

Queensland



Parliamentary Debates  
[Hansard]

**Legislative Assembly**

**TUESDAY, 2 OCTOBER 1923**

---

Electronic reproduction of original hardcopy

TUESDAY, 2 OCTOBER, 1923.

The SPEAKER (Hon. W. Bertram, *Maree*) took the chair at 3.30 p.m.

RAILWAYS ACT AMENDMENT BILL.

ASSENT.

The SPEAKER announced the receipt from His Excellency the Governor of a message conveying His Excellency's assent to this Bill.

UPPER BURNETT AND CALLIDE LAND SETTLEMENT BILL.

ASSENT.

The SPEAKER announced the receipt from His Excellency the Governor of a message conveying His Excellency's assent to this Bill.

AUDITOR-GENERAL'S REPORT.

PUBLIC ACCOUNTS.

The SPEAKER announced the receipt from the Auditor-General of his report on the public accounts for the financial year 1921-1922.

OPPOSITION MEMBERS: Hear, hear!

Ordered to be printed.

QUESTIONS.

TRAVELLING EXPENSES OF SECRETARY FOR AGRICULTURE.

Mr. CORSER (*Burnett*) asked the Secretary for Agriculture—

"Referring to his statement of his travelling expenses for last financial year, given in this House on Friday, 14th instant, amounting to £859 11s. 5d., does this amount represent his total expenditure charged to the department for the year, and does it include all his expenditure so charged for motor-car and cab hire? If not, what was such total expenditure, and the expenditure on motor and cab hire, respectively?"

The SECRETARY FOR AGRICULTURE (Hon. W. N. Gillies, *Eacham*) replied—

"The statement made by me on the Agricultural Estimates refers to and includes the whole of my own personal travelling expenses."

SUGGESTED ENGAGEMENT OF DR. ELWOOD MEAD TO REPORT ON DAWSON IRRIGATION SCHEME.

Mr. TAYLOR (*Windsor*) asked the Chief Secretary—

"As it is reported that Dr. Elwood Mead has been engaged in reporting on irrigation schemes in New South Wales, will the Government consider the advisability of endeavouring to secure his services to report in connection with the Dawson Valley irrigation scheme?"

The SECRETARY FOR AGRICULTURE (Hon. W. N. Gillies, *Eacham*), in the absence of the Premier (Hon. E. G. Theodore, *Chillagoe*), replied—

"No. It is understood Dr. Elwood Mead has left Australia for Palestine."

PROPOSED CONFERENCE IN RE SUGAR AGREEMENT.

Mr. BRAND (*Burrum*) asked the Chief Secretary—

"1. Has any request been received from the canegrowers of the Mackay district, through the United Cane Growers' Association, asking that a conference be convened at Mackay, consisting of growers, millers, workers, refiners, fruitgrowers, and consumers, being representative of all interests concerned, for the purpose of considering the advisability of entering into an economic sugar agreement for a period of ten years?"

"2. If so, is there any intention of convening such a conference?"

"3. Should the conference be convened will he see that adequate representation is provided for the fruitgrowers of this State?"

The SECRETARY FOR AGRICULTURE, in the absence of the Premier, replied—

"1, 2, and 3. The matter is receiving consideration."

PAYMENTS TO RAILWAY EMPLOYEES FOR WORKING ON ELECTION DAY.

Mr. ROBERTS (*East Toowoomba*) asked the Secretary for Railways—

"1. What was the amount paid in accordance with Order N 1623—(a) To railway employees to whom holiday was granted; (b) to railway employees who were required to work?"

"2. What was the number of railway employees to whom a holiday was granted on election day?"

"3. What was the number of railway employees required to work on election day?"

The SECRETARY FOR PUBLIC INSTRUCTION (Hon. J. Huxham, *Buranda*), in the absence of the Secretary for Railways (Hon. J. Larcombe, *Kippel*), replied—

"1, 2, and 3. The information is being compiled."

EXPENDITURE BY BRITISH-AUSTRALIAN COTTON GROWING ASSOCIATION IN QUEENSLAND.

Mr. PETERSON (*Vormanby*), in the absence of Mr. Elphinstone (*Oxley*), asked the Secretary for Agriculture—

"1. What amount of capital has the British-Australian Cotton Growing Association expended in Queensland as the outcome of its agreement with the Government?"

"2. What further capital expenditure does the association contemplate before 31st July, 1926?"

"3. If he cannot furnish actual figures, will he give his estimate under each heading?"

The SECRETARY FOR AGRICULTURE (Hon. W. N. Gillies, *Eacham*) replied—

"1, 2, and 3. Inquiry will be made of the British-Australian Cotton Association, Limited."

## PROHIBITION OF RATOON COTTON.

Mr. PETERSON (*Normanby*), without notice, asked the Secretary for Agriculture—

“Has Cabinet taken into consideration the request of the Central Queensland District Council of Agriculture relative to the proposed embargo against the growing of ratoon cotton?”

“Would it be possible for the Government to withdraw the Cotton Bill until such time as the matter has been thoroughly investigated in England?”

The SECRETARY FOR AGRICULTURE (Hon. W. N. Gillies, *Eacham*) replied—

“The Government have fully considered the question. Even if the Bill is passed, there is room for people to make further representations.”

## REPORT OF COMMISSIONER FOR TRADE.

Mr. KELSO (*Nundah*), without notice, asked the Secretary for Public Works—

“In view of the reply given to me last week by the Secretary for Public Works that the annual report of the Commissioner for Trade would be tabled within the time allowed by statute, I desire to ask when he will be prepared to table such report?”

The SECRETARY FOR PUBLIC WORKS (Hon. W. Forgan Smith, *Mackay*) replied—

“The report will be submitted within the time mentioned in the statute. In the schedule to the Act it is provided that the report should be tabled on or before the last day of October. The hon. member for Nundah has a copy of the statute in his hand, but is apparently not aware that the schedule was amended three or four years ago, some time before I came into office.”

## JURY ACT AMENDMENT BILL.

## THIRD READING.

The ATTORNEY-GENERAL (Hon. J. Mullan, *Fлиндерс*): I beg to move—

“That the Bill be now read a third time.”

Question put and passed.

## CLOSER SETTLEMENT ACTS AMENDMENT BILL.

## THIRD READING.

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, *Cairns*): I beg to move—

“That the Bill be now read a third time.”

Question put and passed.

## SUGAR WORKERS' PERPETUAL LEASE SELECTIONS BILL.

## DISCHARGE OF ORDER FOR THIRD READING.

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, *Cairns*): I beg to move—

“That this Order be discharged from the paper, and the Bill be recommitted for the purpose of amending clause 3; and further, that, when the Bill has been reported, the third reading may be then proceeded with.”

When this Bill was before the Committee I accepted an amendment moved by the leader of the Opposition which had for its object the allowing of a selector on one of these blocks to live in a township while performing the residence conditions, but I have since found that the insertion of the amendment moved does not accomplish that purpose. I brought the matter under the notice of the Parliamentary Draftsman, and he has drafted an amendment which definitely accomplishes the purpose aimed at. It is my intention to move the insertion of that amendment in Committee.

Question put and passed.

## RECOMMITTAL.

(*Mr. Kirwan, Brisbane, in the chair.*)

Clause 3—“Provisions of principal Act applicable”—

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, *Cairns*): I beg to move the omission, on lines 37 to 49, page 2, of the words—

(c) The selection shall be subject to the condition of personal residence by the selector for at least six months in every year during the whole term, and such condition shall be performed by his continuous bona fide personal residence on the selection during such six months at the least of every year; and the provisions of the first paragraph of section eighty-six of the principal Act shall not apply, but the provisions of section ninety-one thereof, excepting the proviso to subsection two, shall otherwise apply”—

with a view to inserting the following new paragraph:—

“(c) The selection shall be subject to a condition that the selector shall himself bona fide personally reside on the selection for at least six months continuously in every year during the whole currency of the lease; provided that while the selector himself bona fide personally resides upon and is himself beneficially interested in any town, suburban, or country land situated at a distance not exceeding fifteen miles from the nearest part of the selection, he shall for the purposes of this provision be deemed to be himself personally bona fide residing on the selection.”

Amendment agreed to.

Clause, as further amended, put and passed. The House resumed.

The CHAIRMAN reported the Bill with a further amendment.

## THIRD READING.

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, *Cairns*): I beg to move—

“That the Bill be now read a third time.”

Question put and passed.

## DAWSON VALLEY IRRIGATION UNDERTAKING.

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, *Cairns*): Mr. Speaker, I beg to move—

“That you do now leave the chair,

*Hon. W. McCormack.*]

and the House resolve itself into a Committee of the Whole to consider the following resolution—That the House approves of the proposed scheme for the establishment of the Dawson Valley Irrigation Undertaking.”

My object in doing so is to take the discussion in Committee. It is more satisfactory to get a wider scope of discussion on the matter, and we can arrange that hon. members be reported in the first person the same as when the House is sitting. That is usually done on railway proposals, and it will be a more satisfactory method on this occasion. There is not a great deal of difference in the time allowed for discussion.

Hon. W. H. BARNES: It is twenty-five minutes in Committee as against forty minutes in the House. Each man will lose fifteen minutes.

The SECRETARY FOR PUBLIC LANDS: No, he is entitled to fifteen minutes, ten minutes and ten minutes, but he has a much wider scope in discussion in Committee.

Mr. ROBERTS: Twenty-five minutes as against forty minutes—fifteen minutes, five minutes, and five minutes.

The SECRETARY FOR PUBLIC LANDS: If hon. members desire to proceed to discuss the matter at this stage it makes no difference to me, and I will deliver my speech at this stage.

HONOURABLE MEMBERS: Hear, hear!

The SECRETARY FOR PUBLIC LANDS: At the outset I desire to briefly refer to irrigation in other countries. As hon. members will know, irrigation projects have been established in almost every country in the world. Here in Australia we have also some very big irrigation projects established, and I propose to refer briefly to these projects in passing.

Originally the irrigation of land was carried out in countries where there was swampy land which was subject to periodical flooding. Later on in some countries small weirs were built and the water was diverted on to low-lying country. Latterly the idea of conserving water by impounding has supplemented largely the original schemes for using natural flowing water for irrigation. I think there can be little gained by the investigation of schemes on the other side of the world. We have our own climatic and geological conditions, consequently we must deal with projects in Australia from an Australian standpoint. I find from reading the history of irrigation that there is very little additional information to be gained from it. As a matter of fact, our Australian schemes, so far as they go, compare more than favourably with schemes in other countries of the world. In America of course they have some very fine irrigation schemes. California offers a very fine example of the judicious use of water owing to the high cost of conservation of water—high charges that are necessary because the water is carried such an immense distance—but, so far as the actual application of irrigation methods are concerned, I think we can get all the information necessary by a study of projects in our own country.

Mr. MORGAN: Are there many financial successes in irrigation in Australia?

The SECRETARY FOR PUBLIC LANDS: Not yet. I hope the hon. member will read

[Hon. W. McCormack.

the Treasurer's speech on the second reading of the Irrigation Bill last year, which deals with that aspect of the case. Australia has not the natural advantages for irrigation that some countries have, as we have very few snow covered mountains in Australia. Farther, we have heavy rains at one period of the year, and we have long dry periods.

This compels some attention to the question of irrigation. There is ample rainfall in the bulk of the settled districts in Australia, but it all falls in one portion of the year. We have no snow storage, as they have in other countries—there is practically only one place where there is any snow storage in Australia—so we are compelled to give attention to the only other available method of the conservation of water for the irrigation of the land by building weirs in our existing streams, and thus impounding the water which is then available during the dry periods of the year. We have in Australia some big irrigation schemes on those lines. Hon. members may say that some of them have been unprofitable, but I propose to show that the conditions governing them—particularly the Murrumbidgee scheme—and which make them unprofitable, perhaps do not exist in connection with the Dawson Valley scheme. That is one of the outstanding factors which have received the attention of the Government, and have enabled us to arrive at a decision to proceed with this very important scheme.

The first application of irrigation to Queensland was on a small scale with the artesian water in the pastoral industry. As hon. members know, a good deal of irrigation, not for growing crops, but for stock purposes, is carried on in Western Queensland under the system of artesian bores. A great portion of that part of the State would be to-day uninhabitable were it not for artesian bores.

Mr. MORGAN: That is not irrigation.

The SECRETARY FOR PUBLIC LANDS: It is. I mention it to lead the House up to what I have to say later on, and to show what a great benefit it is. Even though in that case the conservation of the water has been a natural conservation, we have been able to take advantage of it, with the result that what otherwise would be one of the least productive portions of the State is able to carry on a profitable industry and create great wealth. That is due to the fact that irrigation in a small way is in operation there. I know that that is only an illustration, but it shows the advantage that can accrue to the country if water is available by conservation, even if only for stock purposes. This form of irrigation is purely for watering stock, but it enables us to run millions of sheep upon country which would otherwise certainly be deserted in dry years.

The conservation of water could be successfully carried out in a number of places in Queensland. Their suitability for the purpose is due to the low cost in damming large and important rivers. The scheme under discussion will not require a great capital outlay for the building of the dam. Indeed, the capital cost will be small in comparison with the enormous amount of water that will be conserved. Nature has given us a narrow gorge in a very rocky portion of the country through which flows a large river from a big catchment area, and one of the outstanding features of the Dawson Valley scheme is that the construction of a weir 800 odd feet

long will back up what will be, I believe, the largest conservation of water in the world. That is a factor that will, undoubtedly, make for the success of this scheme. Other schemes not impounding such a large quantity of water have incurred double the expense for their dams. I think hon. members will realise that nature has given us in the Dawson Valley a great opportunity to dam up an immense quantity of water for the use of man by irrigation.

This brings me to the scheme under discussion. I shall briefly give to the House an outline of what we proposed to do. The scheme comprises a main storage dam, situated in the Dawson River at what is known as the Nathan Gorge. The dam will impound something like 2,480,000-acre feet of water. The water will be carried from the dam by gravitation along the natural bed of the river to what is known as Delusion Creek, which is 27 miles further down the river than the dam site.

Mr. TAYLOR: Is that where the first irrigable land commences?

The SECRETARY FOR PUBLIC LANDS: No. The irrigable land commences below that point. At Delusion Creek there will be a weir built—as is shown in the picture in this Chamber—which will really impound the water and raise it to such a height as will enable it to run into channels and be carried over the irrigation area. From the weir at Delusion Creek the water will be diverted by main channels and lateral channels over the whole area. That will be the commencement of the irrigation area, which is divided into several zones extending from that point right down the river. Castle Creek will be about the centre zone of the settlement. At the dam it is proposed to establish a hydro-electric plant, to be operated by the water as it comes from the sluices. The power from that plant will be supplied over the whole of the area. Most of the area will be irrigated by means of gravitation, but to the higher areas to be used for stock purposes and to other adjacent higher levels the water will be pumped by means of the cheap electric power at hand. The estimated cost of the proposal is £1,968,000. The annual charge for maintenance and management is estimated not to exceed £41,300, and the amount proposed to be set aside for interest and sinking fund is £137,670 per annum. The detailed estimated cost of the scheme is—

	£
Construction of channels and distributories ... ..	650,000
Dam and structure ... ..	961,000
Hydro-electric plant ... ..	127,000
Land resumptions ... ..	100,000
Administration ... ..	80,000
Contingencies ... ..	50,000
	<hr/>
	£1,968,000

We propose to spread the cost of this scheme over a number of years. It is anticipated that it will require something like six years to complete the whole scheme. After discussion with the Commissioner of Irrigation, I give to the House the estimated cost for each year until the completion of the whole scheme. The cost in 1923-24 will be £200,000.

Hon. W. H. BARNES: Will you be able to complete the scheme within the estimated amount?

[4 p.m.]

The SECRETARY FOR PUBLIC LANDS: The hon. gentleman might as well ask me whether this will happen or that will happen. That is in the lap of the gods.

Hon. W. H. BARNES: It ought not to be quite so.

The SECRETARY FOR PUBLIC LANDS: I am giving the estimate of a highly qualified man, who is paid a high salary to give that estimate—the estimates are not mine. They are those of the Commissioner. Whether he will exceed or keep within the estimate is a contingency that is beyond my power to foretell. Let us hope that the cost will be below the estimate.

Hon. W. H. BARNES: Success depends so largely on keeping within the cost.

The SECRETARY FOR PUBLIC LANDS: I agree with the hon. member. The success depends on the capitalisation. The danger is over-capitalisation. Some of the other big schemes that have been mentioned have been over-capitalised, not only on the cost of construction but on the value of the land in the area, and these have made them unprofitable. The estimated expenditure is as follows:—

	£
1923-24 ... ..	200,000
1924-25 ... ..	300,000
1925-26 ... ..	400,000
1926-27 ... ..	300,000
1927-28 ... ..	300,000
1928-29 ... ..	300,000
1929-30 ... ..	160,000
	<hr/>

Making a total of ... £1,960,000

Hon. W. H. BARNES: Roughly speaking, £2,000,000.

The SECRETARY FOR PUBLIC LANDS: Yes, roughly speaking, £2,000,000. The estimated annual revenue when the whole scheme is in operation is £211,500. The revenue is made up as follows:—

	£
Land and water rates on the irrigable area of 200,000 acres, at 20s. per acre ...	200,000
Land and water rates on 200,000 acres for stock and domestic supply, at 1s. per acre ...	10,000
Electrical energy—sale of energy	1,000
Crop waterings, 5,000 acres, at 2s. per acre ... ..	500
	<hr/>
Total estimated revenue ...	£211,500

If the scheme can be carried out at the cost estimated and on the interest and redemption charges given in the previous table, it will be a very profitable undertaking. The water rate is very low.

Mr. MORGAN: One shilling an acre for watering stock is fairly high.

The SECRETARY FOR PUBLIC LANDS: That will be the cost of the water delivered. The cost of conserving water on a grazing selection amounts to a good deal of money. The estimated area of good land available suitable for irrigation purposes is 200,000 acres. There are 200,000 acres adjacent to this good land suitable for grazing purposes. Later on I will explain how the Commissioner proposes to design this land so as to allow people to have a small irrigable area with

Hon. W. McCormack }

an area of dry land attached which may be used for dry stock or dairying purposes in conjunction with the irrigation area. The value of the land before resumption is estimated at 10s. per acre. This is an important point. I want hon. members to realise that it is one of the features that make for the success of the scheme. The present value of the land is about 10s. per acre. The same land, after resumption and the provision of the works, it is estimated will have a value of £12 per acre for the 200,000 acres of irrigable land, and £2 an acre for the 200,000 acres suitable for stock and domestic purposes, or a total value of £2,800,000. The value will be increased from 10s. per acre, which is the value to-day, by the establishment of irrigation facilities to a value of £2,800,000. If the estimate of the Commissioner is correct, the proposition appears to be quite sound. I intend to deal with the land values at a later period, and I therefore will not deal with them now.

Mr. TAYLOR: Will there be much resumption?

The SECRETARY FOR PUBLIC LANDS: No—very little resumption. The whole cost of resumption in the area will not be £100,000. As a matter of fact, that is the value spread over the area suitable for irrigation, which makes the value to-day 10s. per acre. The bulk of the area is Crown land, which is of little or no value at the present time. It is flooded country, useful enough for grazing purposes, but of little or no value for agricultural purposes.

The original scheme approved by Parliament last session was for the establishment of an irrigable area at Castle Creek. The idea was to establish this area and supply it with water pumped from a local weir. I understand that there is a deep waterhole at Castle Creek, and machinery has been installed there. To-day the canals are being dug; in fact, many of them are already finished; and the whole scheme is being brought to an early conclusion in that area to give us an idea of the possibilities of the larger scheme when the dam is built. I understand that the whole system of canals will be built so that, when the bigger scheme comes into operation, the water will be diverted from the present pumping arrangement into the larger scheme at very little, if any, extra cost. I think 150 acres have been cleared and grubbed, and the Commissioner expects to have water on this area by the end of this year. That small scheme should be ready for cultivation by the end of this year. It will probably be nine or ten months in the new year before the land is ready to receive the first settlers.

Quite a large organisation has been built up in that district. It is a big undertaking, and it is in a difficult position at the present time because of the lack of communication. Transport has been a problem, and will continue to be a problem, in the construction of the dam. I think the road to the main dam will be from Juandah. That will be cheaper than travelling up the Dawson Valley. At Castle Creek transport facilities have been established for doing the work on the irrigation area. A complete scheme is laid out by the Commissioner for carrying out the work, and quite a number of men are employed there at the present moment. The scheme in that area will probably be an object lesson, so that one part of the area

will show what can be done on the other portions as the scheme develops.

The Commissioner proposes on his experimental farm to show exactly what can be grown successfully on land in the Dawson Valley area. One of the main difficulties that we have to overcome in all these schemes is to find a suitable product—a suitable industry to engage in—and having found that, secure a market for our produce. I understand that the Dawson Valley area under irrigation is suitable for tobacco-growing, and it is suitable for cotton and lucerne growing. There are many things that may be tried, but the Commissioner informs me that he is more inclined to stick to the necessities of life—things that always have a market—than to engage in fruit culture, or in the cultivation of any particular luxury for which the market is destroyed when the community suffers from depression of one kind and another.

HONOURABLE MEMBERS: Hear, hear!

The SECRETARY FOR PUBLIC LANDS: No doubt there is a good deal of common sense in that attitude. One of our troubles has been the over-production of luxuries. When the spending power of the community is good, and while the people are making money, everything is all right. As soon as a slump occurs, we have to face over-production. The chief fault is lack of distribution.

Mr. COLLINS: Hear, hear!

