constructed—and I am only referring to bores constructed for pastoral purposes—the owner should be exempt from other provisions of the Bill. Again, we find

that the Minister requires power to compel an owner to fix a meter on his artesian well, and if he thinks fit, that payment shall be made by such owner or occupier at a prescribed rate for all water delivered, in excess of a certain quantity. Again, it does seem to me a monstrous thing that if, after spending up to £3,000 in putting down the bore to improve the country and make it possible to use that country, the Minister should have the right to prescribe the quantity of water a person should use, and then to be able to make him pay a prescribed rate for excess water. That seems to be a most unreasonable thing. Such a policy put into operation would be an absolute bar to putting down any more artesian wells. I am justified, I think, in looking at the position from perhaps an extreme view, in order that I may make my point, and that the House may understand. I think on this and on other matters we want more information. We want to know to what extent these provisions are going to be applied, and without that information it will be very difficult for us to agree to the measure. In dealing with this Bill so many new questions are brought before us—that is, questions new to existing legislation—that personally I should like to see this Bill sent to a select committee, not for the purpose of delaying its progress through the House, but that we might get further and fuller information on many debatable points, information such as we cannot expect the Minister to be in a position to supply. The Minister has not the knowledge, and neither has he the experience, but if we have the opportunity of examining, say, our fruit and agricultural experts—

The Premier: You can always command evidence from them, besides the Minister has given it to you.

Mr. MALE: I think if we had the opportunity of examining these experts, I am certain we could obtain from them valuable information, and further, in connection with artesian water supplies, if we had the opportunity of examining an expert like Mr. Gibb Maitland, and also the Engineer-in-Chief and the Engineer in charge of Water Supply—

Mr. Underwood: What do you want to examine Mr. Gibb Maitland for?

Mr. MALE: For one reason that he was a member of the Inter-State commission, and we could get reasons for this report from which I have read extracts.

Mr. Underwood: The reasons are in the report.

Mr. MALE: There are reasons in the report, but we could get further information from him.

The Premier: His reasons would only confirm the decision of the commission.

The Minister for Works: The Bill has been submitted to all the experts you have mentioned, and has been endorsed by them.

Mr. MALE: We had something last night which was endorsed but we did not get any information about it. I think it would be much more satisfactory to get the information as well as the endorsement.

The Minister for Works: We will run the country with select committees.

Mr. MALE: On the question of artesian basins, Mr. Gibb Maitland and the engineers can give us more information than the Minister.

The Premier: Go along and see them; why waste money on select committees?

Mr. MALE: I want the information, not only for myself but for the country generally.

The Premier: Then get it from them and give us the benefit of it.

Mr. MALE: This is an important measure, and I appreciate that fact, and that is my reason for endeavouring to get all the information possible on the subject. It should receive something more than passing consideration, and I believe that a select committee on this Bill would give it far more publicity than it has received up to the present time. Bills are presented to the House, the importance of which is not sufficiently realised or understood by the people. The select committee would also give us the opportunity of examining some of our agriculturists, some of our squatters, some of our fruit growers, and some of our dairying people. We could get them to tell us from their point of view how this Bill when applied, is going to affect them, and I am certain that the information gained by such

means will be of value, not only to us but to the Government.

The Premier: A very special select committee has already sat on this Bill.

Mr. MALE: I believe that the appointment of a select committee would assist to remove the prejudice which exists against this Bill, and we have every reason to believe that there is prejudice against it, even after hearing the speech of the member for Murray-Wellington who referred to the questions of confiscation and compensation. Members will have seen that some newspapers have pointed out the danger of confiscation without compensation, and that is bound to create a prejudice, probably wrongly, which I am sure the appointment of a select committee will do much to remove. The select committee would also assist to bring about the easy passage of this Bill through the House, and it would further assist to make it a good workable and valuable measure. I trust that the Minister in charge of the Bill will give this question his consideration, and I feel certain that so far as a measure of this nature is concerned—a measure which is new to all of us, and perhaps still more so to the people in the country, the more it is ventilated and the more it is discussed, the better it will be in the end for us and for those who may have to administer it.

Mr. TURVEY (Swan): The hon. member who has just sat down made a remark last night about legislation run mad. So far as the hon. gentleman is concerned, however, it seems to be with him a matter of select committees run mad, for here we find him advocating the appointment of another select committee.

Hon. Frank Wilson: Properly so too.

Mr. TURVEY: Is the policy of hon. members opposite such that every Bill that is introduced in this Chamber needs the appointment of a select committee?

Mr. Male: It is not a new idea in the House of Commons.

Mr. TURVEY: As the Minister in charge of the Bill has pointed out he has consulted all the authorities, and I would think very little of him as a Minister if, before launching this measure, he had not

taken the trouble to consult the gentlemen to whom the member for Kimberley has referred. I congratulate the Minister for Works on tackling this very deep problem, and on placing the Bill before the Chamber. I realise that it is a Bill fraught with the greatest importance to the State, and it is a pity that in the past some attempt has not been made to reserve the natural watercourses and the banks abutting on them.

Mr. A. E. Piesse: The banks have been reserved for 30 years past.

Mr. TURVEY: It is evident that we are going to have a revival of the trouble which they had in the Eastern States and in other parts of the world. Pioneers have settled on the various basins of rivers, brooks, and streams, and they have gone in for a scheme of intense cultivation. It is quite natural that when they think their rights are to be taken away from them they should express a considerable amount of doubt. But the experience of irrigation in older countries shows that there has always been this difficulty. If we desire to ascertain the result of irrigation, and the difficulties which have had to be overcome, we need to go farther afield than the Eastern States, to go to some of the older countries of the world, where irrigation has been practised from the earliest ages. If we take such countries as Egypt, India, and China, we find they each had the same trouble, and therefore credit must be given to any Government game to tackle this problem and acquire these rights. Such an important duty should not be neglected by any Government, Labour or Liberal, because the longer this matter is delayed the greater the trouble, the greater the difficulty in contesting against vested interests. In India and Egypt to-day, according to eminent authorities on irrigation, no one would dare to contest the Government's right to possess the natural watercourses. These countries, together with Italy and Spain, have set an example to the world in irrigation matters. The examples of these countries prove to us that there has always been trouble in the initial stages. I agree that we are going to have the

same difficulty here. There has always been a difficulty in every country in getting the settlers to submit to the public control of natural waterways, but it has been clearly proved that once this has been adopted it is always maintained; perhaps for this reason more than any other, that unless there is public control of the waterways, a settler is apt to quarrel with his neighbour over the irrigation rights. Once public control is effected, however, then the quarrel is not so much with the neighbour as with the Minister and the departmental officers responsible for carrying out the scheme. In America a scheme of public control of irrigation is being evolved. Frequently trouble occurred there when restraint was imposed upon the people over the use of the water in some stream. Mr. Elwood Mead, an eminent authority on irrigation, touching upon this difficulty in getting the settlers to submit to public control, relates that a canal owner in California was asked how he managed to protect his right in seasons of shortage. The answer was that first of all he had obtained a legal decision establishing his right to the water, and, secondly, he had shipped in two men from Arizona who were handy with a gun, and that between the courts and the guns he was able to get his share.

To this Mr. Mead adds this comment—

Peace and prosperity for the individual and community alike depend upon public control of the streams, and the enforcement of laws by men of experience and administrative ability of a high order. The greatest weakness of American irrigation has come from the failure of the people to recognise it. In the State of Wyoming all waterways are public property.

In Italy the ethics of irrigation have reached the most advanced stage, and there, apparently, it is thought as discreditable to appropriate an unfair supply of water as it would be to steal a neighbour's horse. There in the plains of Piedmont and of Lombardy they show how artificial control of natural water supplies is capable of effecting a very big increase in land values and in cultivation returns. If we take the experience of

Egypt, the oldest country in the world so far as irrigation is concerned, we find that before a real control was exercised by engineers over the distribution of water, the settlers used to adjust their difficulties amongst themselves in that respect by brute force. But it is very seldom now that any agriculturist in Egypt would take the law into his own hands in matters relating to water supply. The member for Murray-Wellington smiled incredulously when the member for Bunbury quoted certain figures from a West Australian authority. It is usual for the member for Murray-Wellington to sneer in his sarcastic way at the statements and arguments of hon. members on this side of the House. In case the local authority referred to by the member for Bunbury is not sufficient to convince hon. members on the Opposition side, I will take the opportunity of quoting figures from the most eminent irrigation authorities in the world to show the increase in land values which has taken place as the result of irrigation. The effect of irrigation in the United States is thus described by Mr. Elwood Mead in a paper read by him before the International Engineering Congress of 1904—

Since 1900 the arid region has enjoyed great prosperity. There has been an increase in western settlement, and the values of both land and water have had rapid and continued advance. Land in the Yakama Valley, Washington, which could have been purchased five years ago for 15 dollars an acre now sells for 75 dollars an acre. Land in the Purlock and Modesto districts in California, which sold for 20 dollars an acre three years ago, now brings 60 dollars an acre. Water rights in Idaho, which in 1894 found no buyers at 10 dollars an acre, now have prompt sale at 25 dollars an acre.

