



**The William R. Randell Lock,
Blanchetown, River Murray.**

STONE TO MARK THE SITE

LAID BY

**HIS EXCELLENCY THE GOVERNOR
(Sir Henry Galway, K.C.M.G., D.S.O.),
June 5th, 1915.**



SOUVENIR OF VISIT BY
PARLIAMENTARY PARTY.



ISSUED UNDER AUTHORITY OF THE PREMIER
(HON. CRAWFORD VAUGHAN, M.P.)

BY THE
INTELLIGENCE AND TOURIST BUREAU,
ADELAIDE.

VICTOR H. RYAN, Director.



THIS STONE
MARKING THE SITE OF
THE WILLIAM R. RANDELL LOCK

WAS LAID BY
**HIS EXCELLENCY THE GOVERNOR
SIR HENRY LIONEL CALWAY
K.C.M.G., D.S.O.**

ON THE OCCASION OF THE VISIT OF MEMBERS
OF THE PARLIAMENTS OF AUSTRALIA.

5TH JUNE 1915.





THE WILLIAM R. RANDELL LOCK.

AN HISTORIC CEREMONY.

ON Saturday, June 5th, 1915, at Blanchetown, His Excellency the Governor of South Australia laid a stone marking the site of the first lock and weir, which is to be constructed as part of a general scheme to conserve the waters of the River Murray for the purposes of irrigation and navigation.

This Lock will be known as "The William R. Randell," after one of the pioneer navigators of the Murray. The ceremony has been justly termed an epoch-making event for Australia, and to mark the importance with which it was regarded, a representative and influential party, comprising members of the Federal and Interstate Parliaments, journeyed by rail and river from Adelaide to the site at the invitation of the State Ministry.

In addition to His Excellency the Governor (Sir Henry Galway, K.C.M.G., D.S.O.), the members included the Prime Minister of Australia (Right Hon. Andrew Fisher, P.C.), the Premier of South Australia (Hon. Crawford Vaughan), the Federal Attorney-General (Hon. W. M. Hughes), the Premier of New South Wales (Hon. W. A. Holman), the South Australian Commissioner of Public Works (Hon. Harry Jackson), the Commissioner of Crown Lands (Hon. C. Goode), and the Minister of Industry (Hon. R. P. Blundell).

This Souvenir is issued to commemorate the inauguration of the work, and serve as an official record of the event.

The Adelaide daily press gave considerable prominence to the proceedings, and the following extracts are from the published reports of the speeches.



Parliamentary Party en route to Blanchetown.

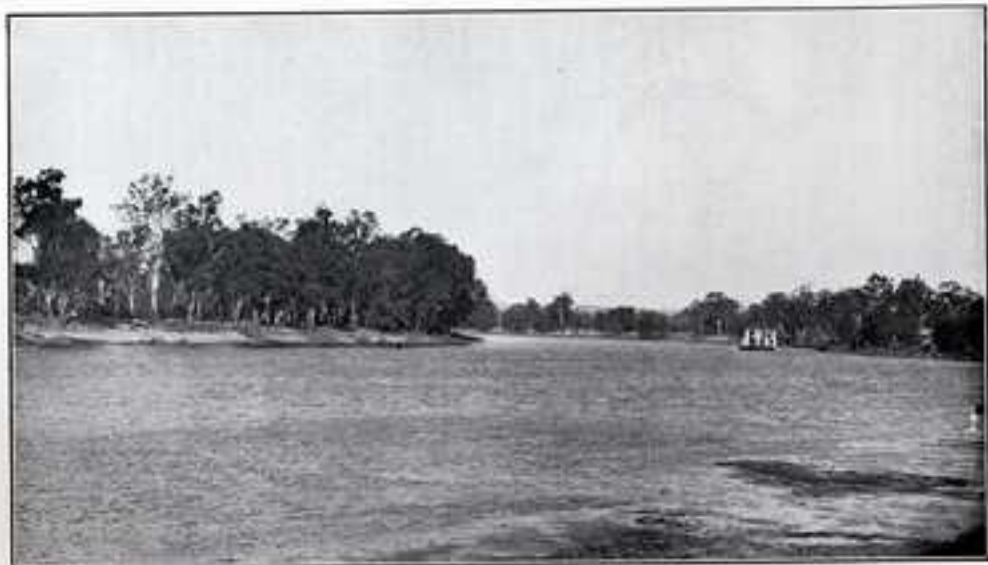
AT THE LOCK SITE.