The SECRETARY FOR PUBLIC LANDS: However, I am not now going to deal with organisation and distribution. There is less danger in giving all our attention to the production of a commodity that everyone needs than in attempting to establish what is known as a "luxury" industry. The Commissioner is wise in his decision. He proposes to confine his attention to commodities for which there is a steady demand. If tobacco can be successfully grown there—

Mr. PETERSON: Is that not a luxury?

The SECRETARY FOR PUBLIC LANDS: It is not, inasmuch as the consumption of tobacco goes on whether conditions are good or bad. I find that there is something like £12,000,000 worth of tobacco annually imported into Australia.

Mr. FRY: It would be better for the State if it were grown here.

The SECRETARY FOR PUBLIC LANDS: The tobacco companies have been endeavouring recently to get people to grow tobacco, and they have tried to assist those people. One of the difficulties connected with Australian-grown tobacco is that our producers will not kiln-dry it. They insist upon drying the tobacco by natural processes, and consequently lose their own market. If we can grow tobacco successfully in the Dawson Valley—and the Commissioner asserts that it can be grown successfully—there is a market immediately available for it without going outside Australia.

Mr. COLLINS: Has the Commissioner reckoned with the Tobacco Trust?

The SECRETARY FOR PUBLIC LANDS: I understand that the Trust is willing to purchase leaf so long as the growers dry it under proper conditions. If the Commissioner sets aside a certain area for tobacco-

[Hon. W. McCormack.

growing on his experimental farm, he will establish the necessary drying apparatus as part of his undertaking, to show that tobacco of good leaf can be grown in Australia. Once that fact is established, we can see to it that we get the whole Australian market by using our protective tariff.

Mr. MOORE: That was discussed years ago.

The SECRETARY FOR PUBLIC LANDS: At present the duty on tobacco is high, but if we could approach the Federal Government and prove that we can supply tobacco of good leaf in Australia, thus making out a good case, we should be able to secure a prohibitive tariff to protect us against outside competition. The Commissioner assures me that the chief difficulty at present is the curing of the tobacco. He says that we have no scientific methods for curing tobacco in Australia.

The Commissioner proposes to go in for lamb-raising, and growing lucerne and feeding it to stock. There is no doubt that lucerne will grow splendidly on irrigated land, and that it can be made a very profitable crop if fed in the proper way to stock.

Mr. PETERSON: Nearly all of our lucerne is imported at present.

The SECRETARY FOR PUBLIC LANDS: No doubt, during dry periods lucerne would be a very profitable crop for sale, but it would not be wise to build up an industry depending on drought conditions. There is no doubt that during a drought it is possible to get wonderful results through irrigation. I will quote from the Sydney "Morning Herald" of 23rd September last, to give an idea of what a few acres of land can produce when irrigated—

"It may be mentioned that during the 1919-1920 drought, when millions of sheep were lost and quantities of valuable and high-priced stud stock threatened with extinction, this farmer, Mr. A. Purcell, provided accommodation for no fewer than 12,700 head, including 200 high-priced rams, on an area on his estate of a few hundred acres, and fed them successfully for ten months on lucerne cut from 150 acres.

"That 12,700 sheep may be fed on 150 acres of lucerne for ten months sounds incredible, but it is true."

All the irrigated area can grow lucerne, and while it is useful to grow lucerne for fodder or for sale, still the success of the scheme would be better-founded than if merely dependent on drought conditions. The idea is to grow these crops to be used in the area for the production of special commodities, and for the sale of those commodities in the form of the manufactured articles. Otherwise, when we had good times elsewhere, we would have bad times on the Dawson Valley, and the irrigated area would be useful only when anyone else was having bad times. It is well known that fodder crops can be grown successfully, and can be used for the feeding of stock for dairy purposes. The manufacture of butter and cheese and lamb-raising will be very profitable industries. No doubt some fruitgrowing will be done in the area, and cotton-growing on small blocks can also be successfully carried out. In Egypt, the most valuable cotton crop is produced on irrigable land, which is watered every three or four weeks. Better prices are obtained for that type of cotton. In this

area cotton has been grown successfully, and if a small portion of each farmer's area is set apart for cotton, it will give the farmer a certain return each year, as he will not be dependent on rainfall. There is no doubt that even with cotton there is going to be a great deal of difficulty in Queensland unless seasons get better. The present season is a bad one, and the last season was not good, and farmers now lose their cotton; if they are on irrigated land, the prospects of a fair return are good.

Mr. CORSER: How many acres of irrigable land will each farmer get?

The SECRETARY FOR PUBLIC LANDS: I shall deal with that later on. Under the Act passed last session large powers are conferred upon the Commissioner. There is no local authority in the area, and the Commissioner really acts as the governing body for the whole of the area. He proposes to cut the irrigable land into small areas—in some places from 12 acres to 15 acres and in other places a larger area—according to the value of the land. If the settler is to go in for intense cultivation, he does not want a large area of land; but, if he has a certain amount of irrigable land and some of the high land, and is going in for mixed farming and requires land apart from the irrigable plot to run his dairy stock, then he requires a little more land. The whole area is to be designed with due regard to the value of the land. In this instance we want cultivation. There is no provision made in the Act to compel cultivation, because the very essence of the scheme is intense cultivation.

Mr. MOORE: There is no getting out of it on that area.

The SECRETARY FOR PUBLIC LANDS: No one would suggest irrigating land unless it is going to be intensely cultivated. The farmer will be allowed to grow his own crop—no crop will be forced on him.

Mr. MORGAN: That is something to be thankful for.

The SECRETARY FOR PUBLIC LANDS: He will be guided in his activities by the results of the work done on the experimental plots. Quite a number of people from other irrigation areas in Australia will come to Queensland to take up irrigation plots because of the low capital value of the land, and we shall have to use discretion in selecting the settlers for this area. We do not propose to open the area like ordinary land. Some capital is required, and capital will be advanced by the Commissioner.

Mr. MORGAN: Experience ought to be necessary, too.

The SECRETARY FOR PUBLIC LANDS: Yes, it is intended as far as possible in the first instance to get men who have carried on farming in the other States under irrigation conditions. I understand Mr. Partidge will have little difficulty in getting quite a number of farmers who have been under him in the other States to come to the Dawson Valley and settle on some of these farms. We shall try to get these men in the first instance, so that their work will be an object lesson to other people who have not had experience in irrigation culture.

Hon. W. H. BARNES: What will be the inducement for men to come from the other States?

*Hon. W. McCormack.]*

The SECRETARY FOR PUBLIC LANDS: What do you mean?

Mr. ROBERTS: Why should men who are already on irrigated land in the other States come to Queensland?

The SECRETARY FOR PUBLIC LANDS: The inducement will be that they can get land here at a low capital value and water supplied to that land by gravitation, whereas to-day some of them are on land of a high capital value per acre and it costs a large amount of money per acre to water that land because the water has to be pumped on to the land. I am only making that statement for what it is worth, but we intend to try and induce these men to come to the area, and I must take the Commissioner's word for it when he says that quite a number of people who are on irrigable areas in the South have written to him saying they are prepared to come to the Dawson Valley and take up farms in the area. They are coming on his recommendation.

Mr. ROBERTS: Will they get preference over our own men?

The SECRETARY FOR PUBLIC LANDS: The system of allotment in this instance does not rest with the Department of Public Lands; it is a matter for the Commissioner and his officers. He intends to establish a Board to deal with applicants on similar lines to those on which the Land Settlement Committee is dealing with applicants for the Burnett land. Of course, great power has to be given to the Commissioner in an undertaking such as this. In the other States the Commissioners of Irrigation have large powers, and we have to give the Commissioner that power, because somebody has to be in charge of a scheme for the settlement of an irrigation area. He proposes to have this Board established consisting of officers of his department and himself, and this Board will select approved applicants. When I say "approved applicants" I take it that he intends to select men who have good credentials, men who he believes will make successful farmers, and men who have some capital with which to carry on when they take up the land. He states that an amount of £700 or £800 is necessary to start a man on a block, and he proposes that the man should have at least £350, the balance to be provided through the Commissioner in the form of an advance. He suggests £350, as he thinks a man should have enough to keep himself without looking for sustenance during the first year of his occupation of the land.

The whole success of the scheme lies in not over-capitalising it at the outset—keeping our costs as low as possible, and being able to supply the farmers when they are on the land with water at a cheap rate. Secondly, they must be able to grow a crop that is profitable and that is saleable. I think all of these questions have been satisfactorily answered. £2,000,000 is a very low figure to get 200,000 acres under water when you consider that in some of the Southern schemes the conservation of water alone—the construction of the dam—has cost a great deal more than the whole of our scheme will cost. Furthermore, we must remember that in nearly all the other settlements the land had a fairly high capital value before the water was put on to it, and that has to be added to the

settler's capitalisation value. Here the land belongs to the Crown, and we can give it at a very low cost to the man who is going to produce from it, and, if we can, in addition to that, supply him with water at 20s. per acre, then the scheme should have a fair chance of success. There is no doubt, as with all big schemes, that we shall have a good deal of trouble. It is not going to be all smooth sailing. It is not going to be as pretty as the picture. We all know that, but we know also that sooner or later Queensland must tackle the question of the conservation of water.

HONOURABLE MEMBERS: Hear, hear!

The SECRETARY FOR PUBLIC LANDS: We are going on year after year constructing railways into the interior and building lines even in the coastal districts through very poor land, thus adding to our interest debt year after year, and when a time comes like the present there is disaster facing us. This is continually occurring, more especially in Queensland. There are places in Queensland, other than the Dawson Valley, where water can be conserved and where it will have to be conserved. In this instance we have Crown land, we have a good catchment area, and we have an ideal situation for a dam. The cost is not great, and surely it is due to this country to give irrigation a trial! Victoria has spent £12,000,000 or £14,000,000 on irrigation.

Mr. EDWARDS: It has paid, too.

The SECRETARY FOR PUBLIC LANDS: Some schemes have not paid while others have paid well. On the irrigation area at Mildura I think about 12,000 acres produced wealth of a value of £500,000 last year, and on the Dawson Valley area there are 200,000 acres of irrigable land. Again I say Queensland must face the problem of water conservation. It would pay us to hold up railway construction and develop the land that is now served by railways.

The conservation of water is one of the directions in which money should be diverted from railway construction, because we carry deficits on our railways and we do not make the country more productive, or in most instances very little more productive, than it

was before the railway was constructed. [4.30 p.m.] But in an irrigation scheme, constructed at a cost of £2,000,000—and many of our sections of railway cost £2,000,000—we have an opportunity of testing a real method of saving our stock and of encouraging production in the dry periods of the year. I can commend this proposition, so far as I know it, to the House. I admit that we have to go a good deal on estimates, but we have appointed a man to investigate this proposition thoroughly. He states that it is a good one, and compares more than favourably with any other proposition in the other States. He ought to know, as he has had experience. I believe it is a reasonable thing for this State to try the scheme. The railway is not a part of the expenditure, but I would point out that the railway in the Dawson Valley would have been built in any case, and it is much more necessary now to go on with the irrigation scheme to make that line a payable proposition. Of course, there is a good length of railway from Baralaba before we reach the point where the good land starts. We intend to build the line on to Castle Creek—that is absolutely necessary. I say that the expendi-

[Hon. W. McCormack.

ture of money in this direction will be a much better asset than the building of further doubtful railways into dry districts. Probably during the next three or four years we shall have an opportunity of seeing whether the larger scheme will be as successful as is anticipated. It may be argued that it would be wiser to delay the bigger scheme until we have tested the smaller scheme at Castle Creek. That might appear a very good argument, but it requires investigation. At first glance I was inclined to think that it might be a good thing to see if the land included in the scheme approved by Parliament last session is as productive as was stated, and if we can produce the things it was stated could be produced. But since the Commissioner has been here and has investigated the whole scheme, he is very earnest about proceeding with the bigger scheme. There are two reasons for that, one of which is that delay is dangerous, because I understand that the whole of the irrigable land is subject to periodical flooding, and the building of the dam will safeguard that flooding. I believe that, with the ordinary rainfall, it will take approximately five or six years to fill the dam; so that, to delay the bigger scheme until we see whether a model area like Castle Creek is successful will be dangerous, and may destroy the whole scheme. Consequently the Government have decided to complete the work at Castle Creek straight away, and also to proceed with the main scheme. I believe that it will take three or four years to get a fair idea as to the success of Castle Creek. The cost of the smaller scheme will be greater than if used in connection with the bigger scheme. If we go on with the scheme and have a definite line of policy, spending so much each year, there will be a great reduction in cost. If we delay the matter, it will increase the capital cost and may eventually prevent the consummation of the bigger scheme.

Mr. G. P. BARNES: You have not indicated the lines you intend following in connection with town settlements, and so forth.

The SECRETARY FOR PUBLIC LANDS: One cannot deal with everything on a motion like this, and I do not want to weary the House.

OPPOSITION MEMBERS: It is not wearying the House.

The SECRETARY FOR PUBLIC LANDS: It is a technical subject in connection with which one is speaking on behalf of somebody else. I am the Minister in charge of the political side of the matter, and it would be impertinence on my part to suggest that I knew anything about irrigation or about the method of carrying out the scheme. I have to depend on my technical advisers in that matter. In dealing with a question like this, a Minister is really obliged to give the advice supplied to him by the officer concerned, who is a highly qualified man and who has the necessary technical knowledge for carrying out the undertaking.

There is just this to be said in conclusion: I have stated that the Commissioner has been given large powers. If we get the right man on this job, it should mean success; if we get the wrong man it may mean disaster. The difficulty in all these big undertakings is to get the right man. The powers given to the Commissioner practically make him an autocrat within the area. I am told that

it is absolutely necessary for the establishment of a successful irrigation settlement to have an autocrat within the area to settle disputes which may arise and do all things necessary to bring it to a successful conclusion. Mr. Partridge proposes, as soon as possible after the settlement of the land, to allow the farmers themselves to establish advisory boards.

OPPOSITION MEMBERS: Hear, hear!

The SECRETARY FOR PUBLIC LANDS: The Government also propose that all works established by the Commissioner at the outset for the treatment of the various products, though built by the State, shall revert to the producers of the commodities in the particular areas as co-operative concerns. It is proposed to allow such utilities as butter or cheese factories or tobacco kilns to revert to the suppliers, and to capitalise the cost of the undertakings and allow the settlers later on to work them co-operatively. As I said, Mr. Partridge says that later on, when the settlements are established, he intends to form small advisory boards of the farmers to help him in the administration of the different sections in the area.

Mr. KELSO: He is to have an absolutely free hand.

The SECRETARY FOR PUBLIC LANDS: He is to have an absolutely free hand. He is to be an autocrat within that area—the last Parliament gave him that power. Of course, there is a provision in the Act which makes him subject to the Minister, but he will have complete control of the area in doing all things necessary to make it a successful settlement. The hon. member for Warwick mentioned the matter of townships. The Commissioner proposes to establish a model town. Any hon. member who is interested can see the drawings in the Irrigation Office.

Mr. MORGAN: They are on the table here.

The SECRETARY FOR PUBLIC LANDS: He proposes to establish a model town, and there is much to commend the idea. I am not one who likes to paint the lily, because these things are all on paper. I am rather of a practical turn of mind. I like to see things actually, and not on paper. All the same, the Commissioner has gone to a good deal of trouble in this work, and anyone who likes to go over the whole scheme will find in it evidence of very careful consideration and very fine imagination. He is to be commended for his work up to date. Of course, as I said before, whether he makes mistakes is in the womb of the future. We have had some bitter experience in the small irrigation scheme in the Inkerman area, and I want to obviate a repetition of what has happened there. I want to be sure of the man; I want to be sure of the undertaking. I want to investigate every avenue it is possible for me as political head to examine to be sure that the man we have obtained and whom the State is paying is the right man. That is my job. It is not my job to investigate or criticise his work after he is appointed. I am not competent to do that. The duty of the Government or of the Minister in these undertakings is to do at the outset everything possible to secure the right man, to choose the proper situation for the undertaking, and to carry it out at as low a cost as possible. I hope that in the years to come

*Hon. W. McCormack.]*

costs will decrease somewhat, and that we shall not be faced always with the enormous expense in construction which has followed the war.

Mr. G. P. BARNES: Will there be reappraisements?

The SECRETARY FOR PUBLIC LANDS: The selections will be perpetual leaseholds, and anybody objecting to the Commissioner's decision may appeal to a police magistrate constituted as a Land Court judge. That is already provided for in the regulations we have passed. I have not been able to deal with the thousand and one incidentals which may crop up in such a scheme as this. I am trying to give all the information that appears to me to be necessary when asking Parliament to grant the money involved. I admit that it is a large amount. I admit also that the proposal is new, and we do not know whether it is going to be a success. We hope it will be, and I am firmly convinced that the situation of Queensland and her climatic conditions necessitate a departure from our existing methods. If this departure is as successful as we hope it will be, I am sure that it will be the forerunner of many such schemes. If a number of these schemes could be successfully established in this State, the fears of drought would be removed practically forever from the minds of the people, because persons who have stock in dry areas would get great help during those periods of stress from the enormous productivity of these irrigated areas. I commend the matter to the House, and I move the motion standing in my name.

HONOURABLE MEMBERS: Hear, hear!

Mr. TAYLOR (*Windsor*): I have listened with a very considerable amount of interest to the speech of the Minister, who has well said that this is the biggest project in the way of water conservation and irrigation that has ever been placed before the people of Queensland. Anyone who has any knowledge of the meteorological conditions of this State during the last fifteen or twenty years can come to only one conclusion—that the bounteous seasons which we had many years ago have practically forsaken us and their place, unfortunately, has been taken by abnormally dry periods. I am quite satisfied, from the outline of the scheme which the Minister has given us, that, if it is possible to irrigate the 200,000 acres of land about which he told us this afternoon at anything like the cost for which the Commissioner hopes to do it, the scheme must be a success. On looking up the cost of various irrigation schemes in other parts of the Commonwealth, I find that the charges are very much in excess of the estimate which has been prepared for the Minister by the Commissioner.

If Queensland is going to produce anything more than a few miles from the coast-line, we must go in for extensive schemes of irrigation. If we are not prepared to do that, the sooner we go out of agriculture and dairying the better. Everybody knows that probably never before in the history of agriculture in this State—apart from our sugar districts—were things in as deplorable a condition as at present. It is up to us, as the Minister said, to make a start with irrigation projects.

\* [Hon. W. McCormack.

If one studies the development along these lines which has taken place in the other States of the Commonwealth—and this is a point to which I would like to draw particular attention—he finds that they are very much more favoured than we in Queensland in the matter of rainfall, and that in some instances they have very fine rivers. There is the Murray River, on the boundary line between New South Wales and Victoria and between South Australia and Victoria, a magnificent stream of water which has been an incalculable benefit to those States. Unfortunately, we are not favoured to the same degree; nor have we storage of water in the form of snow from the hills and mountains which contributes very largely to the success of an irrigation scheme. But, notwithstanding that quite a number of advantages which exist in the other States are denied to us, it is up to us to make the very best use of what we have for the purposes of water conservation, and this, I take it, is an attempt to make the best use of what is claimed to be an area eminently suitable for irrigation purposes, for the raising of crops which will be of the greatest benefit to the State. The raising of crops itself involves a big question. Some people talk about growing wheat. Hon. members know my opinion of wheatgrowing in Queensland. I believe that £4 an acre is as much as you can expect on the average, and I take it that on these irrigation areas we shall have to do better than that if we want people to go on them. Lucerne has been mentioned. That is one of the finest crops we can grow, and one to which we should give all the attention we can. We have developed into a very large butter and cheese producing State—Queensland is practically the largest cheese-producing State in the Commonwealth. Lucerne is the very life-blood of such an industry, and, therefore, we must encourage its cultivation as much as we can. What has been our experience during the last eighteen months? I asked a question the other day as to the amount of produce which was brought into Queensland by rail through Wallangarra—not by boat.

The reply that I got was that during the past eighteen months we had received 50,000 tons of fodder. That is enough to make the angels weep. It is terrible to think that fodder is pouring across the border into this magnificent State. The figure that I have quoted does not take into consideration the fodder that is coming into this State by boat. How long are we going to continue this sort of thing? It has been going on for years, though certainly not to the same extent as at the present time. For quite a number of years we have been drawing from the other States supplies of commodities of which we were not able to produce sufficient for our own requirements, and of which we ought to be producing quite a lot for the local requirements.

The cultivation of cotton has been mentioned. There is a good deal of doubt in many people's minds as to how this crop is going to pan out. The Minister stated that during the past year the cotton crop had had a bad spin. That is so. It is having a bad spin just now. I believe, from what we know of what has taken place during the last three years, that, if we can irrigate the land in the Dawson Valley, then the success of the cotton crop is assured. I may be wrong, but that is my opinion. We are

backed up in regard to the cultivation of cotton by men who know the business from A to Z. They have studied it from every point, and know just exactly what America can do and what Egypt can do. They have come to Queensland and have seen what Queensland can do, and they have realised after inspection and with the knowledge that they have gained of the quality of the cotton that we have been producing in Queensland that they have struck the right place. They have backed that up by investing in Queensland £300,000 or £400,000 in order to establish that industry. If the irrigation scheme is going to be a success—I fervently hope that it will—I do not see why it should not be a success—I have no doubt that in the Dawson Valley area the cotton crop will be one of the great crops which will be produced profitably in that area. We do not want to go in for a lot of fruitgrowing. I am going to quote some figures to show what is being done in regard to fruitgrowing in the other States. One of the troubles with regard to fruitgrowing in Queensland is that it is a perishable crop, and our climate prevents it being kept for any length of time. In Victoria, South Australia, and Western Australia, where the climatic conditions are more favourable, they can keep the fruit for a longer period than we can in Queensland. Our hot weather prevents us from keeping it nearly as well as they can in the other States. In connection with the packing of fruit, Victoria and South Australia have really produced an article probably equal to what can be produced in any part of the world. We want the Commissioner to make up his mind that he will take all sorts of care that it will not be fruitgrowing that the settler will have to depend upon for his livelihood and to pay the interest bill in connection with his home. The scheme is one that should have the careful and thoughtful attention of every hon. member. We are committed to an immense expenditure of money in connection with it, but I would rather see £1,000,000 lost in a scheme such as this than see the money lost in enterprises which should never have been entered upon. In connection with this scheme I would feel that an attempt is being made to develop the State on right and sound lines. We know that in Victoria for quite a number of years irrigation was practically a failure.