On the same subject Mr. M. R. Collins, another eminent authority, in a paper on irrigation in the Transvaal stated—

A liberal estimate of the value of good unirrigated land would be £3 to £5 per acre. Each acre of land is enhanced in value by £25 by being brought under irrigation.

To quote a still higher authority, Sir Colin Scott-Moncrieff states in *Irrigation in Southern Europe* that in Vaucluse in the south of France the rental of good land not entitled to irrigation is about £3 4s., and, if it can procure it, it rises to about £4 3s. per acre. He further adds that irrigation causes an increase of 50 per cent. in the price of land. The result of irrigation in Spain on land values is remarkable. The average price of irrigated ground at Castellon was £140 per acre, the average price of the ground without irrigation being £10 per acre. In Murcia the price of irrigated land was £500 per acre, and of ground without irrigation £25 to £30 an acre. This eminent authority points out that land valued at from £6 to £10 before irrigation was valued at from £80 to £120 per acre after it had been irrigated. Those authorities, at any rate, should suffice in convincing hon. members of the accuracy of the figures quoted by the member for Bunbury. It may be said that these figures relate to some of the older countries; yet if we are to study the effect of irrigation, and a proper public control of the water supplies upon the community and upon land values, we must study the effect it has had in those older countries. In India 44,000,000 acres of land is irrigated. The irrigated areas in Egypt, France, Italy, Spain, and the United States total over 54,000,000 acres, and in those countries alone land which, but for irrigation, would remain barren and unproductive, furnishes the food supply for 250,000,000 of people as the result of irrigation. The result of work done in Egypt by engineers of the British Government during the past half century is an increase of the area watered by irrigation from 3,000,000 to 22,000,000 acres, representing a capital expenditure of £30,000,000, and showing a net profit of seven per cent., not accounting for indirect profit. The value of the crops raised is estimated at £26,000,000. In Western Australia, of course, we cannot expect to reach, perhaps, one-hundredth part of the figures I have quoted; but it must be realised that as such things have been possible in other countries under a system of irrigation, there are the greatest possibilities in front of this State of ours, when the

scheme propounded by the Minister for Works is brought into effect. In his second reading speech the Minister confined his remarks chiefly to the effect which the Bill would have in the south-western portion of the State. I am of opinion that the south-western portion is one of the richest parts of the State and one capable of being developed to a very high degree by a system of intense cultivation brought about by the irrigation proposals. We need not go farther than the electorate I have the honour to represent to ascertain the results in values so far as irrigation is concerned. From one orange grove, containing 53 trees 23 years old, it is estimated that they will this season take 5,000 cases. That has been brought about by irrigation. Again, an orchard irrigated in the same electorate, a small orchard of  $7\frac{1}{2}$  acres, produced last year 3,000 cases of fruit. And I could go on and cite instance after instance of where the orchardists under the system of intense cultivation, which is being carried out with their own small irrigation works, are able to produce some hundreds of pounds per acre from their holdings. If this can be done with the improvised system of irrigation which they adopt, one can imagine how much more productive the land can be made when an efficient system is introduced. I believe that in the Darling Ranges there are valleys which are capable of very great storage indeed. There is the overflow from the present Mundaring Weir in the Helena River. The Government have already some thousands of acres reserved in the catchment area, so there would be no need in those parts to repurchase property, and below the present Weir it would be possible to build a dam which would store sufficient water to flood the whole of the South-West if need be. There are the brooks in the Armadale, Bedforddale, and Canning districts, the valleys of which present great possibilities under a proper system of irrigation. I would ask the Minister to consider those orchardists who have gone into the localities I have indicated, taken up holdings of more than three acres, and are at present using these brooks for intense cultivation. I notice

that in the Bill provision is made to allow these people the right to sufficient water for three acres of garden, but most of these men—whether they are legally entitled to the use of the creek bed I am not in a position to say—have gone there believing they were entitled to it, and were it not for the fact that they knew they could so utilise the brook for intense cultivation purposes they would never have settled there. Although I realise that as time goes on, and other settlers take up land higher up or lower down the stream, they will have rights which also must be considered, I am quite convinced that the Minister, whether he be the present Minister or some other occupant of the office, would not unduly interfere with the rights of these people; but still there is that doubt in the Bill, and I would like the Minister to, if possible, make the position of these people more secure, because there is no doubt that a number of these men settled in the valleys I have referred to principally because they knew they could utilise the water for irrigation.

Mr. Nanson: Are there many cases where more than three acres have been irrigated by private owners?

Mr. George: There are many.

Mr. TURVEY: I do not know that there are many, but one instance is in connection with the little brook that runs through the Bedforddale district. Most of the settlers there have areas of more than three acres, and have gone in for a system of intense cultivation under a very simple scheme of irrigation, of which each orchardist is exceedingly proud.

Mr. Nanson: A select committee would be useful in such cases.

Mr. TURVEY: I am sure that if the Minister has not already received evidence on that point from the fruit commissioner he will take the precaution of doing so.

The Minister for Works: I have all that information.

Mr. TURVEY: Without a doubt there will be a great deal of insecurity felt by the people I refer to, and I hope that the Minister in his reply will dispel all these doubts. Still, as I pointed out, there has always been that trouble when initiating

such a scheme as this. Whether the scheme does actually interfere with them or not, it is only natural that it must appear to interfere with the rights or supposed rights of those individuals who have pioneered or blazed the track in this direction. In the Eastern States there was the same trouble, but now one can travel along any of the creeks or rivers in Victoria, and see a chain frontage on either side reserved. The farmers holding is fenced to within a chain of the river.

Mr. George: If you did that here you would take away the only part on which you could grow anything.

Mr. TURVEY: I realise that difficulty, but something must be done because although these people are entitled to be treated fairly, still there are the rights of those who come after them to be considered. I do not know for what reason the Minister has limited the area for which water can be claimed to three acres unless he has the authority of some Act in operation in the other States.

Mr. George: In England it is a chain on each side of a navigable river.

The Minister for Works: It is three acres in the Eastern States.

Mr. TURVEY: I do not think that anybody would cavil at the proposal to bring about the public ownership and control of natural waters and their sources. I have referred to the fact that in the Helena catchment area the Government already have in their possession many thousands of acres of land, and I want to draw attention to what seems to me to have been the very foolish policy of a past Government in buying out those who were settled in the catchment area. To my own knowledge the Government bought out one fairly wealthy individual who immediately bought out a smaller individual and sat tight, and he is now waiting for the Government to come along again. That seems a foolish policy to adopt. Let us turn now to the catchment areas in the Canning district. From the Victoria reservoir part of the metropolitan water supply is drawn, but there is a proposal to build a dam across the Canning river, and to my mind that is a

scheme that would be a considerable improvement on the building of a dam lower down the Helena river. I feel sure that if somewhere in the Roleystone district, at the back of Kelmscott, a dam was built across the Canning we would have there one of the biggest reservoirs that it would be possible to get in any part of Western Australia. I believe that already data has been collected by the Water Supply Department which proves that a weir built across the Canning river somewhere about Roleystone would dam up a bigger body of water than is impounded by the present Mundaring Weir.

Mr. George: That was known 20 years ago.

Mr. TURVEY: Then why was it not done?

Mr. George: We put the Victoria reservoir where it is because we had the money to do that.

Mr. TURVEY: But the time has come when we should go further.

Mr. George: I admit that.

Mr. TURVEY: The time has come when the Government must either add to the present wall at Mundaring, or build a supplementary wall lower down, or build a weir across the Canning river. In my opinion the Canning river dam would be the proper scheme, so far as a water supply for domestic uses is concerned. But I wish to point out the possibilities of such a supply for irrigation purposes. In all the Canning river districts there are orchardists settled who, under a proper system of irrigation from the proposed reservoir to which I have referred, could carry out a system of intense cultivation, and there is sufficient horticultural land in the hills district, and at the foot of the hills within 20 miles of the city to provide practically the whole of Western Australia with garden produce. I doubt if there is another capital city in Australia that has such unique advantages as this city possesses in that respect. Being surrounded by hills, possessing the richest of valleys in which is to be found some of the finest soil in Australia, it would be most difficult for one to paint a word picture of the possibilities of these districts under a proper system of irriga-

tion. I believe that if these rivers to which I referred were dammed so as to make storage, such a development would be possible.