On arrival at Blanchetown the Commissioner of Public Works asked His Excellency to place the stone in position, and presented him with a silver-mounted mallet, made of South Australian wood, similar to that being used in connection with the lock.

Mr. Jackson said the occasion was, perhaps, the most memorable in the history of South Australia. For many years something in the direction of what was now being done had been contemplated, but as often as they had expected to accomplish something towards conserving and utilizing the water of the Murray for the purposes Nature had intended, just as often had their hopes been blasted by fickle fortune.

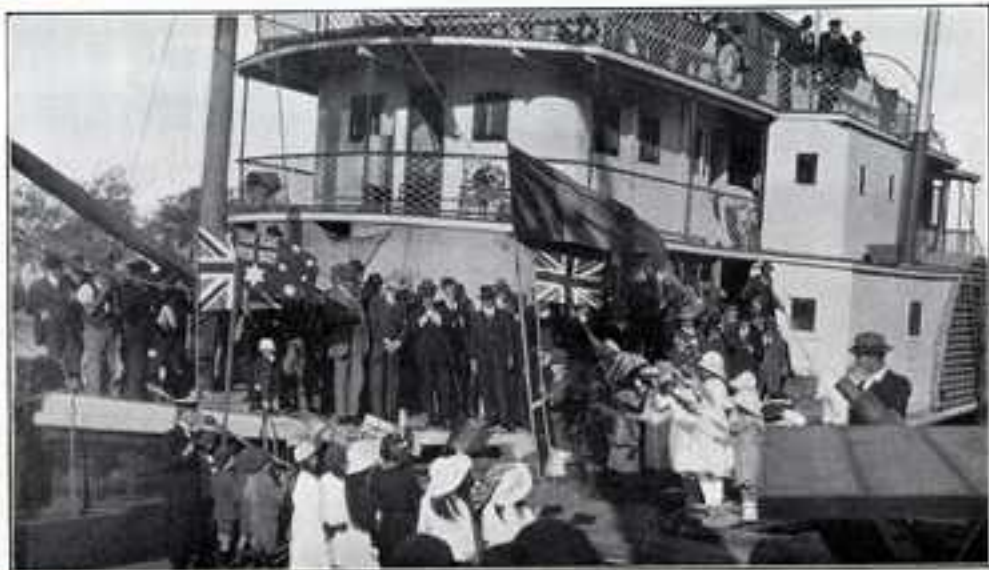
Captain Sturt's Discovery.

His Excellency said:—As Mr. Jackson remarked, this is a very notable day in the history of South Australia, and I am proud indeed that it should have fallen to my lot to be called upon to lay the first stone of the first lock of the River Murray locking system. It is to me a tremendous privilege, and I rather think that I have fluked into performing the ceremony. I wish in one sense the honor could have fallen to the lot of my illustrious predecessor, Sir Day Bosanquet, after the splendid work he did in this State. From the Murray locking system a vast deal is expected in connection with the future welfare of our State. The William R. Randell Lock is one of six to be erected in South Australia, and one of a system of 35 locks in all. The potential benefits these locks are going to confer upon South Australia cannot well be calculated at this stage, but they are without doubt going to be very considerable. The success already obtained in the reclaimed areas below Mannum is a practical and encouraging example of the wealth that lies ahead of us as represented by the Murray lands. If Charles Sturt could only be with us to-day his cup of satisfaction would be brimming over. It is 85 years now since that intrepid explorer unlocked to the world the largest river system in Australia. In that wonderful boat journey from the mouth of the Murrumbidgee to the sea and back Sturt and his gallant companions rowed no less than 1,700 miles—the longest boat journey on record. That was not the only record in the explorer's great achievement. It was the cheapest bit of exploring work ever done, and cost the Government £266, less 7½d., an example of rigid economy that I am sure will appeal to Ministers! These locks, once constructed, will ensure sufficient water both for navigation and irrigation purposes. The Murray settlers are a fine type of colonist who, given the chance, will make things hum. The Murray lands are very fertile, provided sufficient water is available for irrigation purposes. The possibilities are enormous. It is estimated that over 600,000 acres can be reclaimed and irrigated on the Murray banks within the South Australian boundary. During the late drought, which, thank God, is a memory of the past, the reclaimed areas between Mannum and Tailm Bend were veritable oases in the