At 4.55 p.m.,

The CHAIRMAN OF COMMITTEES (Mr. Kirwan, *Brisbane*) took the chair as Deputy Speaker.

Mr. TAYLOR: I do not know whether the men connected with it possessed the necessary knowledge to make it a success. We know that away back in time Alfred Deakin was sent as a Commissioner to California to report on the irrigation works in operation there. After he made his report on his return quite a lot of money was spent in irrigating a number of areas in Victoria. I have seen the channels which were constructed after Mr. Deakin's return, and they were as dry as the floor of this Chamber, and I know that hardly any water ever flowed in some of them. As a result of those operations Victoria probably lost a few million pounds in connection with the initial work of irrigation, but the State did not lose heart because of that fact. They persevered with the determination to make a success of irrigation if it was at all possible. Although probably they have not made a direct profit in quite a number of the areas, through those

ventures they are to-day able to supply the other States with quite a lot of products that are necessary to maintain those States. If it were not for the superabundance of the produce which has been grown in Victoria in particular, I do not know what kind of a position some of the other States of the Commonwealth would be in to-day. That success has been very largely attributable to the success of irrigation in that State. A few days ago I was reading a number of the "Scientific American" which contained an illustrated article in connection with the Burrinjuck reservoir in New South Wales. In commenting on irrigation in Australia, although it did not in any way hold us up to derision or anything of that kind, it certainly pointed out that Australia, with its terrific loss of sheep and cattle during many drought periods which it had experienced, had not carried out irrigation in a way that one would have supposed Australia would have carried out that work. We have trusted to luck, we have trusted to the rainfall. We have said, "Wait till we get a wet season, and get this, and get that." We have never made any serious attempt to irrigate any portion of Queensland or Australia. The Government now come forward with this proposal to see if it is not possible to transform what are waste places in Queensland to-day and make them productive areas. The figures that were given this afternoon, dealing with the added value to the land as the result of irrigation, are quite sufficient to encourage us to go right ahead with the project. Since I have been in this Chamber I have never failed to realise the absolute necessity for encouraging irrigation schemes. I think the Minister was quite on sound ground in his remarks with regard to railway construction and irrigation works. During the last few years it has been forced on our minds that water conservation and irrigation are equal to, if not more important than, railway construction in this State. There is nothing more heartrending to a man and his family than to be placed on land in Queensland or any part of Australia and delve year in and year out trying to make a living for himself, his wife, and family, and then to find at the end of his year's work that there is nothing for him, and that he owes a big debt to those who have carried him on. That is the experience of quite a number of settlers in Queensland to-day. The Government have had to supply fodder to probably hundreds of selectors during the last few months. Unfortunately we cannot see any sign of the Government being able to cease supplying that fodder.

This is a big irrigation scheme which commends itself to us, and we understand that the location of the big dam is an ideal one and that the great bulk of the water to be used for the purpose of irrigation will be taken over the area by means of gravitation. I hope the Government will not stop at this scheme. There are quite a number of smaller schemes in settled areas at the present time which can be well served. The cost, too, will not be anything like £2,000,000—probably not more than £500,000 or even £250,000. In looking through "Knibbs's" figures we find quite a large number of small areas in other parts of the Commonwealth where irrigation schemes are in progress at the present time. It does not matter what the cost of water is to the settler provided the productivity of the land covers all these costs and leaves something

over. It is wonderful what land will carry in the way of costs if water is supplied to it. It is on the application of water judiciously applied that success or otherwise of a crop is practically assured.

I remember reading the discussion which took place in Parliament last year when the Secretary for Railways quoted figures to show that at Renmark in South Australia and Mildura in Victoria, which [5 p.m.] have been developed under a system of intense culture and practically are solely devoted to the growing, drying, and processing of fruit, for which they have secured a market overseas as well as in Australia, the cost of supplying water ran from £30 to £40 an acre. I do not know whether those figures are correct or not, but they seem to me enormous, and I am inclined to think that there must surely be something wrong with them, because the Minister then mentioned that the fruit harvested from 13,000 acres at Mildura amounted to £1,238,373. That is equal to a gross return of £95 an acre. As a set-off against that the Minister quoted the figures for Renmark, and said that 5,364 acres were irrigated and the value of the crop for 1920 was £235,000. That works out at £43 per acre. If the grower had to pay even £30 an acre for water to irrigate fruit lands and he only received a gross return of £43 an acre, I reckon that he would be on the wrong side of the ledger because of the cost of picking, cultivation, and one thing and another. The Minister told us that the cost of distributing the water over the Dawson Valley area will be only £1 an acre. I could not help thinking that £1 an acre is a very low price indeed for the distribution of water on this area. As I said when I commenced my speech, if the distribution of water is only going to cost £1 an acre, the Minister need not lose any sleep whatever in wondering whether the undertaking will be a success or a failure. I cannot see how it is going to be a failure if that is what water is going to cost. The scheme provides for a temporary dam at Castle Creek, 53 miles from Baralaba, in addition to the dam at Delusion Creek. The dam at Castle Creek will make provision for the irrigation of 5,000 acres. That is the first place in which an experiment is to be tried. In addition to the dam at Castle Creek and the dam at Delusion Creek there will be a big dam at Nathan's Gorge. The Minister stated that this will make a further 200,000 acres available for irrigation, and the Department of Public Lands estimates that ultimately over 300,000 acres will be available for irrigation purposes at an estimated cost of £2,000,000. The estimated capacity of the dam, I understand, is somewhere about 2,480,000 acre feet of water. Whilst I am speaking on this matter I would like to say that the first irrigation scheme which operated in Victoria was about 1887, when Chaffey Brothers came from America, and went into that Mildura country. They were really the pioneers of irrigation in Australia. Although they did not do well out of it themselves, they were men of great determination and very fine men. They worked enthusiastically and put all the energy they possibly could into this area at Mildura, with the result that it is the success we know it to be to-day. The Victorian "Year Book" tells us that the area under irrigated culture in Victoria in 1921-22 for all kinds of crops was 287,907 acres, being an increase of 5,373 acres on the

[Mr. Taylor.

area irrigated in the previous year, and 10,233 acres above the average for the previous four years. Then the "Year Book" states what the irrigated areas are carrying in crops. I find that in 1919-20 there were 76,810 acres under cereals, and in 1921-22 the area had fallen to 25,039 acres.

Mr. MORGAN: It does not pay to irrigate cereal crops.

Mr. TAYLOR: It is quite evident from figures such as these that it does not. Those are the figures after some years of growing cereals under irrigation in Victoria. We find that in 1918-19 64,181 acres of lucerne were under irrigation in Victoria, and those figures had grown in 1921-22 to 82,000 acres, showing that they realise that lucerne is a better proposition for irrigation purposes than cereals. Then, in 1918-19, under vines and orchards, there were 38,260 acres irrigated, while last year the area was 55,601 acres. The result has been that Victoria has grown more fruit than it has been able to consume and process, besides supplying the other States. In Queensland I do not believe that we grow or process enough citrus fruits.

There is a line of shredded marmalade that comes into this country from Scotland. Just imagine that! We have to bring shredded marmalade from Scotland made from oranges grown in Spain! It shows plainly that we do not realise the importance of supplying ourselves with quite a lot of commodities which we are quite capable of producing locally. I think we can grow a great deal more of citrus fruits, and we should certainly process more than we are now doing.

I shall quote some figures with regard to Mildura, just to show what can be done under a system of irrigation and close settlement.

The population of Mildura in 1891, according to the census, was 2,321. In 1896, five years afterwards, it had dropped to 2,000. In 1901 it had grown to 3,325, and in 1911 had advanced to 6,119. In 1914, the year of the outbreak of war, it had grown to 7,250. In 1916 to 8,000, in 1917 to 8,250, in 1919 to 9,000, in 1920 to 11,500, and according to the 1921 census the population then had grown to 13,183 persons. From 2,321 in 1891 to 13,183 in 1921!

That shows that the settlement has been a success, because the growth of population, with one exception, has been steady right from the time the irrigation works were started there. The same can be said with regard to Renmark, which I understand is a very much smaller area, the population being about 4,000 persons.

Before finishing, I should like to quote a few more remarks from the Commonwealth "Official Year Book" for 1921-1922—

"Australia's first experiments in irrigation were made with the object of bringing under cultivation areas in which an inadequate rainfall rendered agricultural and even pastoral occupations precarious and intermittent, and although these original settlements have for the most part proved fairly successful, most of the States, instead of promoting new settlements in unoccupied regions, are adopting the policy of making existing settlement closer."

It then gives a list of the various settlements in the whole of the States.

Then we come to see what has been done in New South Wales in the matter of irrigation. There is the Murrumbidgee scheme, which embraces what is known as the Burrinjuck dam. Then they have established irrigation settlements at Curlwaa, near Wentworth, and one at Hay. The Curlwaa irrigation consists of 10,600 acres, and the Hay irrigation area of about 4,500 acres, which previous to 1913 was controlled by a trust. It is in a dry portion of New South Wales, similar to a number of our dry areas in Queensland. Then they have the Murray River irrigation scheme and the tremendous Hume reservoir, to which New South Wales, Victoria, and South Australia are each contributing somewhere about £1,250,000 or £1,500,000, and the Commonwealth is contributing £1,000,000—I know that the contributions from each of the States exceeds that of the Commonwealth. The total cost of this reservoir will run into probably £5,000,000 or £6,000,000, which shows that they are not afraid of big things there.

It is the day for big things to be done in Queensland. We have to get out of the rut of acting in a small way, and we must visualise, not only what it is necessary to carry on to-day, but what Queensland is going to be in fifty or a hundred years. We must legislate in such a way that those who are coming after us will admit that we have not neglected our opportunities of making the State of Queensland not only habitable and profitable to ourselves, but have made it habitable and profitable for those who follow us.

With regard to Victoria, we are told in the Commonwealth "Official Year Book," that the Goulburn is the largest of Victoria's irrigation enterprises. It serves, either for irrigator or domestic and stock purposes, 863,000 acres of land in the valleys of the Goulburn, Campaspe, and Loddon Rivers.

It is constructed of concrete masonry, and a full description is given in the Commonwealth "Official Year Book." Then we have the Cohuna, Gannawarra, Koondrook, and Swan Hill schemes. The whole of these schemes are in the wheat belt. I do not know exactly the cost of distributing water in these areas. Regarding the Nyah irrigation area, the Commonwealth "Official Year Book" says—

"This area was occupied in 1894 under village settlement conditions, settlers being allowed up to 50 acres each. Individual attempts at irrigation having proved unsuccessful, a Government scheme was prepared for the whole settlement. A number of settlers surrendered portion of their holdings which were too large for their effective working, and these portions, with adjacent Crown lands, were resubdivided and made available under the Murray Settlement Acts, 1907, on easy terms."

The agreeable part is that after being subdivided into 208 holdings, with an average of 17 acres, 200 have been settled. The settlers include fifty-seven discharged soldiers—

"The channels have been extended to the soldiers' holdings, and an additional pumping plant erected to meet the increased demand for water. Water rights are apportioned to these holdings on the basis of 2½ acre feet of water for each irrigable area, and the compulsory charge is at present 16s. per acre foot of such water rights. The land is devoted

mainly to vineyards and orchards, and the settlers, taken as a whole, are making good progress."

That shows just exactly what can be done. Like the Secretary for Public Lands, I am not going to paint a lot of fancy pictures. I like the real thing, and I certainly think that, if we saw some of those Southern settlements, we should see the real thing. I hope that it will not be very long before we shall have the real thing in Queensland. I think that the scheme we are considering to-day will be the success we hope it will be, because the wealth of the State depends upon irrigation and water conservation, which we must provide for if we are to hold our own as one of the foremost States of the Commonwealth.

Mr. PETERSON (*Normanby*): I am sure that no one can feel more pleased than myself with the proposal before the House, because, after advocating for a number of years this gigantic scheme, I am now seeing the fruition of my advocacy. The Secretary for Public Lands deserves the thanks of the community for taking upon himself the introduction of the proposal which is, I believe, one of the most important that has ever come under the notice of the House.

We have heard a great deal from time to time about the loss that this State has sustained through dry seasons. I have heard those arguments until I am sick of them. I have been one of the school who believe that there is only one hope for the man on the land in Queensland, and that is through the channels of water conservation and irrigation. The reason why I came to this conclusion is that for the past twenty-five years our seasons have varied considerably. Unfortunately, the meteorological reports show clearly that we have lost to a considerable degree the rainfall to which we had been accustomed. I can remember that when I was quite a lad we had regularly in the Central district of Queensland February rains. That went on from year to year, and it was a rare thing for a drought to take place.

To-day the very reverse is the case. Instead of steady rainfalls at stated periods we have droughts, and, in view of the fact that Queensland to-day is importing large quantities of produce from the Southern States, it is in the interests of Queensland that this proposal should be supported. The Minister pointed out clearly that the success of the scheme depends upon the cost at which water can be supplied to the settler, and I hope the experience of the Inkerman irrigation scheme will not be repeated. I happen to be member for the district in which this scheme is to be carried out, and I am sure, if the Minister has his way, the Inkerman business will not be repeated there. Although the Minister may delegate to the Commissioner the sole control of the area, it is a case of God help the poor unfortunate settler when things go wrong, because he is the man who has to foot the bill, and, as the hon. member for Bowen knows, the member for the district has to foot the bill politically. Generally speaking, the member for the district is the one the settler can get his boot into first. He cannot get at the Commissioner, and sometimes he cannot get at the Minister, but they can all get at their own member. However, if the Minister carries out this proposal in the way he has announced this afternoon, I do not see that it can be other

Mr. Peterson.]

than a gigantic success. The enhanced value of the land alone will more than compensate for the £2,000,000 which it is said this scheme is going to cost. As the Minister said, it is not only necessary to provide water, but it is also necessary to grow a product for which we can obtain a market. Unfortunately, the conditions to-day are such that, if we were to produce more butter and cheese than we are doing to-day, we would have a difficulty in selling it. The Minister forestalled argument in that respect by pointing out that it is proposed to go in for tobacco and lucerne growing. I think these two crops can be successfully grown on the Dawson Valley area. You have there a very deep loamy soil, which must spell success as far as lucerne-growing is concerned. At the present moment, as the leader of the Opposition pointed out, Queensland is importing thousands of tons of fodder from the Southern States. On this area we shall be able to grow all the fodder that is required in Queensland for many years to come, and even from that standpoint we have nothing to fear. Seeing the Minister is so desirous of keeping the cost to the settlers as low as possible, why is it that the Government have commenced the construction of the Baralaba-Castle Creek Railway, and at the same time are going on with the Castle Creek scheme? Does the hon. gentleman know what is occurring there? There are thousands of pounds being lost in connection with haulage. I am only trying to assist the Minister to keep costs down. At the present time there is a large number of teamsters and a number of motor-cars employed in conveying material and all the paraphernalia required for a great work like that from Rannes to the dam site on Castle Creek. All this material has to be carted about 60 miles. Thousands of pounds will be spent on cartage when the Government should have had the railway constructed to Castle Creek before starting the dam. There is a tremendous amount of traffic on that road at the present time.

The SECRETARY FOR PUBLIC LANDS: The material for the construction of the main dam will not go over that line.

Mr. PETERSON: I have been up there several times recently, and there is a considerable amount of traffic, and, if the hon. gentleman wanted to keep costs down, instead of paying £5 or £7 a ton to convey material from Rannes to the dam site, he could have run the railway down and carried that material for about 7s. or 8s. a ton. I cannot understand why the railway was held back and the other work proceeded with first. It is rather putting the cart before the horse. I hope the Minister will do everything he can to have that railway expedited to the fullest possible extent, seeing he is anxious to keep costs down.

The SECRETARY FOR PUBLIC LANDS: The establishment of a motor-lorry service has reduced the cost by 50 per cent.

Mr. PETERSON: No doubt every economy has been practised in that direction, but I want to know why the Baralaba-Castle Creek Railway is not being pushed on faster than it is, seeing there are no engineering difficulties, so that the Government could get the whole of the material down there promptly. Wait till the wet season strikes some of these motor-lorries on the Banana road—

The DEPUTY SPEAKER: Order!

[Mr. Peterson.

Mr. PETERSON: The Minister stated that he was endeavouring to keep costs down as low as possible, and I incidentally wish to point out that he is not going to reduce costs by carting his material in motor-lorries instead of on the railway.

The SECRETARY FOR PUBLIC LANDS: The cost of cartage has been reduced from £5 to 30s. a ton.

Mr. PETERSON: If that is so there is very little to complain about, and I am very glad to hear it.

When I advocated the Dawson Valley irrigation scheme about four years ago, the scheme was ridiculed by certain leading gentlemen opposite.

Mr. COLLINS: We supported it.

Mr. PETERSON: Some of you did. I remember the hon. member for Bowen did. I can remember that the report of Mr. Crowley was distinctly in favour, not only of the Dawson Valley irrigation scheme, but of other irrigation schemes in Queensland, but immediately I advocated the construction of the Dawson Valley scheme Mr. Fihelly, the then Treasurer, issued a report thoroughly condemning it. But time has told its own tale. More competent men have come on to the scene, and gentlemen who have had previous experience in irrigation works have reported favourably on the scheme, and I trust their anticipations will become accomplished facts, and that Queensland will be given a greater push forward than she has had under any scheme up to the present. This scheme is going to be of great benefit to Queensland, because it is going to save thousands of acres of land from the pear menace. The members of the Public Works Commission who travelled through that district must have been appalled at the rate at which the pear is ravaging the whole of that area, and it is only a matter of time, if we do not take time by the forelock, when the whole of these lands will be lost.

The SECRETARY FOR PUBLIC LANDS: That is a certainty.

At 5.23 p.m.,

The SPEAKER resumed the chair.

Mr. PETERSON: The Minister knows from his experience what a menace it is, and consequently if nothing is grown at all as a result of these irrigation works the money will be well spent, as the cost of construction will be more than covered by the value of the land saved from this menace. I trust the House will accord its support to this proposal. As member for the district I am very pleased to see it brought forward, and I am of the opinion that, if the works are efficiently controlled and sympathetically administered, the scheme cannot be other than a great success; and I hope the people who will be settled on the area will be a class of settler who will spell success from the start. A lot will depend upon the class of settler going to the area, and I hope the Commissioner will meet with success in his selection. I feel sure that the Minister's prognostications will be borne out, and that this Legislature will never regret having voted for this proposal.

Mr. CORSER (*Burnett*): This scheme involves a considerable cost—namely, £1,968,000. Its success depends in one particular on the Commissioner of Irrigation.

If his scheme is anywhere within the estimate, it looks as if the proposition is going to be a fairly cheap one, in view [5.30 p.m.] of the possibility of opening the amount of land in irrigable areas that is proposed under the scheme. But to take another feature of this proposition, when the Dawson Valley Railway to open up this irrigation scheme was before us, I raised the point which probably is foremost to-day—that is, as to what we are going to grow on these areas. It is proposed that we cut up the irrigable land into 12-acre blocks. I have not heard any suggestion as to what is a valuable crop to grow under intense cultivation other than that tobacco might be grown in the area. It seems curious to me that the Minister suggested tobacco, as he has no previous experience to guide him.

The SECRETARY FOR PUBLIC LANDS: You do not blame me?

Mr. CORSER: No; but surely there must have been something in the minds of the Government when they brought forward such a scheme as this! Surely this land should be good for such and such a crop! The scheme should not be first launched and the money expended before something is done to a-certain what can be grown on the land. I asked what crops could be grown there when the railway was before the House. It was suggested then that probably lucerne, maize, or wheat might be grown, all of which were ridiculous, having regard to the amount of added value in the land.

The SECRETARY FOR PUBLIC LANDS: Mr. Partridge, who has had experience, now suggests certain definite things.

Mr. CORSER: We have launched the scheme and spent at the present time £28,000 or £30,000.

The SECRETARY FOR PUBLIC LANDS: More.

Mr. CORSER: From the Auditor-General's report I notice that we had spent £30,000 up to the middle of the year. We have gone on with a certain amount of railway construction, but even now the Government are not able to tell us what is going to be grown. We have to depend on the Commissioner to pull us out of the mire. We are going to ask him what can be grown on these lands. What can we grow on land on which £1 an acre a year will be paid for irrigation? It is to be cut up into 12-acre blocks, and is distant 180 odd miles from the coast. It is a long way from a market. We are not going to have a market like they have in Victoria, where they have the Melbourne market. You might take the stuff into Rockhampton. It has been stated that at the Mildura irrigation settlement in Victoria last year over £500,000 was received from 12,000 acres, but there is intense cultivation and a valuable product grown at Mildura. It has not been proved that the Dawson Valley land is fruit land. It has not been suggested that any of the more valuable products have been grown successfully in that district. Now it is hinted that tobacco may be grown, and so it may; but we must remember that in Queensland we have had an amount of experience in tobacco-growing. The Liberal Government for years had an American expert, Mr. Nevill. He visited the greater part of Queensland and carried out experiments in tobacco-growing, which is a valuable crop; but what he gathered was not sufficient to induce anybody to go in for

tobacco other than at Texas. We were faced with quite a number of difficulties, in that the tobacco grown was not always a tobacco suitable to the palate of the smoker in Queensland. I am mentioning this because tobacco is the most valuable product which it is suggested should be grown on this area. We have not had placed before us evidence that it is going to be profitable to go in for tobacco-growing in the Dawson Valley. I sincerely hope that the experimental crops suggested by the Minister will be initiated at the earliest opportunity. The Minister has promised to take members of Parliament out to this area when the water is first laid on. I suggest that the Minister should immediately establish, in characteristic soil, plots for the growing of various crops to see if they will grow.