*Sitting suspended from 6.15 to 7.30 p.m.*

MR. TURVEY: I was confining my remarks on this question chiefly to the South-West and to the districts in the immediate vicinity of the Darling Ranges and on the western slope, but I wish to point out that following what has been done in other parts of the world, it is quite possible that much of the water running to waste on the western slopes of the Darling Range might be diverted and carried to the eastern watershed to even supply some of the agricultural areas. In this connection I might point out how the scientific boundaries or tracts of country hydrographically considered, have been upset by the irrigation-engineers refusing to be bound by them. One striking instance of this is given in connection with an irrigation scheme in Colorado in the Rocky Mountains. On the western side the supply considerably exceeds the demand, but on the eastern slope of the Rockies there is much less than is needed; consequently the supply has been carried from the west in channels to the east side watershed of the Rockies and made to do duty there. This particular instance that I have cited is known as the Skyline Ditch, by which water is carried in a channel cut in the rocks around the mountain tops at an altitude of 10,000 feet and diverted to the eastern plains. If it is possible for that to be done in other parts of the world, it is quite possible that it can be done here, and while I fully realise that it may be many years before our irrigation scheme as outlined by the Minister could be carried to such an extent, still it shows what possibilities there are in even diverting the water from the western slopes of the Darling Range and carrying it to the eastern agricultural areas. The member for Kimberley confined his remarks chiefly to artesian supplies. I do not wish to elaborate in any way on what the hon. member has said in that respect, but I quite agree with him

that there are the greatest of possibilities in irrigation from such a source in the North-West of the State. I understand that the artesian supply exists principally on the western slope of the Darling Range, and further, I believe there are rivers in the North-West that are capable of being blocked and made to provide a big storage of water in the same way that blocking or damming of the river has been tried in connection with the Canning river to prevent the salt water from going up and spoiling some of the orchards and gardens situated along the river. While referring to this, I take the opportunity of drawing the attention of the Minister for Works to an old bore that was put down near Gosnells many years ago in the early stages of settlement in Western Australia and which is now interfering very much with many of the orchardists along the Canning river. I believe they have tried to stop this bore without success so far, though I understand that modern engineering skill can cope with it and can effectually block it. Still, the fact remains that that particular bore is discharging at the present time salt water into the Canning river to the detriment of some of the gardeners along that valley. I hope the Minister will make a mental note of that and get some of his officers to give attention to it and thus help the settlers whose orchards and gardens are to a degree being destroyed by the water being poured out by this bore. The member for Murray-Wellington in the course of his speech made reference to the effect that the ring-barking and clearing of our timbers have upon the supply of water. I think the member for Gascoyne interjected that eminent authorities were of opinion that the clearing or ring-barking of timber, instead of increasing the supply of water, tended to bring about a decrease. So far as Western Australia is concerned, we have ample evidence in the big catchment area in connection with the goldfields water supply that where they have ringbarked the timber the supply of water has increased. Brooks which only trickled along at certain periods of the year are now carrying water all the year round; but I wish to empha-



ise the difference between ring-barking and denuding our forests altogether, because the experience of the Eastern States has proved beyond doubt that in such districts as the mallee country of Victoria, where thousands of acres of trees have been cleared, it has lessened the rainfall. I do not wish to go into the matter of agricultural and horticultural products and the amount that could be saved when we have an up-to-date irrigation scheme. The figures have been quoted time after time, showing that thousands of pounds are continually being sent out of the State to import agricultural and horticultural products that could be produced in our own State. I believe that when this scheme of irrigation is put into full effect we will see the end of the prevailing practice of importing these commodities. Though I realise that it will be a considerable time, indeed many many years, before the full effect of this irrigation policy can show the advantages that Western Australia will derive from it, at the same time one cannot help feeling proud in the thought that at last we have a Ministry who have been firm and game enough to grapple with this very serious problem. I offer my heartiest congratulations to the Minister for Works for having initiated a scheme, which is going to be of such material benefit to this great State of ours, and though there are perhaps some details in the Bill that may require amending in the Committee stage, I shall give my hearty support to the measure as introduced by the Minister.

Hon. H. B. LEFROY (Moore) : I do not think it is likely that any member will raise any objection to the general principles of this Bill. I am sure members as a whole welcome the introduction of the measure which provides for great schemes of irrigation which are likely to be of great benefit to the State. But it is incorrect to say that the sole responsibility for the adoption of such a scheme as is outlined rests entirely with the present Government. It is necessary to work up to a scheme such as this and, in order to perfect such a scheme, certain experiments have to be made before entering upon it, and those experi-

ments were made by previous Governments for many years. They have worked up to the fruition of this scheme and the present Government are introducing a Bill to carry it out. Members know that the question of irrigation has long been before this House and has occupied the attention of previous Governments. Schemes in a small way have been started by the Government in the South-West, and we have had experiments made to test them. It is only right that these experiments should take place before the State enters upon large schemes of this description. It might as well be said that the Government of the present time should have all the credit for the construction of a railway which was authorised by the late Government. The late Government were working up to the stage for introducing a Bill such as this, and now we have a measure which in the ordinary course would have been introduced by them. The Bill may be called a beneficent measure. At the same time it gives the Crown powers which are in many ways unique and are of far-reaching effect. It virtually takes away from the individual, rights which have been legally acquired, or else it limits those rights without any offer of compensation. I trust that the House will be careful in dealing with the matter, in order to as far as possible protect the interests of those who have legally acquired rights and see that no injustice is done. This Bill does not deal with the South-West alone, it deals with the whole State, and though there are many parts of the State where it will be impossible to carry an irrigation scheme, nevertheless this Bill affects them. The Bill clearly defines what a watercourse is. It is a creek or stream of any character in which water flows in a natural channel whether permanently or intermittently. Individuals who have acquired the freehold to land in the past and have acquired the right to certain creeks which only run in the rainy seasons, are brought under the operations of the Bill just as much as those who own property on large streams with water running all the year round, or perhaps consisting of a number of large

pools. I consider that the interests of individuals outside the South-West which is eminently suited for irrigation should be properly protected. The Minister for Works knows full well there are many instances where people have diverted small streams of water, which only flow intermittently, in order to fill tanks; but under this Bill a person is prohibited from doing that; he is prohibited from diverting an ordinary brook in which the water runs in the winter only into a tank to use it for stock purposes unless he obtains a license from the Minister. Where a settler wants to put down a tank alongside a water-course in a district far away from an irrigation district, it is absurd to require that he shall first get permission from the Minister; and I hope that when the Bill is going through Committee the Minister will listen to the arguments that may be used in regard to these questions, and if possible endeavour to do away with what I may call these inconsistencies in the Bill. It is quite right that there should be some control over artesian bores because artesian water may overflow on a property. Though considerable expense may be incurred in putting down a bore, at the same time it has to be remembered that the artesian flow comes from a distance. It does not rise on the property alone, but it comes from a distance, and I think it is quite right that some control should be exercised by the State to protect any waste of that water which flows from a distance and has come from land which, at any rate, is not the property of the person who has put down the bore.

The Minister for Works: All we are after in the Bill is to prevent waste.

Hon. H. B. LEFROY: I quite agree there should be provision in that regard. At the same time there are cases where persons who have acquired freeholds to small brooks may be irrigating more than three acres. I notice that if they have been irrigating more than three acres from a watercourse they may obtain a license to continue to use the water for ten years, but I think some further

security ought to be given to individuals so that they should feel that there is no possibility of that right being wrested from them after the ten years.

The Minister for Works: What would you do in the case of a man taking all the water of the stream and depriving someone below him?