The River Murray at Blanchetown.

desert, and yet they are only a beginning of what is confidently looked for. As Mr. David Gordon stated in his excellent publication, "The Nile of Australia," the arid nature of Australia is caricatured by uninformed people. There are many rivers in this great continent whose waters are waiting to be put into use in order that the producer, and thereby trade, may benefit enormously. The harnessing of this great stream is about to be commenced by the erection of this lock, one of a carefully-thought-out system. The Murray is, we hope, going to come into its own by at last playing the part it was meant to in developing the States through which it flows; and it is a matter of great gratification to two of the three States concerned that the Governments of those States have come to a determination to put, if possible, the waters of this mighty river to their best uses, so that each State shall be benefited therefrom to the utmost. The happy agreement come to by the States referred to is greatly strengthened from the fact that the wise statesmanship which formulated the Murray waters scheme has the strong support of the Federal Government. The scheme may, therefore, be said to be national, and in that happy fact you have the keystone of the future success of the great undertaking we are putting into motion to-day. As the locks are erected, and as this grand stream is bitted and bridled and got under control, new provinces will spring up, and the now waste lands of this vast Commonwealth will be converted, as time goes on, into green pastures, wheat lands, and orchards inhabited by a virile race of progressive and prosperous people. The faith to do and dare which inspired Charles Sturt and the old pioneers of Australia still animates the hearts of their descendants, the men and women of to-day, and with that knowledge we look with confidence to splendid successes resulting from the efforts now being made to develop the great watershed of the Murray River. To satisfy ourselves that the grit of the makers and founders of this beautiful land has been handed down to their sons and their sons' sons to-day we have only to look to the Dardanelles, where Australia's manhood has covered itself with glory and renown that will be imperishable and will form a glorious and inspiring chapter in the history of the British Empire. And how proud we are of our soldiers and sailors, whose gallantry and fortitude might well form the subject of an epic poem such as Homer's Iliad—which Iliad, too, was written in connection with the siege of Troy, an ancient town situated not very far from where our men are now driving the Turkish host out of Europe. In conclusion, I would express, if I may, my humble commendation that the Murray locking system has been so arranged that every possible benefit shall be secured, not only for irrigation, but also for navigation. By that arrangement not only will waste lands be turned into fertile fields, but also the natural waterway of a vast area will be used as the trade route it was intended for. The Murray is South Australia's greatest asset, and we now rejoice in the hope that it is about to be fully developed.



Arrival of the Parliamentary Party at Loch Sile.

The Foundation Stone.

His Excellency then tapped the stone with the mallet and declared it to be well and truly laid, to the accompaniment of ringing cheers.

The Premier's Speech.