The SECRETARY FOR PUBLIC LANDS: We have got 150 acres ready.

Mr. CORSER: I suggest that these crops should be started immediately to ascertain their value after we have taken them over the railways.

The SECRETARY FOR PUBLIC LANDS: We cannot start to grow them until we irrigate the land.

Mr. CORSER: That is so; but the Minister claims that the water probably will be ready before the end of the year. I hope he will get on with the matter. It will be too late then to plant lucerne and tobacco, so I do not know what he is going to do. The scheme looks all right, and £2,000,000 seems to be a small cost for the amount of water which is to be stored and the area of country to be benefited; you cannot criticise that. It is a professional expert's estimate, and appears to be all right, and it is adopted by the Government. I can offer criticism, however, as to what the conditions will be when we get the water. I have failed to find from the Minister's statement that there is any settled policy as to what the settlers are going to grow. It is like the farmer going into the Upper Burnett without knowing what he is going to grow, but it is not going to cost him £1 an acre there for water. The Government must find a market and show the settlers how to grow the particular crop which will make those areas profitable. Personally, I think that the people on the 160-acre blocks, for which water is to be provided for stock and domestic purposes for £8 a year, will receive the water at a very low rate. I think the people will be most fortunate in being able to get water facilities under such favourable conditions.

There is one matter probably of more interest to the member for the district than anything else—that is, that £200,000 is to be spent each year; but I notice that in the year of the next election they are going to expend £400,000.

The SECRETARY FOR PUBLIC LANDS: That was the amount asked for by the Commissioner. It was not fixed by the Government at all.

Mr. CORSER: The interest bill, we understand, will be augmented by £137,760 per annum, and the scheme provides for a revenue of £200,000, or £1 an acre, per year. The experimental farms are what have struck me most, and it is to be hoped that the Minister will devise a system under which people will be able to see what can be grown profitably, and that the market is assured.

*Mr. Corser.]*

It should be something that is not going to be grown in the Upper Burnett.

The SECRETARY FOR PUBLIC LANDS: Don't you think that in your district you will get plenty of crops if you have good water?

Mr. CORSER: Yes.

The SECRETARY FOR PUBLIC LANDS: Then why object?

Mr. CORSER: I have not said that you will not; but without an expenditure of £200,000 a year in the Upper Burnett and Callide Valley you anticipate the growing of crops of lucerne and maize. It is intended to throw open 5,000 farms, and there will be that number of farmers in addition to what there are to-day. Under this scheme we are going to open farms in small irrigated areas of 12 acres. What is the intense cultivation which is going to take place on those small blocks, with a rental of £1 a year for water, which is going to give them a reward equal to that gained by an ordinary farmer in a good season?

Mr. PETERSON: You want a market to encourage settlement.

Mr. CORSER: That is quite right.

The SECRETARY FOR PUBLIC LANDS: According to your reasoning we are at the end of our tether.

Mr. CORSER: The Minister cannot get out of it that way. He agrees that we are going to put 5,000 new farmers on the Upper Burnett and Callide lands alone. Surely they are going to produce a tremendous amount over and above what is already produced of the ordinary commodities?

The SECRETARY FOR PUBLIC LANDS: They are going to use it, too.

Mr. CORSER: Perhaps so, but surely men on 12 acres are not going to grow the same class of commodity.

The SECRETARY FOR PUBLIC LANDS: They may.

Mr. CORSER: What is going to be grown? The Minister only suggests tobacco, which may form a solution of the problem, but we have no evidence that in that area tobacco will be successful. Take cotton. Supposing that cotton is grown on 10 acres, with a return of £30 an acre—which is a good return—that would only give £300. I am raising a point that the Minister will find is a very practical one, and he will find as things go on that these things will affect the scheme more than anything else. I think he will agree that this is the time to point out the difficulties, and I hope that he will give the greatest attention to them.

Mr. DEACON (*Cunningham*): While this scheme may not do any harm, it is difficult to realise just how it is going to be a success.

Mr. KIRWAN: You are a Jeremiah.

Mr. DEACON: I am not a Jeremiah. On looking at it in the light of the information we have it is very hard to see that it is going to be a success. While I am not going to criticise the scheme adversely altogether, I want to point out some things which do not appear quite clear to me or, so far as I can understand, to anybody else. A lot of money is to be invested for one

[*Mr. Corser.*

thing, and I think I shall be in order in criticising the scheme from that point of view alone. The burden is to fall on the settlers alone, and I think every one of us should be very careful to consider this aspect of it before we agree to go in for it. To start off with, we are told that the land comprises red sandy alluvial soil valued at 10s. an acre. That is poor land—second-class grazing land—so that a large amount of the land to be irrigated is inferior land. If we are going to put settlers on bad land, how are they going to get heavy crops? It is not water alone that grows crops. Take similar land anywhere in Queensland and see what it grew in a year when the rainfall was high—at a time when it was at its best. If that is equal to what you can do with irrigation, you will have an idea of what this poor land will grow. You cannot get heavy crops off poor land with all the water in the world. And this is poor land—land worth 10s. an acre—red sandy soil, white sandy loam, and so on. It cannot be denied that that is poor land.

Mr. CARTER: How can you carry on intense cultivation without manuring?

Mr. DEACON: I can show the hon. member for Port Curtis land which has been farmed for sixty years and there is not the slightest sign of its giving out, and that has been done without any manure at all. The Minister says that the settlers may grow tobacco. Can he show me any part of the world where men from the old country—Anglo-Saxons—have made a success of growing tobacco unless they have had cheap labour?

Hon. F. T. BRENNAN: If it had not been for W. D. and H. O. Wills we would be growing it to-day.

Mr. DEACON: Where are they growing tobacco profitably to-day?

Hon. F. T. BRENNAN: Texas.

Mr. DEACON: There you have the Chinese. They would not be allowed under this scheme. We could not settle an army of Chinese on this land. The Government would not dream of it. Tobacco has been tried on the Downs. It is an old problem, and the main objection is that you will not get people to take on anything like that in a general way without cheap labour. They will work a machine or take any job in town, but put them on the land at market gardening and how many of them like it? Tobacco-growing is really glorified market gardening.

The SECRETARY FOR PUBLIC LANDS: Is not irrigation glorified market gardening?

Mr. DEACON: We are told that the settlers on these lands might grow cotton. I am quite sure that they will be able to grow cotton, but whether we can hold our own with the cheap cotton grown elsewhere is another matter. The whole business seems to be experimental. I am just trying to show the Minister that he does not know what these settlers are going to do, and I for one like to see where we are travelling. The Minister put forward no certainty of crop; he only suggests that these crops will be grown, and he has not shown that they have been a success elsewhere in Queensland. The Minister mentioned sheep-raising, and quoted the case of a man who had raised

so many sheep in drought time with the aid of irrigation. That is not a fair comparison.

The SECRETARY FOR PUBLIC LANDS: Most of the farmers, instead of hand-feeding stock in dry times, allow the stock to get feed for themselves.

Mr. DEACON: The Minister has been misinformed.

The SECRETARY FOR PUBLIC LANDS: I have not.

Mr. DEACON: The farmers in my district feed their stock.

The SPEAKER: Order! The hon. gentleman must connect his remarks with the irrigation scheme under discussion.

Mr. DEACON: I am going to do that. The Minister has stated that the farmers do not hand-feed their stock. Even if he has been correctly informed he is dealing with the same class of settlers as he will have to deal with on this area.

The SECRETARY FOR PUBLIC LANDS: Is not the gist of your argument that people are doing the thing I have stated?

Mr. DEACON: No. I am trying to show that the farmers are going into the area to make a success for themselves and not for the purpose of making so much work for others. The Minister, in giving an estimate of the cost of the scheme, said that there had been grave mistakes made in other States. There have been grave mistakes in the other States, and it is safe to infer that we are going to make mistakes here, too.

The SECRETARY FOR PUBLIC LANDS: I know of a very careful fellow who walked in his sleep. (Laughter.)

Mr. DEACON: I hope it was not the Minister, for his own sake. There has been no sleep-walking in connection with the Inkerman irrigation scheme. We know the cost there. The Minister said that he hoped the actual cost would not be as much as the estimated cost. How are you going to expect a reduction in the estimated cost? The main expenditure will be in connection with labour. You cannot expect that cost to be reduced. The tendency is for it to rise.

Hon. F. T. BRENNAN: Labour is only a detail.

Mr. DEACON: It is a detail that makes all the difference between success and failure in a scheme like this. We have had no evidence to show that this scheme is going to be a success. It is safe to say that the cost of the scheme has been greatly underestimated. If we are going to have 200,000 acres brought under cultivation, then, after taking into consideration drought, waste, soakage, and evaporation, you will have to impound more water than is proposed to be impounded by the Nathan Dam.

The SECRETARY FOR PUBLIC LANDS: Do you say that sufficient water will not be impounded? How do you arrive at your estimate?

Mr. DEACON: In just the same way as the Minister obtained his evidence as to what crops will grow—by guessing at them. (Laughter.)

Mr. F. A. COOPER: Are these guessing competitions in order?

Mr. MORGAN (*Murilla*): I recognise that in connection with this scheme the Minister has great responsibilities thrust upon him,

and I recognise also that the Commissioner who has to carry out the work and supervise the expenditure has to carry greater responsibilities than the Minister or the Government in the handling of this scheme. I feel sure that in the Commissioner we have a man who has come from other States with a very great reputation, creditably earned in those other States, and I feel confident that, when the work is finished, Queensland will have value for the money so expended. In the early days in Victoria, after the late Mr. Deakin came back from America, instead of having real practical men at the head of affairs, there were a lot of theorists—men who knew little about the subject of irrigation other than what they had read—with the result that the money expended in those days was really expended in an experimental way. Generally, when any Government go in for experimental work or experimental legislation, those who come after them—provided that they have some ability—will profit by the experience of those who experimented under the earlier Governments.

We cannot altogether look upon the estimated cost of this scheme as being the definite figure within which the work will be completed. The officers who have estimated that figure have to a very great extent been guided by what they know and by what they have seen on surveys, plans, and measurements. While that figure may not be quite correct, I think it is sufficient for us at the present time.

Mention has been made of the cost of the water to be supplied to the intending settlers. That is the most important point in relation to the success of the future settlers. If the cost of the water is going to exceed the returns from the land, then the scheme is going to be a complete failure. Even if the scheme proves to be more or less a failure from an irrigation point of view, still I think the expenditure of that amount of money in conserving a huge body of water almost in the centre of Queensland is going to alter the climatic conditions of this State to a considerable extent. I believe that it is going to be a means of increasing the rainfall and making it more certain than it is to-day. In Victoria, after huge bodies of water were conserved, the seasons were not so erratic as they were in the early eighties and nineties. It has been found in that State that the storing of water has not only meant more even rainfall, but there have been better climatic conditions. I feel sure that by the storing of such a large body of water, more especially in the Central Queensland and far Western districts of the State, the same results will follow. If possible, I would like to see a canal taken from the Pacific Ocean into the centre of Queensland, because, from a climatic point of view, that would be a huge benefit to the State. We have spent millions of pounds on our railways, but we have spent little or nothing on water conservation. If the Minister would look up my remarks ever since I have been in this House, he will see that I said that one of the things that first struck me when I came to Queensland was that we were spending millions of pounds in building railways and doing nothing to conserve the water that ran year after year into the other States. We have the Condamine River, which I think is one of the longest rivers in the world. The water that flows from Warwick flows through Queensland into New South Wales and into the Murray River, and is stored there for irrigation purposes.

*Mr. Morgan.]*

Several speakers, including the Minister, mentioned the crops likely to be grown in this area. It is generally recognised that crops of some value must be produced in order to ensure the success of this [7 p.m.] scheme. The leader of the Opposition referred to the fact that the Secretary for Railways, when speaking on this matter last session, stated that it cost £30 to £40 an acre to irrigate the land at Mildura.

Mr. COLLINS: £30 or £40! Should it not be £3 or £4?

Mr. MORGAN: I understood the leader of the Opposition to say £30 or £40. That may have been a misprint. At Mildura the land is irrigated three times in the year. A 10-acre block is looked upon there as a living area, and a man with a 20-acre block is regarded as a fairly large fruitgrower. The principal crop grown, from a marketable point of view, is the sultana. If that crop failed, it would mean an enormous loss to the fruitgrowers. The point that I wish to make is that three waterings are usually necessary a year. During a dry period it might be necessary to give the land a special watering. Those three waterings cost £2 10s. an acre. At Merbein, another settlement where the vine is grown extensively, three waterings cost 42s. 6d. per acre per year, while at Renmark for four waterings during the year it costs £3 an acre. I have not the figures for the other two irrigation areas. If the results in the Mildura district are taken over a period of ten years, it will be found that land irrigated for dried fruit purposes produces a crop worth from £60 to £80 an acre. That is the revenue obtained by the fruitgrower, though it is quite possible in good seasons for him to receive as high as £100 an acre. It can be recognised, therefore, that the cost of watering—£2 10s. per acre per annum—is pretty cheap. On the other hand, if it costs £2 10s. an acre to irrigate land for wheat-growing, if the crop is worth only £5 an acre, it would be disastrous to go in for growing wheat or other cereal crop. That is one of the reasons why it does not pay to grow wheat or oats by irrigation in the Southern States. A more valuable crop must be grown if it is intended to irrigate. That is one of the points that will have to be taken into consideration in connection with this scheme. It would be an impossibility to grow fruit in the Dawson Valley for the purpose of drying it. It is a well-known fact that there must be no rain during the drying season. Considerable damage has been done to the fruit by showers of rain at Mildura during the drying process.

Rain will do more damage there than dry weather, because they can get over dry-weather conditions by the use of water. In Queensland, if we endeavour to grow fruit for the purpose of drying and marketing it in that form, we shall find that just at the time when the fruit is ready to harvest a shower of rain will probably fall and spoil it. I consider the conditions are not suitable in this State for drying fruit. The fruit would have to be dried by artificial processes, which would not allow us to compete favourably with the naturally-dried fruit of Victoria and South Australia.

The Minister mentioned that lucerne would be extensively cultivated. From what I know of the locality, I believe it will pay to grow lucerne from a dairying point of view. I do

not know whether it will pay to grow it for sale as fodder, but for the purpose of growing lucerne for the cow—"putting it through the bucket"—it should be a success, and no one could complain if the cost for irrigation only amounted to £1 an acre. That is not a large amount, and I feel sure that if water can be given to these people at an average of £1 an acre on the best land in the Dawson Valley it is not going to be a costly scheme from the producer's point of view, and will leave him a decent margin of profit. I am not quite so sure, in connection with the Minister's statement, that it will cost 1s. an acre to supply water for stock and domestic supplies. In the Wimmera district in Victoria, the rate on 320 acres amounts to about £5 a year for stock and domestic supply, which is quite a different proposition. I am doubtful whether people can take up Dawson Valley land that is not irrigated and pay 1s. an acre for the purpose of watering the land so that their stock can be fed and watered satisfactorily. I think that it will be too costly.

It has been mentioned by the hon. member for Cunningham that the land in the Dawson Valley has not a large carrying capacity. I would draw the hon. member's attention to the fact that the Mallee country in Victoria, before being irrigated, would not feed a bandicoot to 500 acres. Until that area was irrigated it was of no use from a grazing point of view, as it produced only eucalyptus scrub. It will therefore be seen that land may be useless from a cultivating and grazing point of view when only receiving its natural rainfall, but when properly irrigated the same land becomes very productive and exceedingly valuable. I remember Mildura before the train went there, and about eighteen months ago I again went to the locality to look over it and meet some friends, and I had the opportunity of making a comparison. The progress has been wonderful. The progress that has been made at the soldier settlement at Red Hill in connection with the growing of fruit for drying purposes is almost unbelievable. When water is supplied to land of that description it turns it from almost a desert into a Garden of Eden. If that can be done in Victoria, I feel sure that we can do the same in Queensland. Like the leader of the Opposition—and I feel sure the view is held by most hon. members—I recognise that the time has come when we should spend millions of pounds on water conservation and less on railway construction.

We have suitable rivers. I live on the Condamine, and I know that river from one end to the other, and I know that the Condamine lends itself to locking. There are thousands of acres of beautiful land along the banks of that river suitable for irrigation, and, if water was available, we would have been able to produce the necessary feed for our stock in this time of drought and thus prevent the deaths that are occurring daily amongst our valuable stock. It is a well-known fact that Australia is in what might be called a drought zone. We suffer more or less from droughts from one end of Australia to the other, and unfortunately we in Queensland have done little or nothing up to the present in the way of conserving water. The water that is to be conserved in the Dawson Valley is going to be of immense benefit, not only to the area that will be immediately served, but to the whole of Queensland. As the Minister has already

[Mr. Morgan.]

stated, Nature has provided us with an opportunity of conserving at little cost the largest body of fresh water that has been conserved in any part of the world. The hon. member for Carnarvon need not fear for one moment that there is likely to be a shortage of water in connection with this scheme. I know the Dawson River well, and that river has seldom, if ever, been known to cease running, as there are numerous springs running into it. When the reservoir is once filled I feel sure we need have no fear that the water is likely to "peter out." The Minister has mentioned the fact that a road has to be made from Juandah for the purpose of conveying the heavy material that will be necessary for the construction of the dam across Nathan Gorge. I am sorry that the Government are not going to proceed with the construction of a railway to connect the Southern railway system with the Central system. It is only a matter of time when that railway must be constructed to link up with Rockhampton. No doubt it will be necessary to spend some thousands of pounds to make the road trafficable to Juandah, and once the dam is constructed that road will cease to be of any further benefit to the State. If a railway were constructed, it would mean that the material for the construction of the dam could be conveyed much cheaper, and the connecting link between the two systems of railway that has been advocated for so long would be an accomplished fact. No doubt the cost of making that road is included in the figures the Minister has mentioned, but I feel sure it would have been a much better plan if the Government had decided to build the railway in order to convey the material for the dam instead of spending the enormous amount of money that it will be necessary to spend to make this road from Juandah, which will eventually be lost.

It has been mentioned by the Minister that tobacco can be successfully grown in this locality. It is a well-known fact that while tobacco may be grown luxuriantly, it may not have the flavour which is necessary to render it of marketable value. It is the same as it is with grapes. A crop of grapes may be grown on land, but it will not produce good wine, while the same variety of grapes grown on land of different quality will have the necessary ingredients for the production of a very fine quality of wine. It is not the fact that tobacco can be grown in bulk, but the quality of the tobacco which counts. The soil must be analysed, and if it is found to contain the necessary ingredients, the tobacco grown will be of the finest quality from a smoker's point of view: but if it is not, all the water in the world will not make the tobacco of good quality and suitable for manufacture. It has been stated that the Tobacco Trust will be prepared to take all the tobacco that is grown in connection with this scheme, but the Tobacco Trust never did anything to assist the tobacco-growers in the Texas district. In fact, they did all they possibly could to discourage the growth of tobacco. One of the reasons for that is that the Tobacco Trust are a huge monopoly, and they do not want any interference with their monopoly. If we can grow tobacco successfully and of good quality, why should we depend on the Tobacco Trust in any way? We ought to be able to manufacture our own tobacco, and not depend on what the Tobacco Trust like to give us.

Mr. PEASE: The Commonwealth Government have killed the tobacco industry.

Mr. MORGAN: I do not know whether it is the fault of the Commonwealth Government or of the Tobacco Trust, but the Commonwealth Governments, either Liberal or Labour, have never done anything to counteract the influence of the huge monopoly which has a grip of Australia. Unfortunately, there has been no Government in the Commonwealth which has set out to fight the monopoly to give the producers of tobacco in Australia a fair deal. If tobacco can be grown successfully in this locality, I hope that we shall have the backing of the Government in the direction of manufacturing it ourselves, so that we may get the full benefit for the producer, and be independent altogether of the Tobacco Trust.

I am pleased that I represent the portion of Queensland where this water is going to be conserved. The land which is to be irrigated is not in the Murilla electorate, but the whole of the water is to be conserved in that electorate. The storage of the water is going to deprive a number of people of their holdings, and I trust that when the Government are resuming the land, they will treat liberally the settlers and graziers whose land is going to be taken. I hope the Government will recognise that many of these people have been there for forty and fifty years. They have pioneered the country and struggled on a long way from railways—perhaps 120 miles—and all these matters should be taken into consideration when they are deprived of their homes. I feel sure that the general wish of all those who have the success of the scheme at heart is that they will get a fair deal from the Government, notwithstanding that the Government may be able to resume their land with little or no compensation.