Hon. H. B. LEFROY: There may be cases where there is no risk of that sort of thing, and in those cases there should be provisions to allow these parties to make use of the water they require, or at any rate they should be made to feel that they have the sole right to the water they require. There are certain persons on the Gingin Brook who have used water from that brook for irrigating purposes. I think in some instances they irrigate more than three acres, but at any rate they may have started with the intention of irrigating more than three acres. I think they ought to be encouraged to extend their operations, and that the Bill should have provisions giving that encouragement. I think the Minister will listen to arguments that fall from this side of the House with regard to the measure when it is in Committee, and I hope we will be able to make the Bill acceptable to all the people in the State. I ask him to consider the question of diverting the water from the small creeks which only run in the wet weather but which certainly are watercourses under the Bill. It seems unnecessary that a person who wants to put down a tank should be obliged to go to the Minister to ask for permission beforehand. I think that matter may be remedied in Committee. With the Bill generally I am in accord, but I hope the Minister will make it as little confiscatory as possible. I do not think it is his object to make it a confiscatory or harassing measure. There are cases where the banks of a river form the boundaries of land, and I notice that, though it is intended that the State should control the bed and the actual banks of a stream, it is not intended that the State should control the flats over which the water flows during the rainy season. That is a good thing, and I do not think anyone is likely to object to it. I know that the Bill is taken from the Acts of Vio-

toria, Queensland, and New South Wales. It has been found necessary, in order to carry on irrigation schemes successfully, that measures of this sort should become law in those States, and it is only natural to conclude a measure of the same character should be needed in Western Australia. I do not think that the Bill departs from the lines adopted in the other States; but still the conditions in Western Australia may not always be similar to those in the Eastern States, and where they are dissimilar I trust the Minister when the Bill is in Committee will give full consideration to any proposals that may come before him to take away what I may call the ill effects that may be brought to the individual, and which the individual never expected would be applied to him while holding his land. I do not think that the Opposition are desirous of doing anything except to help the Government make this Bill a workable measure, and I hope that when the Bill does become law it will be found that it will interfere with the rights of owners as little as possible, and at the same time be found to be a measure of great advantage to Western Australia in the future.

*[The Deputy Speaker (Mr. McDowall) took the Chair.]*

Mr. GARDINER (Roebourne): In supporting the second reading of the Bill I do not propose to travel over the same ground as those who have preceded me, most of whom have been most complimentary to the Minister introducing the Bill of this description. We all realise it is absolutely necessary in Western Australia, as it has been in other parts of Australia and in other parts of the world, to have Bills of this description and irrigation schemes. The member for Bunbury and the member for Swan have expatiated at great length on the great advantages which would be conferred on the south-western portion of the State if these schemes were successfully inaugurated. I intend to confine my remarks to the effect irrigation will have on the northern portion of Western Australia. I contend and with reason, that the north of the State offers greater

inducement for a successful system of irrigation and water conservation and distribution than any other part of Australia, inasmuch as its soil is infinitely superior to the soil elsewhere in the State, and the water facilities are there to a greater extent. I am not making this statement without having some evidence to go on. As a matter of fact I will read some extracts from the reports of Government experts. Mr. Despeissis says—

The soil consists of deep alluvial deposits and on the whole is better balanced, deeper, and capable of yielding more profitable crops if sufficient moisture is available.

Again he says—

When the North-West rivers are properly dammed and a systematic method of water conservation and distribution is effected, millions of acres of rice plain will be made available for the plough. Land bringing 10s. per thousand acres rental will sell for as many pounds an acre.

Then there is a further report from the Government Analyst—

Analyses made of a number of these soils compared with others of well-known fertility in the South-West division, show that they are richer in potash and nitrogen, two essential elements of plant food.

These are statements in reference to the soil from the Gascoyne to Whim Creek, and these reports have been confirmed by experiments throughout the length and breadth of this country. In some places in the constituency I represent private individuals have instituted small experimental farms, and they have proved that almost every kind of plant life thrives if sufficient water is available. Mr. Despeissis reported that some of the finest fruit it had been his lot to see or eat was grown in these parts. They are particularly suitable for the cultivation of oranges, apricots, and other fruits of that nature; also in regard to wheat, barley, and oats we find that along the Ashburton river, after a reasonable amount of rain, these are growing wild, due probably to seed

having been dropped by travelling teamsters. However, no attempt has been made in the direction of endeavouring to cultivate this land, owing to the conditions under which the pastoral leases are held. As a matter of fact men whom I know have been most anxious to take up small areas of this country to endeavour to establish a reasonable sized farm, but unfortunately when their applications reached the Lands Department they were informed that it would be utterly impossible for them to obtain 1,000 or 2,000 acres for the purpose of endeavouring to prove that the country was capable of producing to as great an extent, if not greater, than the south-western portion of the State.

Mr. E. B. Johnston: They cannot even get 50 acres.

Mr. GARDINER: That is correct, notwithstanding the fact that individuals in that part of the State are holding between half a million and one million acres. The Minister for Works when introducing this Bill paid considerable attention to the fact that in the southern portions of the State there were great opportunities for lucerne growing under a system of irrigation. I am prepared to agree with him on that point, and the figures he quoted demonstrate the fact that various parts of the South-West under a system of irrigation would successfully and profitably grow lucerne. I would point out that it is usual to disparage the possibility of lucerne culture in the North-West. Lucerne, however, is not indigenous to a cool climate, it originally came from Arabia and Persia, where the climate is similar to that of the North-West; and with the immense rivers which flow through the North-West, I believe, if reasonable facilities are offered if water can be brought into use and conserved in our North-West, it will be found that not only lucerne but many other products can be grown there successfully. In regard to our great coastal plains in the North-West, one great advantage which would be invaluable to the small settlers is the fact that there would be no initial cost so far as clearing is concerned. There is

practically no timber on these plains, which extend from 60 to 100 miles inland, and which are almost ready for the plough. It is absolutely essential, however, that some system of irrigation should be introduced before we can ever hope to see any scheme of cultivation successfully carried out. I might point out that another advantage which exists is the fact that we have a heavy dew in those parts the like of which, I believe, is unknown in any part of the southern districts, and this dew will be a valuable auxiliary to a system of irrigation which the Minister purposes introducing. I think I have demonstrated that the soil and other conditions are admirably suited for intense culture in the north-western portion of this State. The question arises whether we have sufficient rivers, or natural watercourses, which could be put to use and actively worked in the interests of the coastal plains. I will deal with two instances that I know of and both of which are in my own electorate; there are others, and probably of greater magnitude, which could be worked more successfully, but it will be sufficient for my purpose to deal with those rivers regarding which I have some knowledge, and which are in the Roebourne district. The first is the Ashburton, one of the finest rivers in Western Australia, and even to-day, notwithstanding the fact that that portion of the State has been unfortunate enough to experience a drought—an unusual circumstance for that particular portion of the State—which has existed for a period of about two years, there are still immense pools of beautiful fresh water in all parts of this river. Had the water been dammed, and the cost would have been very small indeed, I venture to say that a sufficient quantity would have been conserved to irrigate miles of splendid country. The other instance to which I will refer is known as the Mill Stream. This is a spring, or a series of springs, from which I am given to understand 30,000,000 gallons of water flow daily. My figures are merely hypothetical but they have been supplied to me by those who are in a position to know. In addi-

tion to the springs there are two immense pools, one of which it is said has never been bottomed. This amount of water should prove invaluable for the purpose of irrigating the plains adjacent to Roebourne. I would further point out that the Mill Stream is situated on the summit of a great tableland, so that by natural gravitation the plains below could be irrigated without very great difficulty. Everything is there, and simply by a little engineering work, and without great cost to the State, a great scheme of irrigation could be carried out. I believe, if the Minister for Works were to send an engineer to those parts for the purpose of reporting as to the probable cost of carrying out such a scheme, and the probable area of land which could be irrigated if this Mill Stream were brought into requisition, he would be greatly surprised, and the day would not be long distant when he would have the work under way, and then in the near future we would find at Roebourne a great rural population. I am sure that this will come about in time. Look at Canada, a country which can show us what it is possible to do in the way of irrigation. Southern Alberta some years ago was a country very similar in many respects to that of our North-West. There were immense areas of land devoted to grazing purposes. Cattle were raised there but in numbers that were nothing to speak about, and a few cattle men were employed. There were absolutely no settlers, and a small port close by was used for the shipment of the stock. About seven or eight years ago the people of Canada realised that the soil of this place was of exceptional fertility and they sent an expert along to report upon the possibility of closer settlement in the event of it being possible to irrigate a portion of this great area. Engineers reported that there were some great difficulties in the way of damming the rivers, but notwithstanding this the work was put in hand, and what do we see to-day? There is something like 368,000 acres of land under intense cultivation, there are several large towns and a fairly large rural population, which

is indeed a greater advantage and of far greater importance than the conditions which previously existed. Although the climatic conditions are not similar to those of our North-West, still I might liken the respective countries, inasmuch as the North-West to-day is viewed from a standpoint similar to that which that particular part of Canada to which I have referred was viewed seven or eight years ago. The people of the metropolis and many other parts of the State consider that the North-West is only fit for grazing, and up to date I am prepared to admit that it has done nothing much in any other direction. If, however, the North-West had opportunities similar to those given to the north-western portion of the State it would seem to be in a different position, and would probably carry a greater population than some of the longer settled parts of the State in the South. But there is no opportunity to develop the North-West. It is impossible for any individual to take up a small area of land there and prove that the country is capable of producing anything that will grow in the southern latitude. The hon. member for Moore complained that this Bill makes provision for resuming river frontages and vesting them in the Crown. The people leasing them should not be permitted to have the exclusive right to the rivers, which is the case at the present time in the North-West. I do not wish to say that an individual who might desire a drink would be ordered away from a river, but those who were fortunate enough to take up land in the early days selected land that had a river frontage and obtained an exclusive right to the use of the water. Consequently a smaller man is compelled to seek other means of providing for his stock, and on those grounds I would be prepared to support the measure, inasmuch as it would be the means of restoring to the people their rights in regard to the river frontages so far as the North-West is concerned. The same thing applies to many other parts of the State. I do not propose to discuss the measure at any greater length; I commend the Minister for Works for having introduced

the Bill, and I am confident that if it is passed it will confer a great benefit upon the people of Western Australia and more particularly on those who are in the northern portions of the State.