The Premier (Hon. Crawford Vaughan, M.P.), in moving a vote of thanks to the Governor for having performed the ceremony, congratulated His Excellency upon having taken a leading part in what would by future generations be regarded as an historic event. Long years of discussion and of procrastination on the great question of locking the Murray lay behind them, and ahead was the happier time of definite action. Throughout the ages the life-giving waters of this splendid stream, after cutting their way down thousands of miles of channel from Kosciusko to the coast, had emptied themselves uselessly into the broad bosom of the Southern Ocean, there to be merged forever with the rolling surges. Along the banks of the great waterway lay the rich red sands, the box flats, and the shallow lagoons, that by the magic touch of man's productive genius might be turned into verdant pastures, flourishing orchards, and happy settlements. The arbitrary lines of State division had, however, bred interstate jealousy and misunderstanding. As early as 1887 a Royal Commission was appointed by the South Australian Government, with the Hon. J. H. Howe as chairman, to consider the question of the allocation of the waters of the Murray between New South Wales, Victoria, and South Australia. This Commission was merged into an Interstate Commission in 1902 to make a full inquiry and report "concerning the conservation and distribution of the waters of the Murray and its tributaries for the purposes of irrigation, navigation, and water supply." That Commission recommended the construction of storage works at Cumberoona and Lake Victoria, and weirs at the Murray Mouth, the cost of which should be borne in equal shares by the three States, and a weir and headworks at Bungowannah, to be paid for by New South Wales and Victoria in equal shares. The recommendations also included a first instalment of a complete locking scheme, from Blanchetown to Wentworth (which it was suggested the Federal Government might be induced to carry out), and the appointment of a permanent Commission to control the waters of the Murray and its tributaries. Further agreements were drawn up in 1903, 1906, and 1907, but it was not until 1908 that finality seemed to be reached, when the Premiers of the three States signed an agreement that was to be submitted to the various Parliaments for approval. The measure passed the second reading of the South Australian Parliament, but unfortunately was not proceeded with in New South Wales and Victoria. The 1908 agreement provided for the appointment of a permanent River Murray Commission to control everything concerning the Murray waters, that the Lake Victoria storage works and two locks and weirs in the Murray should be constructed and paid for in equal shares by



The Assembly at the Lock Pitt.

the three States, and that a total yearly volume of sixty thousand million cubic feet of water should be delivered at the boundary of South Australia, subject only to reduction in years of low discharge. It was not until 1910 that authorisation was given to the Murray Works Act, under which the William R. Randell Lock was now being constructed. That measure also authorised the construction of the Lake Victoria works, and two weirs and locks in the Murray, subject to the consent of the States of New South Wales and Victoria, and also the construction of a system of locks and weirs from Blanchetown to the boundary. In order to carry out this great undertaking South Australia engaged the services of Major Johnston, of the Corps of Engineers, United States Army, and through the courtesy of the United States Government, he was allowed to visit South Australia. It was upon Major Johnston's plans, reports, and estimates that this work was being carried out. In 1911 an agreement was arrived at between the three States, under which authority was given to South Australia to proceed with the Lake Victoria scheme, subject to the consent of the Parliaments of New South Wales and Victoria. The fate of this agreement was like that of its predecessors. It perished in early infancy, a cold and indifferent world permitting it to die of neglect. Determined if possible to resist the blandishments of legal proceedings, South Australia made one last desperate effort to reach a final solution of this long, contentious trouble, and in 1913 the last agreement was born. Three States and the Commonwealth adopted the role of godfather of this lusty infant. The agreement, which had passed "Seylla" of the New South Wales Parliament, was now making a dangerous voyage past the "Charybdis" of the Victorian Assembly. When that danger had been safely navigated it would be all plain sailing, as he did not anticipate any difficulty in the measure passing through the Commonwealth Parliament and the Legislature of South Australia. Having explained the principal features of the agreement, the Premier said he wished to make it quite clear that the lock, the construction of which was now about to begin, was not being built in anticipation of the agreement of 1913, but was a work that had "been in hand for the past five years." Its construction would not conflict in any way with the terms of the last settlement, but it should go to prove that South Australia was in earnest on this matter. It was felt that the last word of compromise had been spoken. They had given all that they dared to give in justice to the citizens and to posterity. It might be thought that South Australia had been too insistent in its claims for the State's share of the waters of the Murray, and had laid too much emphasis upon the subject of navigation. He candidly confessed that South Australian representatives had too often allowed the greater question of irrigation to be obscured by the cry for a navigable river. Irrigation and navigation were not in conflict with each other. One could not be secured without the other; but, in his humble opinion, if either had to give way, it necessarily must be navigation that must take the



His Excellency the Governor (Sir Henry Gaffney, K.C.M.G., D.S.O.) laying the stone to mark the site of the William R. Bennett Lock.