I intend to do all I can to support the proposal. I have gone into it very fully. I have all the facts and figures at my disposal, and I have submitted them to men who know something about irrigation and the construction of works of this sort, and they generally are of opinion that the whole scheme has been thoroughly thought out. I would, however, like to make one suggestion—it may have already entered the mind of the Minister in charge of the proposal. Mr. Elwood Mead, who is looked upon as one of the greatest irrigation experts in the world to-day, is likely to visit Australia shortly—I think he is soon expected in New South Wales—and I would like the Government to invite him to Queensland and ask him to go into the figures and the scheme generally of Mr. Partridge in order to be assured that everything has been worked out in a systematic manner. His opinion, no doubt, would be of very great value to everybody connected with the scheme, and I think it is the aim and object of all of us that it should be carried to a successful issue. We do not want to spend a large amount of money wastefully. We do not want the works to be over-capitalised. We want the water to be provided as cheaply as possible, so that the settler will be able to make a decent living on the land and not expect an exorbitant value for his produce. The matter affects the consumer just as much as the producer, for, if it is going to cost large amounts to produce the foodstuffs which will be grown on this area, they naturally will be dearer to those who use them.

*Mr. Morgan.]*

Whether food is dear or cheap is a matter of the cost of production, and it is the duty of everybody, no matter who he may be or what his position is in life, to do all he can to bring it to a successful issue.

Mr. G. P. BARNES (*Warwick*): Without doubt the question before the House is the most interesting one that has been submitted to it for many a long day. I for one feel distinctly sympathetic towards the proposal of the Government, and before making any further remarks I would like to congratulate the Minister upon the character and tone of his speech. The manner in which he introduced this very great question altogether redounded to his credit. I can well imagine that, had he been disposed to expatiate upon its possibilities, he might easily have pointed out what he considered to be the future of a gigantic scheme, but altogether his deliverance was not only interesting but also practical.

At the same time the Minister seems to be seized with the wisdom of acting cautiously, and by no means at any time did he lead the House to believe that a great certainty of success would follow the effort that the Government were making. I think that possibly he erred rightly, and on the other hand I do think that possibly he underrated the immense possibilities of the scheme which he has presented to the House. There was room for extravagant utterance, but no such choice in the presentment of this big case was utilised by the Minister this afternoon. I commend the hon. gentleman's general tone in the presentment of one of the biggest things Queensland has had to consider. It is no use going along further with our fingers in our mouths talking about settling our great land without making some real step in the direction of true consolidation. Whilst we have been extending our railways in all directions, there has not followed the settlement that might reasonably have been expected, and in what is proposed now there seems to be the opportunity of bringing about the close settlement of a nature such as will tend to the upbuilding and peopling of the land we love so well. I am not quite sure that I would not have preferred the Government undertaking such a scheme in a spot nearer to the city and, perhaps, on a smaller scale, because we have to feel our way in connection with this matter, and I do think that an effort might have been made in the valley of the Condamine. We have some minor schemes being carried out there with a marked degree of success, but with Government aid very much more could be done than is being done now. Much more could have been done by the Government than it is possible to do by private enterprise if a different system of weirs had been constructed in the valley of the Condamine. If the Government had carried on that work, there would have been an impetus in the direction of testing a scheme in connection with the rich land surrounding the Condamine—which you, Mr. Speaker, know so well—which would have had a mighty beneficial effect and which might have well preceded this greater scheme. I hope, however, that the time will come when the Minister's attention will be directed to the conservation of water in the more settled districts. I think the Minister acted wisely in stating that the first consideration will be given to the smaller Castle Creek section,

[*Mr. Morgan.*

as that seems to indicate that the Government will feel their way. I can well understand the Minister's modesty in introducing this matter, especially as he has to consider the lamentable loss which has attended the Inkerman irrigation scheme. It is to be regretted that just at the present time when we are discussing this scheme which is so great, and certainly not too costly considering its magnitude, that we have before us the unfortunate facts in connection with the Inkerman irrigation scheme.

It may be that we are buying our experience, and the very fact of having bought experience in connection with the Inkerman scheme will be very beneficial to the Minister and officers of the department. The Inkerman scheme originally was estimated to cost £131,000, and it was anticipated [7.30 p.m.] that 18,000 acres would be irrigated; but on 30th June, 1923, the capital cost of the scheme was £392,836 10s. 10d., and only 2,500 acres were benefited. The Auditor-General in his report which was tabled to-day states—

“The great discrepancy between the estimated and actual cost of the works to date has, I understand, been dealt with in a report to the Government by the Commissioner of Irrigation, and after allowing for increase in prices of machinery, plant, etc., he states that there has been a certain amount of unjustifiable and unnecessary expenditure from which any benefit is unlikely. The estimated capital expenditure necessary to complete the scheme is approximately £65,000, and the Commissioner has recommended that the capital value of the Inkerman works at 30th June, 1923, be fixed at £235,000, this being his estimate of the present value of the tangible assets. This entails a writing down of capital expenditure of about £170,000.”

Having that experience in view I take it that the Minister was led to be very careful in the particulars which he laid before the House this afternoon. I commend his presentment of the case in that way. I am very hopeful that, while the State has bought its experience in that connection, great success will attend this scheme. A reconsideration of the size of the areas might possibly have to be given by the Commissioner of Irrigation and the Minister at an early date. Unless we can associate secondary industries with the scheme, I am very doubtful of success attending the size of the areas proposed. That will be possible under a hydro-electric scheme, and it is a very inviting suggestion. I am inclined to think that, if something of that kind cannot be done, very small areas except for townspeople will not be successful.

A great deal has been said regarding the commodities that are likely to be grown. The various commodities that have been suggested are not at all likely to lead to the success that we would like to see. Tobacco-growing has been referred to. I daresay you, Mr. Speaker, being an old Warwick man, will remember that in 1893, 1894, and 1895 quite a big effort was made in the Warwick and surrounding districts in connection with tobacco cultivation. It was entirely carried out by Chinamen. In 1893 and 1894 the results were extremely successful and high prices were paid for tobacco leaf. As a result of the encouragement given in 1893 and 1894, the area planted in 1895 was so

great that it was sufficient to last the requirements of Australia for five years. Unfortunately my own company suffered very heavily, so I can speak with a degree of feeling on the matter. In 1895 the crop produced about 2,500 tons, and the requirements of Australia for the leaf at the time were about 500 tons. I happened to be in England towards the end of 1895, and I made a big effort to dispose of the tobacco-leaf there, but I found it was quite impossible to do so. Unless the article is very fine indeed there is no chance of it ever leaving bond, as the duty is too great. We can only grow sufficient tobacco-leaf, therefore, to meet our own requirements, and there is no use talking of an export trade, as no buyers are operating. I am not aware that even in Texas, where tobacco has been grown more successfully than in any other place that I know of, it has been grown by others than Chinese.

Mr. ELPHINSTONE: It is grown by white people in the Bowen district.

Mr. G. P. BARNES: The whites in and around Warwick and the Texas districts found the hunting for grubs and work of that kind so distasteful that they retired from the industry. We cannot build hopes on growing the tobacco-leaf extensively in the Dawson Valley, but there is an immense future if these irrigable areas are devoted to lamb-raising. There is a market in that direction. We want to give attention to the growing of commodities which have an exportable value. What I have said in connection with lamb-raising will also apply to dairying, but I doubt whether areas of 12 acres will be acceptable to settlers who wish to devote the land to that purpose. Success will also depend very largely on the possibilities of growing an American crop called alfalfa, similar to our lucerne. I understand from remarks made by hon. members on this side that some of the land is of poor quality. I disagree with the hon. member for Cunningham, who stated that even if water was available to a large extent the land would be unsuitable for that purpose. Poor land with an abundance of water will produce beyond expectation. It will be the duty of the Department of Agriculture to demonstrate by their experimental farms what can be done. If settlers are allowed to follow their own inclinations and not be dictated to, they will very early discover what are the most profitable crops to devote their attention to. I agree with the Minister that settlers of the adventurous type should not be encouraged. It is no use trying to do everything for individuals of that kind. If men are able to find a certain amount of money, and if their efforts are subsidised, then we are more likely to succeed in peopling areas such as the Dawson Valley with the right type of men who will develop the country on the lines we most prefer.

I think the laying out of town sections is an exceedingly wise plan. The Minister might direct even more attention to this matter, for we must realise that the Dawson Valley is right away in the interior; I suppose the shortest road to the irrigation area will be 400 miles from the centre of population. If men are going to be properly encouraged to go on these areas, it is the duty of the department to make the scheme as attractive as possible. That can only be done by having many town areas. I suggest village areas 5 miles apart, and town areas

20 miles apart. Such a scheme would be more likely to bring a population that would be contented and likely to remain on the land.

Much has been said by the Minister as to the immense quantity of water that will be stored under this scheme. It is almost unbelievable that such a quantity of water can be so stored and that the area to be made available for irrigation will be 200,000 acres. It is quite likely, as has been the case elsewhere, that we are overrating these things. I put aside not long ago an article which appeared in the Sydney "Bulletin." It deals with irrigation, and is of rather a critical nature, and indicates how very frequently anticipations are not realised. It is dated 31st May, 1923, and reads—

"India is a land of big mountains, big rivers, a great rainfall in most parts, and a dry season which makes water conservation highly advisable. Its irrigation works were made with cheap labour, and the business was spread over very many hundred years. The irrigated space is 49,963,000 acres. Of this area nearly 13,000,000 acres are moistened by the very cheap and intensely patient Hindu lifting water out of wells, and another 7,000,000 by means of tanks. The record is magnificent, for the ground covered approaches the dimensions of Victoria. Egypt, with a great river flowing down from great mountains as a permanent resource, has been at work since before Pharaoh. It has under cultivation a little over 5,000,000 acres (1,000,000 farmers to 5 acres each), and it is reckoned that the Nile may run to 2,000,000 acres more. Even that final effort will make a watered area of much less than half the size of Tasmania. Of our own country's biggest and oldest and most successful settlement, Mildura, the official records say briefly that 'the area of the settlement is 45,000 acres, of which 13,000 acres are under intense culture.' It is a business of gardening on small allotments; and people who talk in millions and picture vast irrigated wheat farms and cattle stations, with kangaroos drowning in the flood, are stodgy vote-hunters who discourse through their hats.

\* \* \* \*

"Australia's great theoretical standby for irrigation is the Murray-Darling-Murrumbidgee river system. All the theorists concentrate on the Murray. It gathers its waters from four States. In New South Wales it collects to its bosom sixty-three tributaries, and in Victoria forty-nine. From Queensland it gathers a multitude, and in South Australia it gets an occasional drop of rain. The valley of the Murray reaches to Broken Hill, and covers 454,635 square miles. Practically all the irrigation yet done lies in this valley, and though it hasn't made any visible impression on the 454,635 square miles, it already in bad seasons makes very obvious impression on the Murray."

That is really the point that I wish to come to. It is just possible that we may over-estimate the quantity of water that we shall conserve by this great scheme. One thing that struck me most forcibly is the extremely light cost that attaches to the scheme. If water can be supplied at the rate of £1 an

*Mr. G. P. Barnes.]*

acre, it is an extremely moderate sum. I think we are doing a wise thing in presenting to the people of Queensland, Australia, and to settlers from abroad, irrigable land at such an exceedingly moderate sum. £1 an acre per annum, with the cost of the land £6 to £12 an acre, should prove highly attractive to settlers.

Altogether, the scheme is one that should commend itself to the community. I only hope that the Minister's most sanguine hopes—not that he has expressed himself in an over-sanguine way—and those of the officials of the department who are working out this great scheme, will be fully realised, and that the success of the Dawson Valley scheme will lead to other movements being made in the same way in other localities.

Mr. MOORE (*Aubigny*): With such a large scheme we should go fully into the question to see whether it is satisfactory or not. One of the facts that we cannot help being struck with is the extremely great discrepancy between the report made by the Public Works Commission and the speech made by the Secretary for Public Lands this afternoon. There are some very vital factors to be considered in connection with an irrigation scheme. One is the class of country to be irrigated—whether it has a subsoil that will hold the water, or whether you have to put an enormous quantity of water over it, owing to the fact that the water soaks away quickly. Another is the character of the country in which you are going to make your irrigation channels. If it will necessitate concrete channels, the proposition is going to be a very expensive one.

There are some very vital facts in this report of the Public Works Commission. Leaving out the part about this being the largest dam in the world, let us get down to the questions which are really most vital to the success or otherwise of the scheme. Mr. R. E. Shaw, the Assistant Engineer in the Water Supply Department, in a report submitted to the Royal Commission on Public Works, stated—

“At Taroom, above which the catchment area is 6,440 square miles, we have had a gauging-station since 1910 to determine the annual run-off. The measurements at this gauging-station have shown great variations in the flow. The highest was 1,172,000 acre feet in 1910-1911, which represented a run-off of only 11 per cent. The lowest was 34,676 acre feet in 1918-1919, which was only 0.66 per cent. of the rainfall. The average over the period measured was 324,000 acre feet, on a run-off of  $\frac{3}{4}$  per cent. of the rainfall. The dam having a catchment area of 9,000 square miles, the average run-off would be 453,000 acre feet, but for the three years ended on the 30th June, 1921, the total run-off was 240,000 only. This is very important, because usually the amount of water diverted is the annual flow-off. In this case, where we have had only an average flow-off of 80,000 acre feet for three years in succession, storage is required to supplement the amount.”

The point I want to get at is the porous nature of the soil. With that heavy rainfall—which, according to Mr. Shaw's evidence, falls mostly in the summer—you would naturally expect the soil to be somewhat sodden with water, but you get a

[*Mr. G. P. Barnes.*

remarkably low run-off. It is undulating country, and although it is a fairly large catchment area, you get an average run-off of only  $\frac{3}{4}$  per cent. of the rainfall. At Waranga, on the Goulburn River, in Victoria, you get a run-off of about 26 per cent. If the soil is as porous as this appears to be, if you are going in for a big irrigation scheme, it is highly probable that after two or three bad years, when you want the water most particularly, you are going to have a shortage of water. That is something to be guarded against. Mr. Shaw, in his report, says—

“In addition to the periods of poor run-off, high evaporation and seepage is to be expected in this locality, so that 100,000 acres of irrigation appears at present to be the limit for safety.”

This scheme provides for 200,000 acres of intense cultivation and 200,000 acres which will be supplied with water for household and stock purposes, and Mr. Shaw, when giving evidence before the Royal Commission of Public Works, said he considered 100,000 acres of irrigation to be the limit of safety.

The SECRETARY FOR PUBLIC WORKS: The present Commissioner has increased the capacity of the dam more than twofold.

Mr. MOORE: Mr. Shaw gave several different heights for the dam.

Mr. COLLINS: Why don't you quote the highest amount he mentions—2,072,278 acre-feet?

Mr. MOORE: What I am getting at is the porosity of the soil, which does not allow a sufficient run-off to provide enough water in normal years, and, if you have such porous soil as that, it is highly probable a great deal of water that is impounded will be lost by evaporation and seepage. The report does not give any analysis of the soil, but it says the clay content is a little higher than in some portions of Queensland, but it is sandy and gravelly underneath. Now, if you have a sandy and gravelly subsoil, it will let a lot of the water run away.

I do not know very much about irrigation in Queensland. I have tried it personally on the Downs. I had only a small block of 5 acres, and I pumped at the rate of 10,000 gallons an hour from seven in the morning till six o'clock at night, but I did not cover 10 yards, as the water ran through the soil—it was so porous. Of course it is possible with a big body of water that you might run the water over quickly so that you could get a reasonable amount of water on the land. On the big Rodney irrigation area in Victoria the country is so level—there is a fall of about 1 foot in a mile—that you can run 2 inches or  $1\frac{1}{2}$  inches on quickly. The water does not sink through, as there is a clay subsoil. Where you have a porous soil—and it must be porous when you get such a remarkably low run-off—

The SECRETARY FOR PUBLIC LANDS: Where were these tests taken—at Taroom or on the Dawson?

Mr. MOORE: The tests were taken at Taroom, above which the catchment area is 6,440 square miles. I understand the total area is now 9,000 square miles.

The SECRETARY FOR PUBLIC LANDS: It is a long way from the dam to Taroom.

Mr. MOORE: You say you have 9,000 square miles in the catchment area?

The SECRETARY FOR PUBLIC LANDS: There is a tremendous change in the country between Taroom and the irrigation area down the river.

Mr. MOORE: I am not doubting that, but the Government sent the Public Works Commission up there to take evidence, and, after getting their report, you quadruple the amount of land which the engineer who had been investigating says is the limit of safety. Mr. Shaw further says in his report—

“As the contour survey of the irrigable area commended by gravitation has progressed soil samples have been collected and submitted for analysis. Though the chemical constituents differ, some samples being more clayey than others, and the colours are not alike, the results evidence great similarity and all have been most satisfactory.”

Most satisfactory from an irrigable point of view and a growing point of view, but not from the point of view of running channels and the storage of water. That is the point we want to keep in mind. The report continues—

“Where the percentage of clay is somewhat high, a large proportion of coarse and medium sand insures an open texture, which is confirmed by good capillarity. It is considered by the Agricultural Chemist to be most suitable for irrigation purposes, with abundance of mineral plant foods in readily available form. In comparison with analyses of other Queensland soils, and also of samples from irrigation settlements on the Murrumbidgee and Murray Rivers, the Dawson River land is easily first for silt content, humus, nitrogen, and phosphoric acid, and equal to the best of the others in lime and potash. The clay content is higher than in the Southern soils, but the presence of good quantities of coarse and medium sand insures an even texture, and a sub-stratum of gravel and sand provides underground drainage. Chlorine is very low both in the soil and the water of the Dawson River, and there appears to be little danger from this source, which has proved a serious drawback to many irrigation settlements.

“The only respect in which this scheme may suffer by comparison with others lies in a number of incoming creeks across which canal waters have to be flumed. The surrounding country is rolling in nature, whilst the Murray and Murrumbidgee Rivers are bordered by plains, giving them an advantage in this respect. Parts of the areas to be irrigated are also rendered uneven by flood channels, and larger farm areas will be necessary where these occur and where they cannot be avoided.”

Those are two very vital factors. First of all, you have a porous soil and a gravelly subsoil which is going to let the water run away, and the Minister will know the difficulty they had in Mildura in the first instance in connection with their channels. They all had to be concreted, because of the porosity of the soil. Exactly the same thing happened in connection with the Rodney Irrigation Trust. They had a big supply of water running in a wide channel, and they had to

puddle it and concrete it for miles and miles owing to the seepage and evaporation. The loss of water was so great that in hundreds of cases people could not get water when they wanted it; it never reached them. Then we

have the other point which it is [8 p.m.] going to be most expensive to get rid of—that is, the rolling and undulating nature of the soil which is going to be irrigated below. In the irrigation schemes in Victoria, such as those from Shepparton to Echuca—I suppose it is the easiest irrigated country in the world—very little grading is required, and the cost of putting on the water is so low that the people can afford to irrigate wheat and other crops. I have lived there and have taken part in irrigation. At the present time, in the Waranga-Rodney, Swan Hill, and Goulburn districts—which I suppose comprise an area of 500,000 acres altogether—the cost for water is 6s. per acre-foot per year, which is ample to meet all costs. I have not seen this country on the Dawson, and can only take the engineer's report. He speaks about the undulation and about the creeks over which the water will have to be carried by fluming, and those are two very vital things in regard to irrigation. If heavy grading has to be undertaken before you can run the water quickly, it is going to add considerably to the expense to the settler. Even light grading is an expensive item. Of course, these areas are very small. Mr. Shaw gives it as his opinion that 30 acres are necessary for a man to make a living on. Twelve and a-half acres is smaller—barring Mildura and one or two little fruitgrowing settlements—than the area watered in any other settlement in Australia. Most of them in Victoria run from 50 to 60 or 70 acres.

The SECRETARY FOR PUBLIC LANDS: All irrigable areas?

Mr. MOORE: Yes. When the Waranga-Rodney irrigation area commenced and they ran the water through channels it was a dead loss because a large number of the settlers would not use the water. They always waited for the rain to fall, as they thought that, if they irrigated the land and the rain came, they would have too much water. After instruction from Dr. Elwood Mead and other irrigation experts, they used the water to the full extent, even running it over the land to make the grass grow. One can see how cheap the water is when people can afford it for that purpose. But you must have land of such a nature that it does not absorb too much water, and over which it will run quickly. Looking at the picture of the settlement and reading the report, it seems to me that the grading is going to be a very considerable item in connection with the Dawson Valley irrigation area. From an irrigation point of view it is going to be ideal for putting the water on. The only thing is that it will take a considerable amount more than it otherwise would do, but the difficulty is in connection with running the water in the channels. They will all have to be puddled or concreted. If you have a friable soil which allows the water to run through, the seepage is very great. That is a problem which has to be faced. The greatest problem that I see is the low run-off in the catchment area, showing the porosity of the soil and the vast amount of water which must run through the soil. Instead of running into the dam, which will be used in times of dry seasons when it is wanted most, it seems to me that we are likely to have a shortage of water if we put

Mr. Moore.]

too many people on the area. I would be careful about the area of land which is to be irrigated and the number of people to be put on it when we have definite evidence from an engineer here, who says that he considers 100,000 acres the limit of safety.

The SECRETARY FOR PUBLIC LANDS: We may have a million acres eventually.

Mr. MOORE: I think that what the engineer was basing his estimate on was not so much on a million-acre area as on the amount of rainfall, and the water which would be available. It was not a question so much of the height of the dam and the area which could be put under water so as to store it, as to the amount of water that would be available. He takes three years in which there were only 80,000 acre-feet available in each of those three years as the run-off for irrigation purposes. One of the most heart-breaking things that a person can possibly come up against is to be put on an irrigation farm and to find when drought times come that there is not sufficient water. That was one of the great difficulties they had to face in Victoria for many years. The channels were so small and the seepage so great that the people who were some distance away from the weir did not get water. They were put on the areas with the idea of growing lucerne and other crops, but the water did not reach them. The matter has got to such a stage that channels have been made larger, seepage almost stopped, and the people have been educated on the question. As the Minister said, they rely in Victoria on the snow waters which come down every year. Here, we have no snow water; we have to rely on rainfall, and I suppose that this year there have not been more than 10 or 11 inches of rain in that area.