Mr. McDONALD (Gascoyne): The member for Swan, in dealing with this measure, referred to an interjection made by me when the member for Murray-Wellington was speaking the other night with reference to the destruction of timber affecting the moisture of the land. I have here an extract from the *Encyclopedia Britannica*, which will be admitted to be a standard work, which says—

The countries bordering on the Mediterranean, Spain, France, Italy, and Turkey, have suffered in a marked degree from the reckless and wholesale destruction of the woods and forests which formerly covered the mountain slopes, and many springs which formerly existed under the shelter of the forests have now disappeared.

Later on the same work adds—

There can be no doubt that one of the causes of the terrible famines of India and China is the unwise denudation of the mountain slopes, where forests formerly absorbed a large portion of the rainfall.

It may be that the timber, having been ringbarked, no longer absorbs the moisture in the soil, and the fact that the rivers or creeks referred to by the member for Murray-Wellington, having run to a greater distance than they had formerly done would bring about the fact that there was nothing to absorb that water, and consequently it went away uselessly into the creeks and rivers. But that, as will be admitted, must be only for a time. Unless the forests exist in those parts there is no chance at all of the clouds being upheld and their contents given as rain to the earth. In the forest districts of Victoria, and in portions of the south of this State, I know from practical experience that once the timber disappears the moisture in the ground and the natural springs which formerly existed disappear also.

Mr. George: How many years do they take to disappear?

Mr. McDONALD: I cannot say, but I can safely affirm that in the Gippsland district of Victoria much of the water which had formerly existed disappeared within 12 years after the disappearance of the forest. In the district referred to by the member for Williams-Narrogin there is a fairly large rainfall, and that the springs remain is due to the rain not being absorbed by the green timber.

Mr. George: It has been experimentally proved that a jarrah tree takes from 80 to 100 gallons of water per day.

Mr. McDONALD: And that 80 or 100 gallons of water not being absorbed by the fallen tree runs in the form of creeks. But those creeks will only be due to the rainfall, there will not be any natural water in the soil. It is owing to the soil not retaining the water as formerly that irrigation becomes an absolute necessity in places where the rainfall is below a certain measurement. It is a well-known fact that in good seasons farmers forget the lessons they learned in bad years. When they get a copious rainfall they are convinced that things are going to be excellent for ever and ever, and they throw aside all precautions. That is where the advisability comes in of a paternal Government taking the matter in hand, and introducing a Bill providing for irrigation. Before glancing over the Bill and touching upon a few points which have struck me most forcibly in connection with it, I desire to follow in the footsteps of the member for Swan and, looking at various countries of the world, endeavour to show where irrigation has done the most good. Before going away from Western Australia, however, I wish to point out that many of the products of the farms of the Eastern States, and other parts of the world, are brought into this State, products which, under certain schemes to be advanced as a result of the Bill, we will be able to produce for ourselves. For instance, during the first seven months of this year this State paid for butter £292,180, for cheese £30,750, for eggs £26,000, for dried fruits, raisins, dates, and other fruits, £25,637, and for jam £59,640. You will understand that jams

are practically a manufactured article; but if the fruit were produced here the jam would be manufactured here. The milk referred to by the member for Kimberley cost Western Australia £75,000. Onions and potatoes cost nearly £50,000. All these articles, which could be produced locally if we had a proper system of irrigation, transforming waste lands into areas under intense cultivation, cost the State the magnificent total of £558,000 for the first seven months of the year. One might say that the purchase of those articles cost practically a million pounds per annum. The member for Swan made reference to Spain. Spain contains 125 million acres. Of that area, deducting mountains, lakes, and other barriers to cultivation, there is a million acres of irrigable land. Notwithstanding this, until the latter end of the nineteenth century agriculture in Spain was a decreasing and dying industry. However, the Junta in 1865, having learnt the value of irrigation in other countries, voted a million pounds to subsidise certain canals, and now they have at least 500,000 acres irrigated and producing valuable harvests where formerly the land was merely a parched and arid area. In Spain they found out that irrigation alone was not of much avail after a certain time, because the washing of the water took away from the soil certain constituents which were absolutely essential to the profitable growing of crops. But they found out, also, that irrigation in conjunction with manure will convert poor soil into fertile land. In Spain, however, the water belongs to private people, and it must be purchased by those who wish to use it for irrigation purposes from the trusts or individuals who hold the water rights. The lesson to be derived from this is that where private ownership of water is permitted the consequences have been fatal to the furtherance of irrigation. I have shown that in Spain they started with an expenditure of a million pounds. In many of the countries I will traverse in the course of my remarks sums like that will be mentioned, greater or lesser as the case may be, the object being to show members of the House that

for the purpose of advancing her agriculture through irrigation Western Australia cannot spend too much. France is the country of peasant proprietors. The lands have been subdivided by bequests and various other means of transfer for the last 200 years, ever since the feudal estates were beginning to be broken up. To such an extent has the subdivisional process been carried, that where the grandfathers of the workers of the present generation held, perhaps, each a large paddock, those paddocks were divided between the fathers of the present generation, and the divisions were again divided and subdivided until in France to-day the individual may hold for himself the produce of merely two or three furrows. I mention this to show how closely the subdivision has been made in that country. Where, in other places, the divisions may be made by paddocks, in France it has been brought down to the actual produce of a furrow. Although the latitude is more northerly, in France as well as in Spain there were any number of places unirrigated, places parched and useless, but which, once the waters of irrigation were brought on, produced at once verdant crops and brought wealth and prosperity to the people. In France the Government exercise control over all the waters, but only to the extent of supervision. That is to say, they allow no waste. All water used for irrigation purposes is closely watched by Government officials so that waste may be avoided. The method of applying for Government waters in any one district is as follows:—A district is proclaimed at the request of three-fourths of owners of land in that district, and the Government insist that 75 per cent. of owners must own at least two-thirds of the land which it is proposed to irrigate. They make application to the Government for the right to cut canals. Government engineers are then sent out to inspect the locality, designs and plans are submitted to the Government, and the water is then laid on. It can be handed over to a syndicate composed of representatives of the landlords who petitioned the Government,

or else it may be given over to the municipality. But in no instance in France does private ownership of the waters remain. In 1845 some 1414 landholders applied for permission to have a canal cut. Of that number 1095 were owners of property of less than three acres, and 205 of less than five acres. Before irrigation these small plots would not give employment even to their owners who had, therefore, to go away in search of employment. They had to go far away for employment because all their neighbours were in precisely the same plight. But irrigation came to them, and then these three-acre plots not only provided employment for their owners, but the owners were forced to give employment to others in order that the produce might be gathered and sold. In France the most worthless shingle-bed and sand has been converted into fertile land by skill and patience combined with irrigation and manure. Leaving Europe for awhile I want to take you into Egypt. Old as is the irrigation system of the Nile, still it is only within these last few lustums that irrigation has been gone into on scientific principles. In Egypt the Parliament, or the body controlling the finances, think nothing of voting a million pounds for repairs to their dams. It is said that in 1894 Egypt, a country that would not grow a blade of grass unaided, had over six million acres in crop, and, after meeting local demands, exported to Europe, and other parts of the world 13 million pounds worth of produce. As far as their dams are concerned, there was one completed a few years ago, the figures in regard to which are indeed massive. The storage of that dam, which creates a lake along the valley of the Nile extending for 200 miles, is 2,250,000,000,000 gallons. The mind of man cannot conceive the amount of water contained in that dam, irrigating as it does thousands of acres and rendering the valley of the Nile one of the most fertile in the world. The contract price of that scheme was two million pounds, a small outlay, members will admit, when I remind them that they think nothing in Egypt of voting a million pounds for repairs. In