secondary place. At the present time South Australia had no less than 25,906 acres along the valley of the Murray under intense culture, and if the areas now being dealt with, and the schemes contemplated between the boundary and the Murray Mouth were included, they had a grand total of 359,554 acres. Last year, when the low state of the river threatened the settlements with ruin, improvised sand-bag embankments had to be built to store fresh water for the pumping plants at Mildura, Renmark, Waikerie, and Berri. Lower down the river the people had to be content with watering their lucerne with salt water, trusting to the leaching process of high rivers to take the salt out of the soil. It would be seen then that South Australia was making no empty boast when she preached the gospel of irrigation, and earnestly requested the other States to come into line with her in the development of this Nile of Australia. Lake Victoria was a natural storage basin, which with the trifling expenditure of less than £200,000 could be made to store 22,000,000,000 cubic feet of water, which was only one-third less than the capacity of Barrinjuck itself. Lake Bonney offered itself as another storage basin which the construction of locks would enable them to utilise, and each lock would throw back the water to a height of 10ft., thus keeping the river fresh and full for many months longer than it otherwise could be. At the same time, they must never forget that a locked river, though of inestimable value for irrigation purposes, could be made navigable to boats drawing 6ft. 6in. on considerably less than one-seventh of the quantity of water that was now required. The Government were considering also the advisability of following the example shown by the Dutch in the reclamation of the Zuyder Zee by reclaiming Lakes Albert and Alexandrina as far as practicable. It would be invidious to particularise the efforts of any particular past Minister in the work of utilising the waters of the Murray. Among those who had taken a leading part in the deliberations in this matter were the Hon. J. H. Howe, Mr. Simpson Newland, the late Tom Price, Mr. Justice Gordon, Sir Richard Butler, the Hon. A. H. Peake, the Hon. J. Verran, and last but not least, the Hon. P. McM. Glynn, and the Hon. David Gordon, whose labors in the cause of development of the River Murray had been unceasing. Just as the turning of the sod on the East-West line bore witness to the future development of the interior of Australia's vast continent, the ceremony that day at Blanchetown opened the door to the future utilisation of the resources of the Murray. It ushered in a new era of activity and enterprise. The imagination could scarcely conceive the future that awaited Australia when these placid waters were harnessed to man's use. Then would the solitary places be made glad, and the desert blossom as the rose. For what the Tiber was to old Rome, what the Mississippi was to America, what the Nile was to Egypt, this and more he believed the Murray was destined to be to generations of Australians yet unborn.



The Ministerial Party at Blanchetown.



Sunrise at the Murray Mouth.

Support from the Prime Minister.

The Prime Minister (Right Hon. Andrew Fisher, P.C.) said he was glad to have the opportunity to second the vote of thanks so ably submitted by the Premier. He had been made happy by the references in the speeches to the abundance of water the heavens sent to that portion of Australia, but it had almost made him sad to think that these bounties had for so long been allowed to run to waste. He did not belong to their State, but he felt just as warmly for the people as he did for the people of his own State. That should be the spirit of every Australian. He hoped no available opportunity would be lost by the State or Federal Parliaments to prevent the waste they had heard so much about, whether there were differences of opinion between sections of the Australian people or not. It was an economic waste that could not be justified either to themselves or to any other part of the world. Without entering into any political controversy, he might say that 25 years ago he was one of a number who had tried to draft a political platform, and the second plank of that platform was "Conservation of water and irrigation." That plank and idea had been allowed to lie dormant too long. He hoped the people would awaken to their opportunities and interests. The time might soon arrive when a great mass of people might be seeking a new home, and why should they not have that home by their beautiful river, and in such a healthy climate. If Australians exercised their wills and intentions in a practical and sound way there should be abundant opportunities offered to citizens of the Commonwealth. He would use all his influence, and would even abet those who were desirous of utilising the bounteous rains that fell either in South Australia or any other State if it would increase the prosperity of the people. It was with the greatest of pleasure that he thanked His Excellency for laying in position the foundation-stone of the first Murray lock.

Interstate Co-operation.