The SECRETARY FOR PUBLIC LANDS: One big flood would fill the dam.

Mr. MOORE: One big flood would fill it. Mr. Shaw talks about the evaporation, and says that he thinks the evaporation would be almost as great as it is at Blackall, where it is 10 feet per annum. Anyhow, if we are going to have a drought period with high winds such as we are going through at present the seepage and evaporation combined will be very high. I would not like to see too many people put on the area until we see how much water is available.

The SECRETARY FOR PUBLIC LANDS: If we work to a standard, they have a fair idea in six years as to what they can do.

Mr. MOORE: When you have a catchment station on a river and you know how much water comes down in thirty years, you have a pretty fair idea as to how much water is available.

I think it is a good thing to expend money in conserving water rather than in building railways. I quite agree with the Minister in regard to that, but I am also anxious to see that too large a number of people shall not be put on an area such as this and be left in a dry year without enough water to carry on with. The area of the blocks is very small, and an individual will have to rely entirely on intensive cultivation.

The SECRETARY FOR PUBLIC LANDS: Those small areas are only around the settlement.

Mr. MOORE: It is rather difficult to know what is to be grown on such small areas, especially such a long way from the market. It is a long way to bring the products down to market from the Dawson Valley. There

[Mr. Moore.

are not very many things which can be grown. I know that the Mildura scheme can be pointed out as an example of what can be done; but, after all, there is a limit to what can be done in one class of industry. If you overtake the demand, all the stabilisation of prices in the world will not solve the problem. That is one of the difficulties we have to face in cutting up this land into such small areas. It means that the settler has to grow something for which he can get money quickly and for which there is a pretty good market. Cotton may be grown—I do not know whether it is going to be good or not—but I am satisfied that one of the difficulties which the Minister or the Commissioner will have to solve is to find out whether crops will return enough on such small areas to keep a family comfortably, because the settlers will have nothing to fall back upon. It is rather a mistake to try to settle too many people on any area. I am inclined to take the evidence given before the Public Works Commission by an expert, because the Public Works Commission is sent out to get evidence to put before the House on which we can judge. So, when an expert gives sworn evidence that he considers there is a limit of safety in regard to areas, and that 30 acres is required in order that a man may be reasonably comfortable, I am inclined to accept his opinion unless I can find something sufficiently contradictory and reliable to make me alter my mind. So far I have not seen anything that would enable me to come to the conclusion that a smaller rather than a greater area of land is justified. I am rather afraid that it is not. I do not want to throw cold water on the scheme, because I firmly believe that irrigation is going to save an immense amount of stock and money for Queensland, and I do not want to see Queensland enter upon it on a system such as has resulted in failures in other places. I think anybody who had experience twenty-five years ago in Victoria, and saw the number of persons put on small blocks for special purposes only to find that the water was not there for them when they wanted it, should be chary of falling into the same error here.

I do not think I need say very much more about the proposal. Irrigation in Victoria has been a success largely because common-sense instructions were given to settlers, and largely because of the class of cultivation that has grown up and suitability of the soil. Only last year the Commissioner made a satisfactory report. A newspaper extract reports the following facts:—

“A number of irrigation districts which have been established six or seven years are now so prosperous that settlers are rapidly reducing their arrears in payments to the State, not only for water charges, but also in respect to instalments due on their lands. The chairman of the Water Commission (Mr. Cattanaeh) stated on 11th May that although it was sometimes customary to allow arrears in new districts to accumulate up to 60 per cent. of the value of the improvements, that concession was not provided for in any agreement, and in all cases where settlers were now doing well it was expected that they would pay the amounts owing, irrespective of the amount of the valuation of improvements. It was gratifying to find that there was a decided improvement in the financial

position of many settlers, which would, of course, be reflected by increased payments to the State."

When we find that the areas there are larger, that the capital expenditure to make the land suitable for irrigation is considerably less than it is likely to be in the Dawson Valley, and that the water charges in Victoria are as low as 5s. and 6s. per acre-foot, I think the Minister should seriously consider whether the areas he proposes are large enough, whether the people are going to get a fair chance to make a living, and whether he is not going in for too big a scheme for the amount of water that is likely to be conserved. If he goes into it conservatively, I think the possibility is that the scheme is likely to be a success. But there are other things that ought to be considered, and I would draw the attention of hon. members to the evidence of Mr. Shaw, given on page 6—

"You have had some experience on Burrinjuck?—Yes.

"The cost of those works exceeded the estimate by a long way?—Yes. The Government went into that scheme as a huge State enterprise, and they did not run it on commercial lines. That is the principal reason why the estimate was exceeded. Again, you have to spoon-feed the settlers to a certain extent, but it can be overdone; and there the building of houses, the grading of the land, and the fencing were all done by day labour by the Government, and it cost a lot of money."

That witness put the position quite shortly in an answer to a very pertinent question that was put to him as to why the cost of the Burrinjuck works exceeded the estimate. We have exactly the same principle at work in Queensland to-day. One has only to look at the Auditor-General's report to see that the same thing occurred in the Inkerman irrigation scheme, where £170,000 has had to be written off. I trust the same principle will not be allowed to go on unchecked in connection with the Dawson Valley irrigation scheme, because, if it is, it will cost about £6,000,000 instead of £2,000,000, and there will be a much smaller area to irrigate, perhaps, than at present. The evidence given before the Public Works Commission is well worthy of consideration by the Minister, and I think the Government should initiate some other system from which the settler is likely to get a fairer deal rather than to hold on to a fetish of the Government. I ask the Minister, as far as possible, to depart from a system which is likely to cost the settlers greater expense in favour of one which will enable every man to get the very best value for the money which is expended; or, at any rate, I ask him to see that the money is expended in such a way that we get full value for it.

Mr. NOTT (*Stanley*): The possibilities of success of irrigation are very great, but conversely—as in the case of the odds on a racecourse—the chances of failure are very great also. Great sums of money may easily be made or lost. As the Minister said, this proposal is something new. I welcome it, and I am sorry that it is new. I regret that something of this nature was not embarked upon many years ago, or rather that the principle was not extended in the direction

of locking weirs and impounding water, rather than rushing into any particular irrigation scheme.

Until I have visited the locality and inspected the area very carefully, I am not prepared to say one word about the size of the blocks. The Minister remarked that he preferred to see practical results to painting a picture, and in that respect I would like to remind hon. members that similar schemes have cost a lot of money, and that a lot of the expenditure has been due to mistakes. At the Yanco irrigation area hon. members will see a picture that will certainly please them, and is well worthy of a visit by any Australian. I am sure that if the capital cost can be kept down to a reasonable amount, there will be many men ready to settle on the irrigation areas, but of course the question will be, "Can these costs be kept to a reasonable amount?" The Minister has stated that we have had rather a bitter experience in connection with the Inkerman irrigation scheme.

Mr. COLLINS: What is the bitter experience?

Mr. NOTT: I think I have quoted the Minister's words. The Auditor-General in his report for the year 1922-1923, says in connection with the Inkerman irrigation scheme—

"The scheme was originally estimated to cost £131,000, and it was anticipated that 18,000 acres would be irrigated, but at 30th June, 1923, the capital cost was £392,836 16s. 10d., and only 2,500 acres were benefited."

If you figure that out, you will find that instead of the scheme costing the estimated amount of £7 per acre, it has cost £153 an acre. The Minister was quite justified in saying that that has been a bitter experience. I think this scheme is an admirable one; still it appears to me that it is a Rolls-Royce idea with a Ford equipment. (Laughter.) It is a scheme of the greatest magnitude that has been brought before this House for many years. We have been considering big schemes in connection with the Burnett lands, the Palmerston lands, and now we have this scheme. When we have these huge schemes one after another, especially in the face of huge losses on various State enterprises and the Inkerman irrigation scheme, are we not justified in asking whether they are being brought forward with the idea of having them carried out, or are they only intended as window-dressing for the Premier when he goes home to borrow money or to renew loans, when he will be able to talk about the wonderful developmental schemes that are being carried on in Queensland?

Mr. KIRWAN: The schemes will be carried out.

Mr. NOTT: I only hope that the Government will endeavour to complete this scheme at a reasonable cost, and that they will hold up the Inkerman scheme as an object lesson to themselves, and that they will not tackle this scheme in the way that they tackled that scheme.

Mr. COLLINS (*Bowen*): I have listened to the remarks of hon. members opposite and to the half-hearted approval given by some of them to this proposal. They have made kind of "Yes-No" speeches. They do not say straight out that they are opposed

Mr. Collins.]

to the proposal; neither do they give—excepting one or two of them—their whole-hearted support to it. I am here to give my whole-hearted support to anything that stands for progress in this State, and I am satisfied that this proposal means progress in the Central portion of Queensland. Some hon. members opposite have criticised the Inkerman irrigation scheme, but I would like to ask those hon. gentlemen whether—even supposing the State has to write off the £170,000, as mentioned by the hon. member for Stanley—the Inkerman irrigation scheme has increased production or lessened the production. That is what we have to consider. It is going to increase production. It has already increased production, because, had there been no irrigation on the Inkerman Estate, there would not be crushed the amount of cane that they are going to crush this year; and, further, if anything is done towards increasing production, then it should receive the support of this House. Of course, I can quite understand hon. gentlemen opposite. They are so tainted with commercialism that the question that is ever uppermost in their mind is, “Does it pay?” “Will it pay?” Not whether it will help to develop the country or not. Everyone knows that the growth that is taking place on the Inkerman Estate is practically just as rapid as the growth which took place at Mildura. There have been many mistakes made in connection with the Inkerman Estate. The first mistake was made by the Denham Government, of which the hon. member for Wynnum was a member. At that time there should never have been a single acre of land let to anyone until the irrigation scheme was properly laid out, and that would have saved thousands of pounds in the grading of the land, and there would not have been so many wells required for the irrigating of that estate. Therefore, some of the blame lies at the door of the Kidston Government when they repurchased the Inkerman Estate, knowing as they must have known, if they knew anything about Queensland at all, that it was in a dry belt, and that to make sugar-growing a success in that part of Queensland, it was necessary to have irrigation. There is nothing to say that we must stop at 2,500 acres of irrigable land on the Inkerman Estate. That is only a commencement, as the Minister well knows. Has private enterprise never made any mistakes in connection with some of its ventures, especially in connection with new things? This is an entirely new thing in the State of Queensland. I am not carried away by the opinions of experts, as I used to be a few years ago. My eight years’ experience in Parliament as member for Bowen—not only in connection with experts dealing with irrigation and railways and engineers in connection with construction works—has led me to have less faith in experts than I used to have. I think that if a little more common sense—that should be put in big capitals—was exercised, and there was not so much dependence upon experts, then those experts would be more likely to keep within their estimate of cost. At any rate, I hope the Minister will keep a firm hand on whoever may be in charge of the Dawson Valley scheme. I do not altogether agree with the Minister in giving the Commissioner autocratic powers. I believe that if anyone should have autocratic powers, it is the representatives of the people, and Ministers in particular, and that those powers should

not be transferred to an autocratic Commissioner. I believe that those who are responsible to the people should take the responsibility. I quite agreed with the hon. member for Normanby when he said this afternoon that in the last analysis it is generally the hon. member for the particular locality who has to carry the baby, if there is any baby to carry. Any mistakes that are made by the Government have to be carried by the rank and file, and I would rather those mistakes should be made by the representatives of the people than by any expert, whether in connection with irrigation or any other work carried out by the State.

The SECRETARY FOR PUBLIC LANDS: No political head could exercise complete supervision.

Mr. COLLINS: I do not altogether agree with the Minister, because, if we have not got sufficient political heads, then there would be nothing wrong in creating a few more. (Laughter.) Then again, I am not altogether carried away with the type of settler that the Commissioner may approve of, because I have made a close observation in my electorate, and I have no hesitation in telling this House that some of the most successful sugar-growers on the Inkerman Estate and round about Proserpine are miners from Charters Towers and Ravenswood. Consideration wants to be given to that type of man. Going upon the land is a question of work, work, work; and my experience in connection with the men in my own electorate is that those who work, work, work, and work again and again have made a success on the land. That is the type of settler who should be encouraged. The best class of settler is not always the kind that [8.30 p.m.] can put his hand in his pocket, sign a cheque for £350, and say, “I have sufficient capital to go on the land.” It does not follow that he is going to be a success. The Premier and myself had the pleasure of visiting a farm conducted by such a man as I have mentioned—a Mr. Berryman. He has one of the best irrigation plants on his farm that is to be found in the whole area, and he has made a success of sugar-growing. The point I want to make is that it is not altogether a question of having the money; it is a question of having to work to make a success on the land. Man has to work to make anything a success. With all due respect to Mildura, with its 12,000 acres of irrigable land and an annual production of £500,000, I am prepared to say that the 2,500 acres irrigated on the Inkerman Estate will give a greater return in proportion. I have just worked out roughly that the area irrigated at Inkerman would produce about 75,000 tons of cane, and, taking that cane at the low estimate of £2 a ton, that would give a return of £150,000. If we had the same number of acres irrigated on the Inkerman Estate as are irrigated at Mildura, there would be a greater production of wealth. I was very pleased to hear the leader of the Opposition say that this is a day of big things. Of course it is a day of big things, and the Government are doing the big things. We cannot expect all the big things to be a success, and some will probably be failures. I am very pleased to think that we are launching out in that direction. We have to turn to other parts of the world to see the success achieved as the result of irrigation.

[Mr. Collins.]

There is an article in the July issue of "Current History" headed "How America's Irrigation Problem has been Solved"—

"The remarkable story of the conversion of millions of acres of arid desert into prosperous agricultural settlements. An enormous addition to the wealth of the nation. Difficulty of making irrigation schemes pay overcome by the growing demand for hydro-electric power."

I understood the Minister to say that part of the Dawson Valley scheme was to generate hydro-electric power. The article states—

"In the United States, however, irrigation as we understand the term is of comparatively recent origin, extending back much less than a century. Our Government records on the subject do not antedate 1860, although local history contains an earlier record than that—the year 1847, and a Mormon settlement in Utah."

We all know that it was Brigham Young of the Mormons who evolved the first idea with respect to irrigation in the United States. (Laughter.) Hon. members may laugh at my reference to Brigham Young and the Mermons, but everyone must admit after reading the history of these wonderful people—this is something the hon. member for Burnett can ponder over—that these people did not worry about markets. They went hundred of miles into the wilderness, built up a great city, established great irrigation works, and created their own markets. As time goes on, not only in this country but in every country in the civilised world, we shall have to create our own markets. There will come a time when each country and nation will have to develop its own resources and live within them to a large extent. That day is not as far distant as some might imagine. I do not want hon. members to think that I am so foolish as to advocate the doctrine of polygamy. (Laughter.) I could give hon. members opposite a very rough answer if I liked, but I will not do it. I was only quoting what these wonderful people did. They trekked 1,100 miles into the wilderness and built up a great city and a civilisation of which the hon. member for Fassifern, no doubt, could tell us something. Let me quote again from "Current History"—

"Under this system of federal co-operation the reclamation of America's arid lands proceeds to-day with increased speed and confidence. Before 1860 the number of farms under irrigation in the United States was 696, comprising 469,000 acres; in 1910 the acreage had increased to 14,433,285; while by 1920 the Government census shows 1,916,391 farms under irrigation, with an irrigated acreage of 19,191,716 and an area subject to irrigation under projected schemes in excess of 36,000,000 acres. The present gross area under irrigation in the United States, all of which is the result of not more than seventy years' activity, represents one-fifth of the aggregate lands now being irrigated on the earth's surface. In addition, we have many great projects in view, including the Columbia River project, which contemplates the reclamation of 4,500,000 acres of arid land, and the Colorado basin, with 7,000,000 acres, while Bills in Congress and appropriations already provided

furnish many hundreds of millions of dollars and include development in all parts of the country where irrigation is in practice."

That goes to show what has been accomplished in a few years by the United States Government. When we consider that the Commonwealth of Australia is pretty nearly as large as the United States, it goes to show what we can do in the development of this State and this Commonwealth if we wish. Hon. members opposite are continually crying out for a vigorous policy of immigration. If they are to be consistent, they will have to support a proposal such as this, otherwise where are we going to put the people when they arrive? What is the use of sending new arrivals to a dry portion of the State? We have to get down to bedrock and realise that a large portion of this State is in a dry belt, and, if ever it is going to be great, man has to make it so. We shall have to utilise the best engineering skill and go in for works such as that which was outlined by the Minister this afternoon. Let me quote further from "Current History" as to what has been done in the great country I have referred to—

"Consider first the Yakima Indian Reserve in Eastern Washington. This reserve—100,000 acres of drought-stricken desert, once optimistically valued at 50 cents per acre—"

I want hon. members to take a note of that— "was irrigated by the Government for the Indians. At the end of ten years its annual yield in crops passed 7,000,000 dollars, the value of its lands had increased to 200 dollars per acre, and the assets thus created would reasonably approximate 30,000,000 dollars."

Then let me quote again from the same article—

"Perhaps the most illuminating instance of all, however, is the story of Imperial Valley in Southern California. Here is a valley unique in all world history—a burned-out lake bed of pre-historic origin, the former bed of the Gulf of California, 1,000,000 acres in area, lying from 200 to 300 feet below the level of the sea."

"Twenty-one years ago it boasted but a single prospector's shack, for Imperial Valley was a drought-stricken desert, strewn with the bleached bones of both men and beasts who, in an effort to cross its hot surface, had died of thirst. In 1902, after much preliminary effort, the waters of the Colorado were diverted for reclamation purposes into this ancient lake bed. To-day Imperial Valley is perhaps the most famous agricultural area anywhere on earth. It has 650,000 acres under water, and because of the climate and a highly modern system of irrigation it raises from five to seven crops per annum, with a yield of often 2,000 dollars per acre. It supports a score of thriving towns and villages; its population comprises 65,000 people; and last year it shipped one carload of agricultural produce for each man, woman, and child of the entire population. The value of this yield was 70,000,000 dollars, while the estimated potential wealth, resulting from this application of Colorado River water to a drought-stricken, famished soil, is

Mr. Collins.]

500,000,000 dollars. All this has been created out of a barren desert in a period of twenty-one years."

I could go on quoting from the same article dealing with other portions of the United States, but there is no need to do so. I have had the opportunity of visiting Nathan's Gorge as a member of the Public Works Commission and of travelling over some of the country which it is proposed to irrigate, and I have no hesitation in saying that, if that land is poor, then God help the rest of Queensland. It is not poor. What I have been reading from this magazine is what the American people have been doing with soil that is poor. I believe that this scheme will be successful, notwithstanding that the estimated cost is within the vicinity of £2,000,000, though I am rather doubtful about the opinions of experts, because they have led us astray on more than one occasion.

HONOURABLE MEMBERS: Hear, hear!

Mr. COLLINS: In fact, outside of a knowledge of mathematics and a few other things, I am beginning to think that they do not know any more than other people. (Laughter.) A good deal of common sense should be exercised, and these experts should at times listen to common sense. The Minister occasionally gives too much ear to experts, and not enough to the opinions of representatives of the people. We have been sent here by the people as common-sense individuals, to make the laws for common-sense people. We do not send experts into Parliament. If we had to do that, God knows what kind of laws they would make. (Laughter.) The Minister is a common-sense individual, and, as a layman, he should use that common sense over those experts and keep them in their places. I have much pleasure in supporting the proposal, and I hope that it will be one of the many that will be brought before this Chamber, and that it will be a success and increase the production and wealth of this State.

HONOURABLE MEMBERS: Hear, hear!

Mr. KERR (*Enoggera*): The hon. member for Bowen mentioned the fact that this is a day of big things. So far as the Government are concerned, it is a day of big things only in the matter of having them on paper. If you go into the doings of the Government in regard to land settlement and water conservation, you will find it impossible to hit upon a successful achievement.

Mr. SIZER: They have all been losses.

Mr. KERR: Every one of them has resulted in a substantial loss to the State. We are not here for the purpose of criticising and killing every measure that is for the advancement of the State. At the same time it is a right and privilege of members of this House that we should criticise similar doings of the Government. Queensland, under Labour administration, has had a wonderful opportunity to establish settlers on the land. I refer, not only to the Crown lands of the State, but the Government went further than that and spent many hundreds of thousands of pounds on repurchasing estates, allegedly some of the best land in Queensland.

The SECRETARY FOR PUBLIC LANDS: What has that to do with this proposition?

Mr. KERR: I am referring to that in passing, as I have a right to do. The Government have had an opportunity unique in the history of Queensland of doing some-

thing for the State, and they have failed miserably. They have spent over £2,000,000 of loan money to establish perhaps 2,000 of the best settlers in Queensland and have failed—

The SECRETARY FOR PUBLIC LANDS: Where?

Mr. KERR: In practically every part of Queensland, in soldier settlements.

The SECRETARY FOR PUBLIC LANDS: What State has made a success of soldier settlement?

Mr. KERR: Why point to other States? You have the same land and the same market and a good class of men to settle.

The SECRETARY FOR PUBLIC LANDS: What is the use of talking rot like that.

The SPEAKER: Order!