India, too, large sums have been paid time after time for irrigation purposes, with the result that a scheme in the Ganges valley can irrigate 4,415,000 acres. That work cost £6,000,100, and produces annually £8,000,000. That is one of the results of irrigation, but the Ganges runs through a fertile portion of India, and India itself is a fertile country. But the northern portion of it in the shade of the Himalayas is noted for its sterility, and in the province of Agra works were built at a cost of one and a-half million pounds to irrigate the surrounding country, and the annual produce of that system is over £3,000,000. The lesson learned from India as well as from France and Spain, tells us that when the Government have full control of the rivers and irrigation work, the cost of irrigating is much less than when private enterprise controls such matters. Furthermore, the lesson learned from India, although I shall bring no evidence in support of my statement at this stage, is that artesian or well water is most valuable for irrigation purposes. In Italy a statement made by one who is *au fait* with all the details of the irrigation schemes of the public works department in that country leads off by saying "the right of property in water once parted with by the Government, the interests of the people as a whole suffer." A canal in Italy fell into the hands of a certain rich family. The names of both the place and the family are mentioned by my authority, but neither will I give to the House, mainly because of the difficulty of pronunciation. This canal not only enables the family to have their own estate irrigated free of cost, but returns in addition an income of £4,000 per annum. The Cavour canal in the Piedmont province of Italy cost two million pounds, and it irrigates the valleys and plains of Piedmont, which formerly were parched, and are now famous as one of the most productive districts in Europe. In connection with that an instance is given: a peasant owned 35 acres and on that area he was enabled after irrigation to feed 50 cows all the year round. The annual net profit of a cow in that part of the world is given as £6, and therefore



from 35 acres he was receiving an income of £300 a year owing to irrigation at a small cost. To bring the argument further home and give members some idea of the value of irrigation in the dairying industry in New South Wales, I may mention the instance of a dairy farm in that State which consisted of 350 acres. Formerly, on that area the farmer was enabled to keep 25 cows, and they returned a profit of £380 per annum. He irrigated, and the same area kept 60 cows all the year round, and the profit increased to £800 per annum. In New Zealand, during a severe drought, I think it was in 1897, irrigation enabled a man to fatten 8,000 out of a total of 11,000 lambs on his estate. Had it not been for his foresight in providing for the irrigation of his property he would have lost the whole 11,000; on the other hand, he was enabled to fatten 8,000. In the same district one paddock under ordinary conditions used to return six tons of chaff, but irrigation enabled the owner to take from the paddock 80 tons of chaff. As far as Australia is concerned, I suppose the first big attempt in the way of irrigation was made by the Chaffey Brothers at Mildura, Victoria, and much about the same time at Renmark in South Australia. Chaffey Brothers obtained by Crown grant from the Victorian Government the rights to 250,000 acres on the banks of the Murray river, but the flow of water was limited to them. They were not allowed, as has been asked in this Chamber that the holder of the land might be allowed, to take the whole of the water running past, but they were limited in supply according to the month of the year, ranging from 20,000 cubic feet per second in March to 60,000 cubic feet in October, November, and December—the months I suppose when the snow melts in the mountains which form the source of the Murray and the river comes down in flood. Not only was that limitation placed on them, but there was a further limitation, that before they took even that much water a certain quantity must be allowed to flow past their intakes, in order to enable the settlers lower down to benefit by the river flowing past. As far as this Bill is concerned, the Minister for Works has received congratula-

tions from all, and I want to assure him that anybody, no matter whether he be in Parliament or out of Parliament, who has the interests of Western Australia at heart, must be delighted with this measure. However, there are one or two things which may require a little attention in Committee. In the definition clause, for instance, I find no mention of sub-artesian waters. It has been said that sub-artesian has been omitted for the simple reason that it is merely to preserve waters from waste that this Bill is introduced, and that where a man is compelled to put machinery on his sub-artesian well to pump the water and regulate the flow, he will be careful of his own volition. Possibly he will, but I would remind the Minister for Works that the bore in Fremantle, sub-artesian as it is, has an output of something over a million gallons per day, and that, I maintain, should be held by the Crown just as much as an artesian bore which flows at the rate of 100,000 or 200,000 gallons per day. There seems to be some mistake in connection with the confiscation clause which is said to occur in the Bill. It is not a question of confiscation. I understand from the Minister that so long as the present holder of an artesian well will control the water flowing from him and will not allow the flow to interfere with the wells put down in the locality later on by license, he will not be interfered with, but the Minister reserves the right to himself to say at any one time to any one holder, "you are allowing more water to go away than is commensurate with your needs, and you must block it in the interests of the locality and of other people."

Mr. George: Then it is only to prevent wilful waste?

Mr. McDONALD: Yes. Another matter for congratulation is the provision which enables the Minister to lease bores for which he has no particular use for the time being. That power was given before—I do not know by what Act—but I do know that bores have been leased in the past, but under such conditions as to render the leases detrimental to the interests of the public. I am assured by the Minister that in future the public will

be considered before bores are leased, and that a clause will be inserted in all leases requiring the lessees to give the public access to the bores both for themselves and for their stock. With reference to merely allowing sufficient water to irrigate three acres of garden, I desire to say that when the Minister allows anyone to take 200,000 cubic feet per annum, he is allowing him water which will irrigate an area much greater than three acres. I am told that 200,000 cubic feet means one and a quarter million gallons, and that is sufficient to cover three acres to a depth of 18 inches. Ordinary irrigation allows, according to the crop that may be put in, three or four inches of covering as the case may be, but the Minister in his munificence is allowing the holder water to cover his ground to a depth of 18 inches. I have already referred to the fact that the Minister may compel the partial closing of bores in the event of negligent or wilful waste. Unfortunately, experience has shown in one or two cases that a bore may not be closed totally. In one instance a stoppage was put on the flow from the casing, and the water burst through 3,000 feet of rock and came to the surface alongside, showing that although waste may be occurring, the closing of the bores may be only partial. Another portion which seems to me very suitable, especially for a country like this, is the clause taken from the Queensland Act which allows the board in whom the Minister vests the water rights for the time being, to deal proportionately in the event of insufficient water being available for all requirements. That is about all I have to say concerning the Bill, except to add my congratulations to the Minister to those that have gone before on the general excellence of the measure. I wish, however, to deal with the statement made by the author of a report which has been placed before us dealing with artesian waters—the report of the inter-State conference on artesian waters to which the member for Kimberley referred. The hon. member said that no doubt artesian waters will be mainly used for pastoral purposes. So they will, but in the event of artesian water being found in or about any locality which may be

placed under intense culture, then I maintain the water should be used for that purpose. In South Dakota, the Yatima Valley of Washington, San Joaquin, and San Bernardino in California and San Luis in Colorado, artesian water is used for culture on areas of from one to 160 acres. With regard to the San Luis valley, the plateau from which it descends is 7,500 feet above sea level, and wheat is grown on that elevated plateau by means of artesian water. I do not know how far the waters of Western Australia would be suitable for wheat growing, but I have the results of irrigation from two bores in New South Wales. Of course the analyses of water in Western Australia might differ totally from that of the bore to which I am about to refer, but a man named Symons experimented chemically with regard to the alkaline properties of waters in New South Wales, and finally, crops of wheat and other produce were raised which were better than those which had the benefit of rainfall or of ordinary irrigation. The results of irrigation with bore water in New South Wales are described thus—

The experimental farm at the Moree bore has been established eight years and the soil is still producing good crops. During the great drought (1902) green fodder to the value of £300 was sold from one small paddock, while, on the opposite side of the road special train loads of fodder were being transhipped to teams for the starving stock between Moree and the border of the district. During this period many owners paid over £1 per head to keep their breeding ewes alive, the fodder costing, delivered, from £17 to £20 per ton, while with the use of bore water which was comparatively plentiful, green fodder could have been produced at a cost of 5s. to 10s. a ton.

On the banks of the Lachlan river and the neighbouring districts some of the pastoralists lost as much as 80 and 90 per cent. of their stock, but one man who had the foresight to plant lucerne under irrigation lost scarcely any, and those mostly died from natural causes and not from the drought. This is irrigation with artesian water. I am given to

understand that carbonate of soda, which is one of the ingredients of water most deleterious to the soil, is more plentiful in the waters of New South Wales than in those of this State. After devoting some space to the cultivation of fruit and vegetables on the Moree farm by means of artesian water, the author proceeds—

Undoubtedly the best crop to grow on a station with artesian water is sorghum. From any five acres of irrigated sorghum 100 tons of green fodder can with ordinary care be produced. At Moree sorghum *saccharatum* has grown eight feet high in ten weeks from the time of sowing, and pearl millet six feet high in the same time.