After expressing pleasure at being able to support the vote of thanks to the Governor, the Premier of New South Wales (Hon. W. A. Holman) said it was with a great amount of personal interest that he found himself there to take some part in a most memorable ceremony. The actual scheme under which it was hoped the task of conserving the waters of the river would ultimately be carried out throughout its whole length bore his signature, and in this regard a striking thought had occurred to him at that moment. It was perhaps an evidence of the rapidity of changes in the political life of Australia that of the four heads of Governments which had signed the agreement last year he was the only one remaining in office. Mr. Cook had been replaced by Mr. Fisher, Mr. Watt by Sir Alexander Peacock, and Mr. Peake by Mr. Vaughan. He could only regard that as a further indication of the gentle spirit and generally pacific nature of politics as they were carried on in the mother State. Their less fortunate neighbors used up all their energies in rows. In New South Wales the Parliamentarians concentrated the whole of



Mannum, a River Township in South Australia.

their energies in furthering the good of the people. An occasion such as they were taking part in was a striking indication of South Australia's determination to succeed. New South Wales stood to benefit as much by the Murray locking scheme as did South Australia. Already New South Wales had embarked on a gigantic irrigation scheme, based on the waters of the Murrumbidgee, but the fraternal settlement of the long-standing legal differences about the waters of the Murray would permit his State to join with Victoria in carrying out an irrigation scheme that would be twice as large in results as Burrinjuck. At Cumberoona they would, after having settled their differences in regard to navigation on the lower reaches of the Murray, be able to construct a reservoir which would permit two areas each the size of the Burrinjuck scheme to be irrigated. One was on the north, and one on the south side of the river, and it was estimated that at least from 15,000 to 20,000 people could be settled on each of these. Necessarily estimates of that kind were vague, but the figures he had quoted had been prepared by those who were in a position to judge of the success of the scheme. It was a great work on which South Australia had now embarked, but he felt that he could echo the sentiment of His Excellency the Governor in regard to being in at the finish of things, for he was merely following where his predecessors had paved the way. However, he rejoiced that in history his name would be associated with the scheme as one of the signatories to the agreement which made it possible for the great work to be carried out. He congratulated His Excellency and South Australia on the day's great event. It was an event that would be looked upon by His Excellency in years to come, and by himself also as something with which they were pleased to have their names connected. It was without a doubt a step in the greatest and most beneficent of public undertakings that had ever been carried out in Australia. Those pioneers who had made it possible, and who had worked so hard to bring it about, deserved the warmest congratulations on their unflagging industry and spirit. Looking back over the whole period of her history he could see no single moment when Australia was confronted with so gigantic a step forward in material development as that which they had witnessed.

Utilising Nature's Forces.

Mr. J. W. Billson, M.L.A. (Victoria), said he hoped the agreement would be carried, but he was not quite sure whether he should say in its present form. Mr. Holman had told them that he was over-reached in the matter by Mr. Glynn, but the Victorian representative affirmed that he was over-reached by the representative of New South Wales. Victoria was now considering the agreement, but South Australia had not considered or determined it. So, although the Parliament in his State was a bit late, it was nevertheless before the Parliament of South Australia. No disagreement, however grave, could justify the folly of allowing facilities for navigation and irrigation to go to waste, thus leaving people destitute of those opportunities which they could have were the forces of Nature harnessed for the use of man. He trusted that the