Mr. KERR: It is a fact. If the Minister wants a decent class of settler, he will give those men a chance on these lands of which we have been hearing so much recently. They would certainly make a success there. The Minister would be well advised to get hold of some of those men and give them that chance. They are now loaded with debt and are going to be kept on their present blocks.

The SPEAKER: Order! I hope the hon. member will keep to the proposition before the House.

Mr. KERR: The Inkerman irrigation scheme has been fully discussed, and to get at the merits of the measure before the House we are entitled to examine the position of an irrigation scheme which has been tried in Queensland. No one can gainsay the fact that the experience which we have gained in connection with the Inkerman irrigation scheme is going to be reflected in this proposition. We shall have a large area of Queensland, part of it covered with pricklypear and part of it undiscovered in the true sense of production—

The SECRETARY FOR PUBLIC LANDS: You have never been outside of Enoggera. You have never been off the railway line in Queensland.

Mr. KERR: I have been in most parts of Queensland and in other parts of Australia, and I have seen more irrigation on the Nile and in other parts of the world than the Minister has thought of.

The SECRETARY FOR PUBLIC LANDS: You might have seen it.

Mr. KERR: I have seen a million acres under irrigation and producing in the desert of Egypt—one of the driest countries in the world.

Mr. COLLINS: Then why should not the Dawson Valley scheme be a success?

Mr. KERR: I am making this speech.

The SECRETARY FOR PUBLIC LANDS: You saw the Pyramids too, but that did not make you any more intelligent.

Mr. KERR: It has given me a direct knowledge that the Minister has not got.

The SECRETARY FOR PUBLIC LANDS: You did not assimilate the knowledge.

Mr. KERR: The Minister will now assimilate it from my speech. It is proposed to spend £400,000 of loan money to build a railway into this country, although there is not a settler in the vicinity of the proposed railway. It is proposed to spend on irrigation works £2,000,000, and they are to be constructed by day labour. In addition it is

[Mr. Collins.

proposed to settle well over 1,000 settlers, advancing £1,000 to each. You are going to spend in the vicinity of £5,000,000 or £10,000,000 before you finish.

The SECRETARY FOR PUBLIC LANDS: Make it £50,000,000.

Mr. KERR: I said £5,000,000 or £10,000,000, and that will be very close to the mark, although, if it is to be judged by the original estimate of the Inkerman scheme, it is going to cost £15,000,000.

Mr. SIZER: More.

Mr. KERR: Here is a similar scheme, and I have never read a more condemnatory comment than that made by the Auditor-General in his report which was received to-day upon the Inkerman scheme. In a few words he tells us definitely that it was originally anticipated to irrigate 18,000 acres at a cost of £131,000, and then he tells us in the next sentence that only 2,500 acres have been irrigated at a cost of £392,000. Can anyone tell me that we can look forward with a great deal of pleasure to a similar scheme?

The SECRETARY FOR PUBLIC LANDS: It is not a similar scheme.

Mr. KERR: This proposal, in my opinion, is a worse scheme than the Inkerman scheme. I may tell the hon. gentleman—

The SECRETARY FOR PUBLIC LANDS: You can tell me a lot of things, but I am not going to take any notice of them.

Mr. KERR: I do not care whether you take any notice of them or not. I am not speaking to you—you are just one of the atoms in this House. (Laughter.)

The SPEAKER: Order! Order!

Mr. KERR: The Inkerman scheme had a better foundation than the Dawson Valley scheme in that the farmers on the Inkerman irrigation area are sugar-growers, and they have a market in Australia for the produce which they can grow. On the other hand they do not know what they can grow in the Dawson Valley. It has been suggested that tobacco is to be grown—an article for which we have no payable or proved market. The Secretary for Public Lands, when speaking on the Palmerston Land Settlement Bill, said that the foundation of any successful settlement scheme in Queensland is to have an established market. I agree fully with what the hon. gentleman said, and I quoted his remarks subsequently.

The SECRETARY FOR PUBLIC LANDS: When did you arrive at that conclusion?

Mr. KERR: The hon. gentleman arrived at the conclusion and I agreed with his words. We have an established market for the produce that can be grown on the Palmerston area. It has been stated by several hon. members opposite that on the Dawson Valley area we can grow wheat and maize, and perhaps some other product will be grown; but it must be remembered that the Upper Burnett and Callide lands and another large area of country are to be utilised for the growing of these products, for which there is no dependable market.

Hon. F. T. BRENNAN: There is not a ton of fodder conserved on the Downs to-day.

Mr. KERR: I say there is no dependable market for these products.

The SPEAKER: Order! It appears to me that the hon. member is not dealing with the question before the House.

Mr. KERR: I am expressing an opinion in regard to the proposal before the House, and I am entitled to say what it is going to lead Queensland into. I have examined the situation, and I cannot see that the result which is promised is going to be achieved. I can see that a great tax is going to be laid on the people when we already have other areas of land available sufficient to settle as many settlers as we are likely to have during the next five or ten years.

The SECRETARY FOR PUBLIC LANDS: You talk immigration in your spare moments.

Mr. KERR: I talk immigration to-day. There is too much talk of schemes in order to delude the people more or less, but nothing substantial that will benefit the people already here. We have large areas of land available under different schemes that will cost less than the scheme now proposed.

The SECRETARY FOR PUBLIC LANDS: Where are they?

Mr. KERR: The estimated annual revenue from this scheme is £211,500. That revenue is anticipated when the whole 200,000 acres are fully utilised. One must have great faith in the future to expect that those 200,000 acres of land will be occupied and will reach the stage when we expect to get £211,500 revenue from them. As a business proposition these undertakings should be on a business foundation. The maintenance and management of the scheme is to cost £41,300, and the interest and sinking fund £137,760, making a total annual charge for maintenance, management, interest, and sinking fund charges of £179,060. That is an immediate charge, whether the 200,000 acres are settled or not. That charge is there to-day, but the anticipated revenue is not there. Before we can get that revenue we have to open the land, we have to build 50 miles of railway, and we have to run water 50 or 60 miles. The whole of the charges will be put on the people of Queensland before anything is produced. If there is an absolute necessity at this stage to spend all that loan money, there might be some reason in incurring the expenditure before getting any revenue, but at this stage the Government could well consider a proposition to develop to a greater extent areas already available in Queensland.

I want to deal, in conclusion, with some of the remarks that have been made by the Minister. He said the conditions in Queensland were different from the conditions in other parts of the world, and because of that fact we could not very well take as a guide irrigation schemes in other parts of the world. With that I do not agree. We could very well be guided by what has been done in connection with irrigation canals in other parts of the world. I have an article here from the "Year Book" for 1920 of the Department of Agriculture of the United States of America. We find there a statement by the Minister for Agriculture that there are sufficient canals and sub-canals in America, if joined together, to go five times round the globe. If a country can construct so many miles of canals for surface irrigation, we should be guided by their experience. On some irrigation schemes I have seen 5 acres fully irrigated and intensely cultivated and the back area from each block ranging up to 400 and 500 acres. If we could adopt some such plan as that, it would be an excellent idea. I have seen cattle grazing in the

*Mr. Kerr.]*

back areas, and I have seen a small area of land close to the canal which it is cheaper and more economical to irrigate fully under intense cultivation. The Secretary of Agriculture in America has this to say on the question—

“It likewise follows that, if only 5 acres out of every 100 acres can be ultimately irrigated owing to the lack of water, a premium will be placed on the relatively small areas for which water is available. Such lands will be called upon to produce sufficient forage to feed range stock during severe storms in winter”—

[9 p.m.]

Instead of storms in winter we have our droughts—

“and when droughts occur and dry-land crops partially fail, the crops grown on irrigated fields will constitute the farmer's main dependents. At present the trend is in this direction. In recent years the farmers of the West have depended more on their irrigated holdings. The prevalence of droughts, the small average yearly returns from dry farming, the high prices of many irrigated products, and the scarcity of labour have exerted more or less influence in causing farmers to concentrate their efforts to a greater degree on relatively small irrigated tracts and to bring these to the highest state of production. This, in turn, has created a greater demand for water, increased its value, enhanced the price of irrigated land, and awakened a desire to lessen the waste of water by the adoption of better appliances and by more skilful use.”

If I can do anything to make the Bill a better measure than it is, I am going to do so. I hope the Minister will consider—and, if necessary, seek advice on the matter and have it available at the Committee stage—the question of having concentrated production on the 5 acres at the front, the area at the back being used in other ways.

The SECRETARY FOR PUBLIC LANDS: That will be done on areas which lend themselves to it.

Mr. KERR: I am glad to hear that. In countries which have not the vast areas we have in Queensland, perhaps that would be very difficult. The time has arrived for the conservation of water in this country, but, in the interests of Queensland, I cannot permit the Government, when bringing forward these schemes, to forget that there are many other factors which dominate the situation. What good is it to have vast schemes for irrigation purposes if our secondary industries are languishing through excessive taxation? You must balance one with the other. Queensland has suffered by schemes such as the Inkerman irrigation scheme, where £170,000 has had to be written off, and soldier settlements, in connection with which a sum of £1,000,000 will possibly have to be written off. These matters must be taken into consideration before we spend millions of pounds more. We must spend our money to the very best advantage. The building of a railway into this area at a cost of £400,000, when there is not yet one settler, and at the same time providing water at a cost of £2,000,000, is a pretty big order. The Government should eliminate any factor

[Mr. Kerr.

which would depreciate Queensland, and adopt the best means of bringing prosperity to the State.

Mr. EDWARDS (*Nanango*): Every hon. member must agree that the time has arrived when we should take the question of irrigation into serious consideration. First of all, we must all agree that greater information should be obtained in connection with this scheme before such a huge sum of money is expended. The Minister discussed the question of the particular product which was likely to be successfully raised and the finding of a market. He said that it may be possible to raise fat lambs on lucerne. I do not know whether it is the intention to give the selectors who go on to these areas a certain amount of back country on which to go in for raising lambs.

The SECRETARY FOR PUBLIC LANDS: The idea is to mix the irrigable land with the back country.

Mr. EDWARDS: That may be all right, but one thing which is necessary is the establishment of freezing works. Such works are established in Victoria and are very successful. The Minister, when speaking of the growing of products, eventually got down to the only one which would be a success—namely, tobacco-growing. We have no information before us as to a market for tobacco. As one who has had experience in growing cereal crops, I may say that you would very often ruin crops in deep soils by irrigating them and then having a heavy rainfall on the top of it. One important point is that this land is 180 miles inland from Rockhampton, so that we shall not be in as good a position as Victoria in regard to the export of products to Brisbane and other markets in Southern Queensland. They have a big lead on us in Victoria and New South Wales in connection with the establishment of irrigation areas. We are going to spend a huge sum of money without a prospect of obtaining a market for the products we are going to raise. As one who has travelled backwards and forwards on the boats between Brisbane and Melbourne, I can say that we have been importing for twenty-four years all the products we are growing in the State.

The SECRETARY FOR PUBLIC LANDS: Where do you ship the butter from your district?

Mr. EDWARDS: From Brisbane.

The SECRETARY FOR PUBLIC LANDS: How far is that from your district?

Mr. EDWARDS: 200 miles.

The SECRETARY FOR PUBLIC LANDS: Is your district unsuccessful?

Mr. EDWARDS: The Minister has no knowledge at all of the conditions of the industry at the present time. I would like him to come up and have a look at my district.

The SECRETARY FOR PUBLIC LANDS: What is the good of talking about it in drought time?

Mr. EDWARDS: If the Minister has studied the conditions in Queensland for the last twenty years, he must know that we must talk about drought times as well as about wet times.

The SECRETARY FOR PUBLIC LANDS: If you can settle land successfully 200 miles away from a port, cannot these men settle land 180 miles away?

Mr. EDWARDS: If we are going to strike decent seasons, as we all hope—I do not think we are going to continue always to have the conditions of the last few years—are the people on such small areas as are proposed here going to produce butter as successfully as the people on the larger areas closer to a market? It is a dangerous thing to spend such a large amount of money without knowing what you are going to do with the land when you irrigate it. I have seen eight or ten years on the Downs when the farmers had lucerne stacks a few miles from the railway, and they could not get £1 a stack for it.

Mr. GLEDSON: That was fifty years ago.

Mr. EDWARDS: No. I have been here only twenty-four years, and I have known the Downs for eleven years, and up to 1902 you could not sell it. I am only pointing that out to show the danger of spending large sums of money without knowing where you are going to get a market. I would like the Minister to consider seriously the making of the small dam first, and irrigating the 5,000 acres—which, after all, is a big undertaking. In fact, if the Government are going to carry this out under the same conditions as those under which they have carried out public works in Queensland, it will be too big for them. They are mismanaging practically all the public works, and it seems to me, as the hon. member for Enoggera said, that all the talk about a huge scheme like this is purely paper talk; I hope it is not. I understand, moreover, that in Southern Queensland there are smaller areas well suited for irrigation. There is the Mount Edwards proposal, which I understand has been described by experts and persons who have practical knowledge as likely to be a great success without any occasion for spending a huge amount of money in putting people on the land. They are there already. There are other areas in my own district, such as that on Barambah Creek and Barker's Creek.

The SECRETARY FOR PUBLIC LANDS: People being on the land will not make it less costly.

Mr. EDWARDS: I believe the Minister is trying to get a business grip of the position of the State from the point of view of land settlement, and I understand one of the reasons for introducing this proposal is that it is a sort of insurance against drought. We should take that into consideration. We should consider whether it is not safer to provide a certain amount of irrigation in areas settled already than to bind the State to spend huge sums on schemes to carry us over times of stress such as that through which we are passing. If we are going to spend a huge amount on a scheme such as this, only to find that freight for the produce to the market is equally as much or more than from the Southern States and other places where they have irrigation, we shall discover that we have not a business proposition, and are faced with a loss.

It is all very well for us to propose a huge scheme when we have no experience of irrigation except the huge loss we have experienced in connection with one particular scheme. I am not saying that I have any expert knowledge in the matter, but my experience of irrigation and waterways in Victoria tells me that the Queensland conditions are quite different. In Victoria and most other places the subsoil is clay, and

water can be run over that land far more cheaply and more easily than in deep soils such as we have in Queensland, and I maintain that irrigation on deep soils such as there are in this area—similar to the black soil of the Downs—is going to be a very costly matter. I have seen a channel on the Downs running with water for hours only to a certain point, and then disappearing on account of the depth of soil: in such country it seems to me that the only successful way of irrigating is by spraying, because if you run a huge quantity of water over such land and then have a certain amount of wet weather, crops cannot be grown on it at all. Every member who has had any experience in the growing of crops knows that it is almost as difficult to grow crops on much of our land during a very wet season as it is during a drought. I have known cases where maize has not grown more than 2 or 3 feet high, simply because it was almost drowned in the early stages of its growth. Other speakers have given a lot of information—in fact we have peregrinated all over the world—but, after all, the market is the biggest problem.

The SECRETARY FOR PUBLIC LANDS: We are not going in for cattle production. Those are the exigencies of the situation. There are £50,000,000 in cattle.

Mr. EDWARDS: If the Government are going to spend £2,000,000 on irrigation, and it turns out to be a failure from a business point of view, I am sure that the Minister would be the first to admit that the Government had made a mistake, and regret that they did not go on with the smaller project to see if the big proposal was likely to be successful. It would be quicker too, and would prove a greater saving in times of drought in the near future.

With reference to the actual carrying out of these works, I hope the Government will not do what has been done on other works. I have seen works started and the men taken off, then started again, and the men taken off again. I hope the Government will carry this project out quickly and be done with it. Let us see as soon as possible whether we can make a success of it, because the State loses heavily if we are continually putting men on works and taking them off.

The SECRETARY FOR PUBLIC LANDS: Mildura was not a success at first.

Mr. EDWARDS: I am well aware of the position of Mildura. The Minister knows as well as I do that Victoria can consume a great deal more of the crops produced there than we can. They are growing at Mildura a product for which they have a great market.

The SECRETARY FOR PUBLIC LANDS: They had no market until they used their intelligence and organised themselves.

Mr. EDWARDS: That may be. In the early days of Mildura and in the wheat areas of the Mallee country the Government came to the rescue of the settlers by granting them concessions in freight.

The SECRETARY FOR PUBLIC LANDS: Mildura was nine years without a railway.

Mr. EDWARDS: They had rivers. They got over their difficulties much better than we shall get over ours to-day. The Minister must take into consideration the fact that there are huge areas in Victoria and New South Wales at present under irrigation, and

*Mr. Edwards.]*

the products from those areas are sent here and will compete with the products that will be forwarded from the Dawson Valley when the scheme is in working order. I am not opposed to irrigation. I think we should have started it years ago. I think that we should be in the same stage of advancement as they are in the South, because then we would be in a very much better position than we are now. I believe that the impounding of huge bodies of water will have the effect of increasing the rainfall, as I believe it has had in Victoria. Ever since they have had huge bodies of water conserved in the South they have had very much more regular rainfall than they had in years gone by.

Mr. ELPHINSTONE (*Ozley*): I have no desire to detain the House, but it seems to me that this measure is of sufficient importance to call for comment from those who have some slight knowledge of irrigation and have any views to place before the Minister and his departmental officers that may be of assistance to them in this important project. I do not see how any of us who have for years been preaching the doctrine of immigration, and at the same time have been discussing water conservation, can well throw any cold water on a proposal of this nature.

HONOURABLE MEMBERS: Hear, hear!

Mr. KIRWAN: You have struck the nail on the head.

Mr. ELPHINSTONE: I am of the firm opinion that it is quite useless to bring hundreds and thousands of immigrants into our State without doing something to make provision for their reception when they arrive here, and in a State like Queensland, where water is a very serious matter, we should keep well to the fore the question of water conservation and the supply of water.

I was very interested in the remarks that fell from the hon. member for Bowen, who, I can quite understand, must feel somewhat tender on this project, particularly in view of the facts disclosed to-day in the Auditor-General's report. I can feel for that gentleman in the position in which he finds himself, but I am not going to condemn that hon. gentleman for having to "carry the baby" of the Inkerman irrigation scheme. In my judgment, that scheme gives us ample food for thought and reflection in the great proposal before the House at the present juncture. If we consider that scheme—I do it in the bearing it has on this proposal—one has to consider that every one of those wells on the Inkerman Estate is costing, and has cost, in capital expenditure approximately £3,000. I have argued that it would have been very much more efficiently and economically constructed and conducted if each farmer had made available to him approximately £1,000 with which he could instal his complete irrigation plant. He could then have got sufficient water for his needs, and at the same time be a master of the situation. That could have been done in that area. I have some very considerable knowledge of water supplies in areas such as the Inkerman area. I dwell on this phase because it may offer some kind of a suggestion to those who have charge of this proposal, because any shortage of water which may be occasioned by very great evaporation or very great soakage may be overcome by making available independent or separate water supplies to each farmer when there is sufficient water available. A supply of sub-

terranean water is one of the best forms of water supply that I know of.

The SECRETARY FOR PUBLIC LANDS: That is not the case with this scheme.

Mr. ELPHINSTONE: I have no knowledge of this area, and I therefore approach the subject with diffidence, because I do not see that any hon. member can conscientiously and intelligently discuss the question in detail without having some intimate knowledge of local conditions, and probably, if some of us had taken the pains to go and see this area and become seized of its potentialities and peculiar characteristics, the discussion which would have arisen would have been a little more helpful. I merely say, from my own knowledge of irrigation in Queensland, which extends over a period of ten years, that I am satisfied that where subterranean supplies are available at reasonable depths the process of irrigation is more satisfactorily handled by wells, pumps, and engines than it is by the conservation of water in large quantities.

The SECRETARY FOR PUBLIC LANDS: In the Inkerman irrigation scheme the idea was to concentrate the power in one central position. There is nothing wrong with the conception of Inkerman; the trouble has been in carrying out the work.

Mr. ELPHINSTONE: In my opinion, there was something wrong with the conception of the Inkerman scheme. I do not see what possible benefit there was in concentrating the power in one centre as has been done. You see the result of it.

The SECRETARY FOR PUBLIC LANDS: You would not have electric power for every industry in Brisbane. You would centralise it.

Mr. ELPHINSTONE: When the farmers are situated in places many miles apart, as is the case on the Inkerman Estate, it means the carrying of electric current by expensive methods to these far-away farmers. Considering the price of fuel and of internal combustion engines, and the reliability which those engines have attained at the present time, it would be very much more efficient to provide each farmer with the means of obtaining his own power instead of drawing it from the central station that has to serve so wide an area. The actual area originally embraced in the Inkerman scheme was something like 18,000 acres, so only a fraction of the scheme has been given effect to. If the cost of the power station at Inkerman, the cost of upkeep, and the cost of carrying the electric energy to the distant farms, the maintenance of the poles and wires is computed and compared with the cost and upkeep of 130 internal combustion engines, it would be all in favour of the latter, and if capital outlay only was compared, it would be found that internal combustion engines could be provided at a very much less capital cost than was expended on the power station.

The SECRETARY FOR PUBLIC LANDS: You are relying on a big area.

Mr. ELPHINSTONE: I put that suggestion before the Minister and his officers, because I am satisfied I am correct. The power station at Inkerman cost something like £130,000. I am not quite sure of the cost of the distribution of the electric energy, but what I argue is that 130 internal combustion engines of a capacity of 15 horse-power could have been more cheaply purchased, and by

[*Mr. Edwards.*]

that means every farmer could have control of his own supply. It would then have been a matter for the Government to recover the cost of these engines from the farmer as fine and opportunity permitted. As the hon. member for Bowen said, these engines could easily be worked by the application of ordinary common sense. Engines these days are made almost fool-proof. My only object in advancing this argument is that in a proposition like this, where water is obtainable at reasonable depths, many of the difficulties associated with such an undertaking could be overcome, such as the friability of the country, the difficulty of the distribution of the water by channels, aqueducts, and so forth.