I have often expressed the hope that the fertile banks of the Gascoyne would, by means of irrigation, be made to provide homes for hundreds of families where at present there are running only a few thousand sheep. My hope was that the shallow waters along the river banks might be profitably used for irrigation. A report was issued by the Minister for Works on his trip to the North-West, in which he gave a semi-detailed account of an irrigation farm he saw in the locality to which I am alluding. There it seems that the growing of lucerne and millet are the natural industries of the district. Unfortunately I am given to understand that although the gentleman referred to was successful in getting sufficient water to irrigate twenty acres, irrigation is not a general thing in the district, and where water in some wells might be drinkable in others it might be from brackish to saline. I hope that some distance from Carnarvon, 30 or 40 miles up the river where there are high banks, the engineers will be able to report the advisability of forming an area and of backing up the waters of the Gascoyne just as the waters of other rivers may be backed up in more favoured situations, and that from the waters which may be retained all the fertile flats of the lower Gascoyne may be irrigated and happy homes may be established along the banks. Failing that and bringing back to mind the remarks of the author who has been quoted, I want to say the district referred to is well within the artesian belt, and

the regulations about to be issued dealing with artesian boring are very liberal. Artesian bores may be put down along this river, and I hope that agriculture and closer settlement will follow. Leaving the Gascoyne, there is quite enough land in Western Australia to benefit by the provisions of this Bill. One man in dealing with it points out that on the 75,000 square miles of artesian water bearing country in Western Australia, leaving out of the question the fertile districts of the South and South-West, a population estimated at 150,000 people may be maintained. In conjunction with the member for Bunbury, I wish the Bill every success in its passage, and I wish to whoever the administration of the Bill may be given likewise success. I have pleasure in supporting the second reading.

On motion by Mr. Moore, debate adjourned.

## BILL—TRAFFIC.

### *Second Reading.*

THE MINISTER FOR WORKS (Hon. W. D. Johnson), in moving the second reading, said: I do not propose to take up much time in presenting this Bill for the consideration of this Chamber. The Traffic Bill as presented is really a consolidating measure, and contains very few provisions that can be taken as new. To-day the licensing of vehicles and the regulation of traffic is controlled partly in provisions under the Municipal Corporations Act, again in provisions under the Roads Act, the Cart and Carriage Licensing Act has an influence, the Width of Tyres Act controls to a certain extent, and there are also certain clauses in the Public Works Act that operate as far as the traffic is concerned. This Bill is introduced for the purpose of consolidating all those provisions in all the various measures, so that traffic will be regulated by one Act, which will thus enable the administration of the measure to be more general and more easily followed by those using our highways and roads. Under this Bill the whole of the Cart and Carriage Act will be repealed, and the Width of Tyres Act

will also be repealed. The provisions dealing with the licensing of vehicles, and the controlling of traffic as contained in the Municipal Act and the Roads Act, will also be repealed, but the repeal will be limited to the provisions in those sections dealing with traffic.

Mr. George: Do you propose to make provision for width of tyres?

The MINISTER FOR WORKS: Yes, the Bill deals directly with them and overcomes the difficulties which have been presented to local bodies for many years. As a matter of fact the Width of Tyres Act has become a dead letter because it is an impossibility to administer it as it exists at present.

Mr. George: They were told that when they brought the Bill forward.

The MINISTER FOR WORKS: The only part of this Bill which can be termed new, although there are some slight amendments in regard to existing clauses in the Acts I have referred to, is that dealing with the width of tyres and with the control and regulation of motor traffic and traction engine traffic. There are also provisions of course that alter the licensing of vehicles and the method of collecting those licenses. The necessity for consolidating the provisions dealing with the regulation of traffic must be apparent to members, because they will realise the difficulty arising from the fact that not only have we got the various measures referred to dealing with traffic, but under those measures the local authorities have power to make regulations and by-laws. Each local body is capable, if desirous of doing so, of framing regulations which are considered to be best from the district point of view. The adjoining district may hold a different opinion altogether, and this exists to-day, with the result that people travelling on a road are compelled by by-law or regulation to comply with the desires of the local authorities in one district, and after crossing over the boundary into another district, to comply with another set of conditions which prevail there, with the result that it is utterly impossible to follow out all the dictates of the various local bodies. Therefore, while we have different mea-

asures dealing with the controlling and licensing of traffic, we also have these measures administered by different local bodies with different systems. We have different measures, by-laws, and regulations that make it totally impossible for the general public to understand them. To take a concrete instance, if we leave Perth by motor for Fremantle, we pass through no less than nine districts controlled by different local bodies with power to make regulations absolutely in conflict with one another. That is in a distance of 12 miles. No sooner do we get out of Perth than we get into a portion of the Subiaco municipality, then into the Claremont road board, then into the Claremont municipality, and then we strike the Cottesloe municipality, and next portion of the Peppermint road district, and then the Cottesloe Beach road district, after which we come to the North Fremantle municipality and finally into the Fremantle municipality. We have all these local bodies dealing with the route that is constantly used by the public, and in many cases the regulations along that particular road differ so that it is impossible for one going from Perth to Fremantle to comply with the conditions unless he continually alters his speed. The same thing applies, though perhaps to a lesser extent, on the road from Perth to Albany. There are, of course, more local bodies, but the distance is so great and the traffic is not so great, with the result that it is not so acute on that particular thoroughfare. But we have on the Albany main road and on the road to York, and on the road to Bunbury, exactly the same conditions prevailing, and it is because these conditions exist that the introduction of this comprehensive measure is necessitated. We propose under the Bill to issue the license under the local authority, something similar of course to what is done to-day, but the license must be issued to the owner of the vehicle in the district where he resides, or, in the case where the vehicle is used in connection with a business, in the district where the business is established. It is different at

present. If a cab proprietor lives at Victoria Park and operates in Perth, it is optional for him to take out a license in Victoria Park or in Perth. In one instance perhaps he takes it out in Victoria Park and uses the roads in Perth. In another instance he takes it out in Perth and uses the roads outside the city: Perth gets the license fees and the other local authorities keep the roads up. We know that local bodies have been competing with one another in order to get the major portion of the license fees. One district reduces the fees, with the result that the owners of the vehicles will rush to that particular local authority to take out licenses, though they do not operate in the district at all. That grievance has been brought under the notice of the Public Works Department on various occasions by various local bodies, and it has also been referred to by various roads board conferences and other conferences of local bodies. It is exactly the same with passenger vehicles and carriers' licenses. Under this Bill they must be taken out in the district where they particularly operate. Coming to the metropolitan area we have altered things considerably, and I look upon this as one of the most important provisions in the Bill before us. We propose that the Government shall take control of the issuing of all licenses in an area to be known as the metropolitan area. It is defined in the schedule, although it is possibly open for argument as to whether we have adopted the correct boundary. We experienced great difficulty in limiting the boundary to the boundaries of road or municipal districts, and we had to subdivide some districts in order to get what can be truly considered the metropolitan area. If hon. members will devote a little attention to the schedule they will have no difficulty in following the boundary of the metropolitan area, as defined there, and in that area the Government will collect all license fees. This has become necessary through the agitation of the local bodies outside the Perth City Council. A recent conference representing all the local bodies in the metropolitan area was held to consider

this most important question, and it carried a resolution calling on the Government to take the course now proposed in the Bill. I agree with the decision of that conference. It is distinctly unfair that the Perth City Council should collect all the fees, while, as a matter of fact, the vehicles for which the fees are paid operate more outside the city than inside the city. Motor cars stand in St. George's-terrace and the fees are paid to the Perth City Council, but we all know they use the roads more outside than inside the city boundary. Also take the vehicles used by large firms such as Foy & Gibson and Boan Brothers; they are licensed in the city but we find them more outside the city than inside. One would give many instances of the unfairness of the present system by which one local body gets all the fees and another local body has the privilege of providing the roads. The fees collected in the metropolitan area will be distributed among the local bodies for the maintenance of main roads. The local bodies will be called upon to outline what they consider are the main roads in their districts, the Government, of course, reserving the right of vetoing any of these propositions. When the local bodies outline what they consider the main roads, the Government will distribute the license fees to them plus a subsidy. I do not wish to go into this in any great detail, because I would be anticipating the Estimates, but on the Estimates it is proposed to subsidise the revenue that will be derived from these license fees. These fees plus a subsidy will be distributed among the local bodies to maintain main roads. The maintenance of main roads has been a vexed question for many years, and various efforts have been made to get the local bodies to undertake this work. Although the Government have given the local bodies certain subsidies and grants, still the main roads, generally speaking, in the metropolitan area are in a deplorable condition. The local bodies take up the attitude that they are more justified in spending their money on side streets. I suppose we can sympathise with them. They feel they ought to do this, because if the side streets