The SECRETARY FOR PUBLIC LANDS: This scheme does not lend itself to that idea.

Mr. ELPHINSTONE: The argument that has been advanced by the hon. member for Aubigny, supported by the report of the Public Works Commission, leads [9.30 p.m.] me to believe that the soil in this area is rather friable, and that therefore the water soaks underneath, and the natural deduction is that it sinks to depths which permit of its being rendered available by pumps and internal combustion engines.

The SECRETARY FOR PUBLIC LANDS: We are dealing with river water at Inkerman and Bowen.

Mr. ELPHINSTONE: Are we not dealing with river water here?

The SECRETARY FOR PUBLIC LANDS: No.

Mr. ELPHINSTONE: I have no intimate knowledge of this area—if hon. members were to be quite frank, it would be found that very few have an intimate knowledge of it. The experience that we have had of irrigation schemes in other parts of Queensland is well worth considering in connection with undertakings of this description. The hon. member for Bowen rather expressed satisfaction that progress has been shown at Inkerman, and therefore there should be no objection to its cost. The object of the Opposition is to point out that progress is most desirable, but there is a limit as to the amount which the community can spend to secure progress. We have to remember that the public debt has to bear the brunt of this progress, and the interest on the public debt becomes unbearable when the schemes in which the money is invested are not interest-earning. Therefore our duty is to examine this measure in a critical manner so that we can give suggestions and advice. I was rather interested in some of the remarks of the hon. member for Bowen. I was wondering what Brigham Young, the Mormons, and the carrying of babies had to do with irrigation. I have no doubt that the hon. member for Bowen in his desire to see a population come into this area wishes to see a scheme adopted that has meant wonders in populating the United States.

Mr. COLLINS: You are a damned liar if you say that. I will not sit here and allow you to make an imputation like that.

The SPEAKER: Order! Order! I call upon the hon. member for Bowen to withdraw the expression.

Mr. COLLINS: Am I to sit here and hear an hon. member imputing immoral purposes to me?

Mr. G. P. BARNES: You are mistaken.

Mr. COLLINS: I ask that the hon. member for Oxley be asked to withdraw also.

The SPEAKER: Order! Order! I did not hear the hon. member for Oxley impute any improper motive to the hon. member for Bowen, otherwise I would have asked him to withdraw.

Mr. COLLINS: The hon. member for Oxley imputed that I was advocating what are known as immoral methods.

The SPEAKER: I did not understand the hon. member to do so. If I did, I would have asked him to withdraw. I must ask the hon. member for Bowen to withdraw.

Mr. COLLINS: I am not going to sit here and stand those things being said.

The SPEAKER: Order! Order! The hon. member for Oxley did not accuse the hon. member for Bowen of anything improper. If he did, I would have asked him to withdraw.

Mr. ELPHINSTONE: Mr. Speaker, I may relieve the situation if I say that I had no such intention, nor did I make such a suggestion.

The SPEAKER: I hope the hon. member for Bowen will withdraw the expression.

Mr. COLLINS: I will withdraw very reluctantly, because I object to anybody imputing mean and immoral motives to me.

The SPEAKER: Order! The hon. member for Oxley has stated that he did not make such an imputation.

Mr. COLLINS: I took it that he did.

Mr. ELPHINSTONE: I am very sorry indeed that the hon. member for Bowen has even suggested that I had any such intention. I had not. There was quite a different construction placed upon my remarks to what I intended they should convey. However, I shall allow the episode to pass.

I have examined with considerable care the details connected with this scheme and must admit that it is a most comprehensive one; and, if it can be carried out at anything like the cost which the Irrigation Commissioner assumes, then it is a most reasonable proposition. The point I would stress is that I sincerely hope that nothing will interfere with the engagement of the Commissioner until this scheme is completed. One of the difficulties with regard to the Inkerman scheme, and one which caused much injudicious expenditure, arose from the many changes that took place with the engineers conducting the scheme. We have gone to such pains to get a Commissioner who is apparently quite capable of conducting operations that I think he should be retained throughout. This is his idea of how the work should be undertaken, and his reputation is wrapped up in it.

I differ from the hon. member for Bowen when he states that too much latitude should not be given to the expert, and that the Minister should assume the responsibility of the undertaking. In my judgment it is not possible for any Minister to assume responsibility for such an undertaking. You have gone far and wide to engage a competent man, and so long as the State engages in such undertakings we should get competent men and, having done so, give them the latitude they need to make the scheme a success. I should be sorry if anyone suggested later on that another Commissioner should be put in charge. Naturally the

*Mr. Elphinstone.]*

second engineer would offer various new suggestions—

The SECRETARY FOR PUBLIC LANDS: They always want to pull down the previous edifice.

Mr. ELPHINSTONE: In my judgment the scheme cannot hope to be as efficiently constructed and consummated as we trust it will be unless this continuity of supervision is maintained.

I was unfortunate in not being here when the Minister gave his opening address, but, so far as I can gather, the idea was that the conservation of the water would take seven years to accomplish. It would be opened in stages as sufficient water was conserved to supply one particular zone, which would be established at the same time. There would be a certain amount of conservation on the Nathan Dam and at the same time a settlement would be established to utilise that water. If that is the position, it seems to me to be a cautious way to proceed. Instead of going right through with conserving this huge body of water, the difficulties and intricacies of which we shall learn as time goes on, instead of being committed to the whole expenditure at one fell blow we shall have seven years in which to gain experience.

One very important matter which has been touched upon and to which I must again refer is this: I think those members of the Opposition who have called attention to the difficulties that may ensue in disposing of the product that has to be raised in this closely settled area have mentioned an important matter which should have the consideration of the Government. As I suggested a few nights ago, I am very pleased to know that the Premier has begun to recognise that the establishment of secondary industries has to be carefully considered. Unless you provide some means of consuming the products from this new scheme it is useless to continue it. The question of growing tobacco has been discussed at some length to-night. The hon. member for Warwick gave a very interesting account of the early history of that industry. He showed that in the year 1895 in the Texas area five times as much tobacco was produced as could be consumed in Australia. I know that in the Bowen area certain growers had to go out of the business of tobacco-growing by reason of the difficulty of finding a market.

I do not want to be a Jeremiah, but these are matters that have to be considered, and therefore, when you talk about close settlement and intense cultivation, the question of a market must be borne in mind. I do not mean to suggest that this scheme should not be gone on with because an immediate market is not apparent, but I do consider that we should apply common sense to the proposal and remember that we cannot go on producing primary products in the manner we propose to do unless we at the same time establish something in the nature of secondary enterprises which are going to consume the products of these closely settled areas. The experience of Mildura is well worth noting. We have seen that for some years after the people there were producing they had little or no market for their products, but by adversity—which is the finest school to learn in at all times—they marketed a product which is world-

famed at the present moment—that is, their dried fruits.

The SECRETARY FOR PUBLIC LANDS: It took some organisation.

Mr. ELPHINSTONE: I quite agree with that. Nothing will be accomplished without organisation. I do not think it is the duty of the Government to go ahead and overcome all the difficulties with which settlers are faced. Because, if settlers come here and are not extended, then we shall not have the class of settler which will make Queensland famous. The tendency to-day is to do too much for the settler, and he in turn depends too much on the Government, and immediately he comes up against a difficulty or adversity he rushes cap in hand to the Government and makes the life of the Minister almost unbearable. Therefore I hope the Government will only go a sufficient length to prepare an opportunity of prosperity for the settler, and let the settler come in and overcome the difficulties which every settler must expect to have to face when he comes to a new country, because he will be a better man through having had to face them. Speaking on the broad question, I do ask that having made provision, as the Government have done in the numerous measures that have been before this House during this session of Parliament, for something like 10,000 settlers to go on to our lands, we should now devote our attention to the broad question of secondary enterprises, so that we can obtain a population which will consume the products of these settlers; and we hope at the same time to supply these settlers with the everyday commodities that they will need for the development of their lands and for the maintenance of their families year in and year out. The hour is late, and I do not wish to detain the House any longer. This is an important question, and one that it seems to me every member of the House must look upon with a certain amount of favour, because it embraces our desire to see immigrants from the old land and the businesslike idea of seeing that reasonable provision is made for them when they do arrive.

Mr. FRY (*Kurilpa*): I have advocated water conservation and irrigation and the use of hydro-electric power in Queensland right from 1918, when I first came into this House, and I am still of the opinion that these things are going to be the salvation of Queensland. I also wish to say that any scheme put forward for water conservation and irrigation must be governed to a great extent by the locality. If the locality is one which is suitable for irrigation, then we are all right, but, if we are going to expend large sums of money in a district where the soil is so porous that there is not going to be a very large run-off, then we are going to have trouble. A scheme of this description depends to a great extent upon the rainfall and the run-off, and apparently, from the report submitted to us, there is only a run-off in this area of  $3\frac{1}{4}$  per cent. When we deduct evaporation and absorption from that, it looks on the face of it as though the scheme is not going to be the success that it is hoped it will be.

Again, according to the Commissioner's report, there is only a safe margin for 100,000 acres of land, whereas the Government are going to irrigate 400,000 acres. That makes me wonder how far the scheme

[Mr. Elphinstone.]

is going to be a success. It is a very ambitious scheme, and one of national importance. I trust that it will be an unqualified success, because upon its success will depend the prosperity of the State. But besides having a locality which is suitable we must also depend upon the management and the policy which the Government for the time being carry into effect. I doubt whether the Commissioner who is in charge of this scheme will be allowed to finish it. From past experience we know that once the party behind the Government feel that a man is taking to himself autocratic powers in carrying out any scheme, there is a howl, and strings are pulled by which he is interfered with. That obtains in almost every direction of Government activity. The other question is the marketing of products which will be raised. The Minister was quite right when he said that we have to work out our destiny and to act in accordance with our climatic conditions. The idea of damming up rivers and streams is a very good one, but it is not all that is necessary in connection with water conservation schemes. There are very valuable areas in the highlands where we can catch the rainfall or surface waters and store them up, but before we incur an expenditure of £2,000,000 we have to be certain that the rainfall is there, and that the water is going to be stored. These schemes are all very well on paper. When we view the pretty pictures on the wall we admire them, but as legislators we must look at these matters in the cold light of experience. We find that the soldier settlements and the Inkerman irrigation scheme which the Government have started have been failures. We only hope that this scheme is not going to be a repetition of those failures. The Minister is very ambitious in stating that the value of the land is going to be raised from 10s. to £12 an acre. If the scheme is a success, I believe that will be ultimately realised. I can understand the nervousness of the Minister in introducing a scheme of this capacity when he feels that upon his shoulders will fall the onus of the failure or the credit for the success of the scheme.

THE SECRETARY FOR PUBLIC LANDS: No; the Commissioner will have that job.

MR. FRY: I pointed out to the Minister that, judging from past experience, as soon as the Commissioner exercises his influence in connection with the scheme, the party sitting behind the Government will let out a yell and get the Government to interfere with him. (Government dissent.) I am not going to deviate from that statement, because it is a fact, and I will repeat it over and over and over again.

MR. KIRWAN: It is not a fact, all the same.

MR. FRY: In passing, I want to show that irrigation has been advocated by me for a very long time. At one time mine was, as it were, the only voice in the Chamber crying out for water conservation and irrigation in the State. In looking up the speeches of hon. members in the past I fail to find any reference made to the subject by hon. members opposite. In "Hansard," volume cxxxiii., page 2153, I am reported as having said on 13th January, 1920—

"When I was speaking in the House some time ago, I stressed the point that the prosperity of the State depended, to a great extent, upon water conservation

and irrigation, not for the purpose only of storing up water for encouraging the growing of cereals and other foodstuffs, but for generating power by which industries throughout the State could be supplied with cheap electrical power with which to run the machinery. Wherever you go in Queensland, the country is so situated that with a very small expenditure huge quantities of water could be conserved. If that was done, and we got a drought like that which we have just gone through, the State would not suffer and industries would continue to go on. Water could be utilised for generating electric power for lighting and carrying purposes, and could also be diverted into irrigation schemes. These things must be judged from the standpoint of the future. We must not think that a small, narrow-minded policy is going to be of any use to the State. I am one of those who believe that, if we start these things, we should do them properly, and we should carry out irrigation schemes in such a way that, in ten years' time the schemes will not be out of date, but will be too large even then for requirements. I hope the Government will tackle the project in a methodical way, and not merely confine themselves to creeks and rivers, because where you can get a fall of from 500 to 1,000 feet you would have sufficient power to run hydro-electric machinery, and those parts of the State which do not possess running creeks may be utilised for the purposes of irrigation."

When I made that speech, nobody on the Government side backed me up; but year after year I have advocated schemes of this sort, and I am very pleased to think that the Government are taking it up, although, so far as we can see from the reports of the experts, they have selected a conservation area where the soil is very porous. And if we are to depend on pumping operations for the supply of this water, it will be too expensive for the purposes for which the land can be used.

THE SECRETARY FOR PUBLIC LANDS: Where did you see any reference to pumping?

MR. FRY: If the water can be obtained by gravitation, there is a better chance of success. How can one reconcile the optimism of the Minister with the report of the Public Works Commission? The scheme has my best wishes for its success. I hope that, since it is a national one, the Government will be strong enough to suppress any opposition from their supporters and deal with them as they ought to be dealt with.

MR. KIRWAN: What they should deal with is the Jeremiahs, who are not on this side of the House.

MR. FRY: I hope they will deal with Jeremiahs on the Government side of the House—there are none on this side. What criticism we have offered has been of a helpful nature. The Opposition have pointed out weaknesses in the scheme, and, as I have said in this House previously, frequently after the Opposition have drawn attention to errors and amendments which should be included, the Bill, after being made law, has been brought back and the very amendments we suggested have been inserted.

THE SECRETARY FOR PUBLIC LANDS: They were not accepted because you did not draft them in proper form.

Mr. Fry.]

Mr. FRY: Because we did not draft them in proper form! What a foolish statement for the Minister to make! If we offer a suggestion to him, surely it is his business, with all the staff at his hand, to find out its value and include it in the Bill!

The SECRETARY FOR PUBLIC LANDS: You have the same staff at your disposal.

Mr. FRY: It is only shortsightedness to suggest that the Opposition have not drafted amendments in proper form. Suppose we point out to the Government the report of their own Commission and ask them to go carefully, how are we going to put an amendment in proper form? We favour water conservation and irrigation in every shape and form, but we want it to be done in such a way as to protect the finances of the country and benefit the State, and eventually assist our secondary industries. I represent a city constituency, and the people I represent depend to a great extent on secondary industries for their support, and it is my object to look after their interests as far as I possibly can in having secondary industries established, maintained, and developed in order that they may all have employment and live in reasonable comfort.

Mr. WARREN (*Murrumbidgee*): I am quite aware that the Minister must depend to a very great extent on his experts. If he has got honest experts, he would be wise to follow their advice, but there are some things on which even experts are not proficient enough to pass an opinion on, and this scheme is one of them. At the same time, I do not agree with the hon. member for Bowen that we should not depend on experts. At the present time when this irrigation scheme is being brought forward we are over-producing considerably. It is not that we are not producing enough, but that we are producing more than we can use and more than we can market overseas. I am sorry that I did not hear the Minister's speech, as I may have missed something vital in connection with it. In connection with this matter he may have suitable soil and a plentiful supply of water, and the scheme may be a creditable one produced by experts. I do not believe in having gigantic schemes just to eclipse everything else, because to-day the big schemes are not the most profitable ones. If you take the Burrijuick scheme right down to North Yanco you will find that the settlers are not financing the scheme, and millions of pounds have had to be written off. Those settlers knew exactly what they were going to produce, but at the present time we do not know whether we are going to grow tobacco or anything else on the Dawson Valley lands. We know that certain things cannot be produced by irrigation unless under a system similar to that mentioned by the hon. member for Aubigny. In connection with

[10 p.m.] this scheme the settlers will have to start off by paying £1 an acre for water in addition to the cost of the land, which is actually more than is paid by the North Yanco settlers at the present time. That is not the only thing to be considered. We have to consider the fact that the Dawson Valley is probably 1,000 miles away from a centre of population. An irrigation scheme must be considered in its relation to population, and population only. The hon. member for Bowen talked about Brigham Young starting a great irrigation scheme, but he started with thirty wives. (Laughter.) The Government surely are not

proposing that our irrigation farmers should take thirty wives to these areas to produce sufficient population to consume their products. If that is so, the hon. member should have told us. At the present time we can produce more meat, fruit, and wool in Australia than are required for local consumption.

Mention has been made of the suitability of the Dawson Valley lands for growing cotton. I agree that cotton can be produced in Queensland, but no one has told us that the soil in this area is suitable for producing cotton. If the idea is that cotton shall be produced by irrigation in the Dawson Valley, it is a very foolish one. The State should not be put to such a great expense for that purpose. Previous schemes such as the State stations and the Inkerman irrigation scheme have not come up to expectations.

There has been some discussion about the cost of grading the surface of the land in the Dawson Valley and what it will mean to the settlers. We have no evidence of any product of a commercial proposition that can be grown on this land. That is the first matter that should be considered. We know that millions of acres in Queensland are more suitable for irrigation. It would be preferable to start irrigation works in the zones where we have the population and which are affected by dry weather. Why not devote the Condamine River to irrigation purposes? I know that it is a pretty rough stream, but more difficult propositions have been solved in other parts of the world. There are vast stretches of good country on each side of the Condamine. There are many streams which offer themselves for irrigation that would benefit areas regularly affected by drought. At the present time fodder is imported from the Southern States into Queensland. There is hardly a year that we do not bring farm products from the South. A great quantity of this produce is used in centres far distant from the farming centres in this State. The country below Miles, where the soil and sub-soil are beyond question, and where grading would not be a serious item, would admirably lend itself to irrigation. Irrigation schemes should be adopted in connection with areas that would be much nearer the market than the Dawson Valley, and be more likely to meet with success. It has been said that Mildura is and Inkerman is going to be a paying proposition, but the point has not been mentioned that the product of both places is protected.

The Inkerman district is producing sugar, which is protected to a very high degree. Mildura is producing principally dried fruits, which are protected to the extent of 3d. per lb. It would not be possible under present conditions to grow products on the Dawson Valley lands unless those products were protected. I would ask the Minister if he thinks that the Commonwealth is going to protect the produce from the Dawson Valley? If it is going to be protected, then it will be all right, otherwise we are not going to make the land pay.

The hon. member for Bowen made a very true statement when he said that it was work that told every time, but I say that the man who is willing to put in more hours than are worked in any other industry should have more reward for his work than he now has. He should not be made a white slave, stuck on the land year in and year out without the enjoyment that falls to the lot of people in thickly populated areas. I

[*Mr. Fry.*]

cannot see that there is going to be any reward for these men who will be stuck right out there in the "Never Never." Unless the Minister is going to produce something of commercial value, he is going to put these men in a similar position to those in the Beerburum and other soldier settlements. They will be coming and going until eventually a turn takes place which will give them a better result for farming. Until then, I do not care how well laid out this scheme is, how much encouragement is given by experts, or what the nature of the soil is, it will never be a success.

One hon. member said to-night that poor soil will grow anything so long as it has water. I differ from that opinion. Water is not a fertiliser. If this soil is not sufficiently rich—which I do not question—to produce a crop, water will not make it productive.

If the scheme is going to be a success, first of all it must be in the right locality; secondly, it must be cheap to the people who use the water; and thirdly—and I might have put this first—there must be a good market for the produce. If the Minister is satisfied that there is a market for the produce, and that the soil is sufficiently good, then I say he is wise in going on with the scheme. But he is not wise in making the scheme too big. He should start in a small way. The dam will have to be built, but he must not make the scheme too big if he desires success. The very making it a big scheme will bring about its destruction.

Question put and passed.

#### COMMITTEE.

(Mr. Kirwan, Brisbane, in the chair.)

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, Cairns): I beg to move—

"That the House approves of the proposed scheme for the establishment of the Dawson Valley Irrigation Undertaking."

Question put and passed.

The House resumed.

The CHAIRMAN reported that the Committee had come to a resolution.

The resolution was agreed to.

#### JAPANESE EARTHQUAKE RELIEF FUNDS BILL.

##### SECOND READING.

The SECRETARY FOR PUBLIC LANDS (Hon. W. McCormack, Cairns): There is nothing to add to my remarks at the initiation of the Bill in Committee. The Bill is merely to give power to the Government to appoint trustees for the fund and to provide for the auditing of the accounts. It also provides that all funds shall be received through the trustees. The Committee at present doing the organisation will be asked to appoint trustees. I beg to move—

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

Question put and passed.

#### COMMITTEE.

(Mr. Kirwan, Brisbane, in the chair.)

Clause 1—"Short title"—put and passed.

#### Clause 2—"Appointment of trustees"—

Mr. MORGAN (Murilla): I would like to ask the Minister who is likely to be appointed manager of this fund. Does it rest entirely with the Minister as to who is to be appointed manager?

The SECRETARY FOR PUBLIC LANDS: I will ask the Committee to recommend trustees. His Excellency is the chairman.

Mr. MORGAN: I would like to know whether anything will be done to see that the money raised is expended in the purchase of Queensland meats and things of that sort.

The SECRETARY FOR PUBLIC LANDS: The Committee is now dealing with that question.

Clause put and passed.

Clauses 3 to 7, both inclusive, put and passed.

The House resumed.

The CHAIRMAN reported the Bill without amendment.

The third reading of the Bill was made an Order of the Day for to-morrow.

The House adjourned at 10.15 p.m.