get into a bad state of repair the local people suffer and are called upon to maintain these streets, whereas if a main road gets into a bad state everybody suffers and everybody growls and there is a possibility of the Government coming to the rescue. As I have stated, various efforts have been made to overcome this unsatisfactory state of affairs, and while I am not going to claim that the method outlined in the Bill is the very best, still I can claim it is a step in the right direction. If the local bodies neglect to maintain the main roads up to the standard required by the Government, we will refuse to give them their share of the license fees plus the subsidy, and their share plus the subsidy will be used by the Government to put those particular main roads in a state of repair. Therefore, inside the metropolitan area it is proposed that the Government shall collect the license fees and subsidise them by a vote that will be placed on the Estimates. Outside the metropolitan area we propose to assist the country districts by also subsidising the license fees that will be collected by them, and of course we want the local bodies in the country districts to devote all the revenue from license fees plus the Government subsidy towards the main roads that will be mutually agreed upon between the local bodies and the Government. This Bill does not provide much material for a second-reading speech; it is essentially a Committee Bill; it is full of material for a very long debate in Committee. I must admit that in going through this draft I thought it was particularly drastic and I expressed that view, but when I investigated it further I found that the drastic clauses were only taken from existing legislation, either from the Roads Act or from the Cart and Carriage Act, or the other Acts I have referred to. I want hon. members to realise that it is a consolidating Bill, and that, though some of the clauses appear particularly drastic, they are the existing law and consequently there cannot be any great danger in giving local bodies the powers proposed by the Bill.

Mr. E. B. Johnston: Is there not a desire to abolish the wheel tax?

The MINISTER FOR WORKS: I am not prepared to abolish all taxes in the country districts. They have an obligation to maintain their roads and these fees form part of their revenue. I know a section have been agitating in regard to the abolition of license fees. They wish to see all taxes abolished, and I have heard it suggested that they would increase the rates if this were done; but if a man owns a cart he should contribute a little more than the man who does not own a cart and does not use the roads. I consider a license fee therefore a fair means of collecting revenue, and when it is subsidised by the Government it is fair enough. The rate will be uniform in the metropolitan area, and I believe that under the provisions of the Bill there will be a uniform rate throughout the State, unless a local body can produce evidence that special consideration should be given to it.

[*The Deputy Speaker (Mr. Holman)*  
resumed the Chair.]

The MINISTER FOR WORKS: Generally speaking the object of the Bill is to bring about uniformity right throughout the State. The Bill as drafted would be useless and inoperative unless we had regulations, and these will have to be framed to deal with the principal clauses before the Bill can come into operation. The by-laws and regulations will be drafted by the Government instead of under the present method of allowing the local bodies to do so, unless, of course, the Government allow the local bodies under special circumstances to suggest special regulations. The provisions relating to width of tyres is taken from the South Australian Act. This of course does not apply to motor vehicles with pneumatic or rubber tyres. This part of the Bill will not come into operation on the passage of the measure, but it is proposed to bring it in by proclamation so that we can give the local authorities plenty of time in which to alter their vehicles, and make them comply with the provisions of the measure. The alteration regarding the width of tyres is to be mainly in connection with the load, which will be taken by measurement, instead of under the existing Act, the size of the axle. It is because the present

Act dealing with width of tyres is so difficult to administer that it has really become a dead letter, and according to the experience of South Australia the system we propose to adopt, and which is embodied in the Bill, is preferable to that which was adopted by this State some years ago. There is another anomaly in connection with the width of tyres, and it is that to-day passenger vehicles are exempt. I am of the opinion that when the Act was passed some years ago it was intended to apply that provision only to privately-owned vehicles, but by some means the section was allowed to pass exempting passenger vehicles. Let me give an illustration as to how that operates. The passenger vehicle which was plying for hire until recently between the Perth post office and Belmont Park often had a load of three tons, yet it was not controlled under the Width of Tyres Act, because it was a passenger vehicle and did not come under the provisions of that measure. Yet a dray carrying up to one ton is obliged to have a tyre of a certain width. That is sufficient to demonstrate that the Width of Tyres Act which is on the statute-book to-day is distinctly unfair, and an alteration, therefore, is absolutely essential. The provision in the Bill before the House will overcome all the difficulties, but if hon. members can show me that these provisions cannot be applied I shall be prepared to be educated in that direction. There are special provisions in the Bill relating to the licensing and control of motor vehicles. Of course this is a somewhat new means of locomotion which is not provided for in any of our existing measures, and it has become necessary to give it attention because the traffic has increased to such an enormous extent.

Mr. George: It has only begun.

The MINISTER FOR WORKS: In order to get the provisions to deal with this traffic we have gone to the English measure which prohibits a motor car to be driven by anyone who does not possess a license. It will be necessary for hon. gentlemen who own motor cars to demonstrate that the public will be safe along those thoroughfares through which they will drive their cars. I purpose my-

self taking out a license immediately the Bill passes.

Mr. Wisdom: Do you provide for an examination?

The MINISTER FOR WORKS: Yes, and that will be carried out by the Government. The clause relating to the control of traction engines is taken from the Victorian Act. Hon. members may think the provisions are a little drastic, but there are members here who will be able to give the House the benefit of the experiences they have had in different districts which will assist me in getting the clause through. It will be necessary to have some control over traction engines when they are moving from district to district, and destroying roads and bridges to the extent they do at the present time. In dealing with the heavy traffic under the Roads Act to-day power is given to the local body to charge a special license fee for vehicles engaged in heavy traffic. In other words a vehicle carrying a heavy load and which will destroy the roads more than the ordinary vehicle, can be subjected to a special impost at the will of the local authority. Where we give that power to the local authority it can only apply locally, but under this Bill licenses are issued by the State, or if they are issued by the local authority then they apply to the whole State, consequently any license of that description cannot be made local. In order to get over that difficulty and to give local authorities the power they should have to make a special impost against those who destroy the roads to a greater extent than the ordinary user, we have adopted the English method of making it possible for the local authority to call upon the person damaging the roads by the carriage of heavy loads to repair the damage caused, and there is machinery in the Bill to outline how that can be enforced. There may be difficulties but I am confident that we will be able to get better results than under the existing method. Under the Municipal Act the local authority has power to license and control tram cars and tram traffic, but under this Bill it is proposed to cancel that authority and give it to the Crown. The control and licensing of tram cars,

and the general control of the traffic will be in the hands of the State. Licenses to employees on the trams will be issued by the State, and this is an alteration which is different from existing legislation. I do not think I need take up any more time. While the Bill is a live one I want hon. members to remember that it mainly contains provisions which can be found in existing legislation, and those I have outlined are only the new provisions which are contained in the Bill. I move—

*That the Bill be now read a second time.*

On motion by Mr. George, debate adjourned.

## BILL—UNCLAIMED MONEYS.

### *Council's Amendments.*

Schedule of four amendments made by the Legislative Council now considered.

### *In Committee.*

Mr. McDowall in the Chair; the Minister for Works in charge of the Bill.

On motions by the MINISTER FOR WORKS amendments Nos. 1, 2, and 3 agreed to.

No. 4—Clause 3—after the word “moneys” in line 2, insert “of not less than five pounds in any one account”:

The MINISTER FOR WORKS: The object of this amendment was to make the Bill apply only to accounts of £5 and over. He moved—

*That the amendment be agreed to.*

Mr. GEORGE: What would become of sums of less than £5?

The MINISTER FOR WORKS: Such sums would remain the property of the banks, or, rather, would remain with the banks. The position in regard to such sums would remain unaltered. The owner could claim them within a certain period, after which they would become the property of the banks. As a result of a conference between the Treasurer and the banks it had been determined that it would not pay to make the Bill apply to sums of less than £5.

Mr. GEORGE: Under existing conditions the owner of a sum of less than £5 which was held by the bank could call in and claim it, but after the passing of the Bill he would have no claim upon it whatever.

The MINISTER FOR WORKS: The owner of such sum would be able to claim it from the bank until after the expiration of six years. The Government had agreed to the representations of the banks that sums of less than £5 should not be brought under the provisions of the Bill.

Mr. MALE: Under the provisions of the Bill these small sums would not be defined as unclaimed moneys, and therefore the owner of such a sum would still have a legal claim against the bank for that amount. Indeed the owner would be in exactly the same position as he was to-day.

Question put and passed; the Council's amendment agreed to.

Resolutions reported, the report adopted, and a Message accordingly returned to the Council.

## PAPERS PRESENTED.

By the Minister for Works: 1, Second Report of the Work of the Chief Electoral Office, from 1st November, 1908, to 21st May, 1912. 2, Geological Survey, Bulletin No. 45—Geological Investigations in North Coolgardie and East Murchison Goldfields. 3, Report on the Working of the Government Railways for year ended 30th June, 1912.

*House adjourned at 9.40 p.m.*