View of the River near Murray Bridge

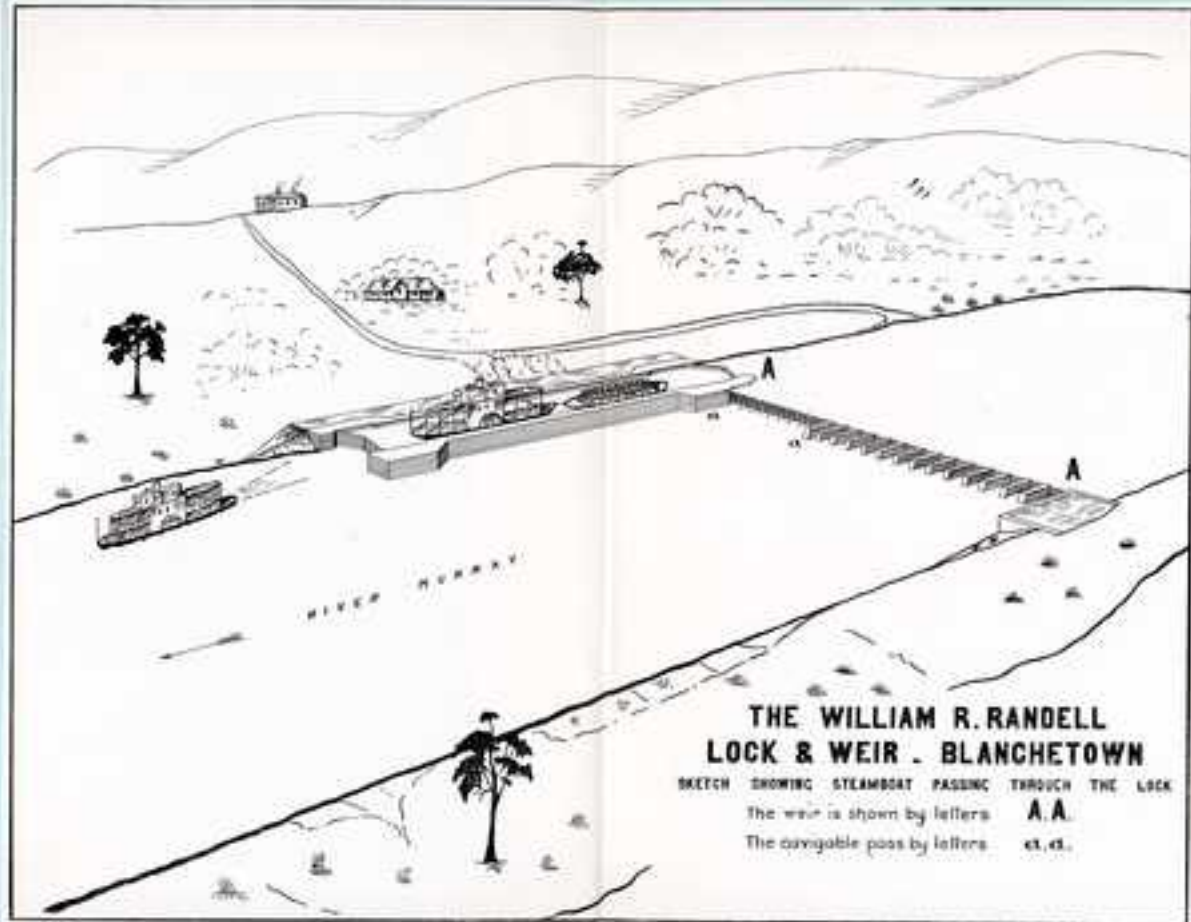
results of the agreement would be all that was anticipated by the framers. Personally he regretted that men in the past had not been sufficiently statesmanlike to recognise their duty, and had not permitted lands and water to be utilised in the natural and most beneficial way. He added his tribute to His Excellency for the work performed that day. He hoped to see hundreds of acres of the land now useless placed under irrigation, and cut up into small blocks in the future, and their own people, who were languishing for want of lands to cultivate, settled on them, adding to their own happiness and the prosperity of Australia.

Of Interstate Importance.

The Hon. R. B. Rees, M.L.C. (Victoria), said it gave him pleasure to be present and join in celebrating that great event, but he regretted that members of the Victorian Ministry were apparently too busy attending to important duties in Melbourne to make the journey. South Australia was inaugurating a work that was of the greatest importance to Victoria. He, however, as a resident on the Murray in Victoria, and a user for irrigation of that great stream, was present to express the hope that the work now being inaugurated to conserve the water might be carried right through, and that it would tend—as he knew it would—to the development of the great Murray Valley, adding to the wealth of the whole district in that reach of the river between Mildura and Echuca. It would do probably more for the people of Victoria than any other work now in progress or in sight. To deal with the question of the agreement would, of course, be controversial, and they were not there for controversy, but to declare that that great necessity was forced upon them by the unprecedented drought, during which the Murray ceased to flow around Swan Hill, the water right along the stream became undrinkable, and so heavily charged with mineral in the South Australian reaches, that it had been responsible for a breakdown of the locomotive engine which brought him over. The position was so serious when rain held off that they ought to have the great river harnessed and the water stored. By conservation they should seek to accomplish what Nature did not do for them, and have in the upper reaches of the rivers reserves that could be allowed to flow down in periods of stress and deficiency, and which would create a sufficient amount of water so that there would be no failure in the irrigation schemes.

New Chapter in Australian History.

The Federal Attorney-General (Hon. W. M. Hughes) remarked that he felt like a superfluous supernumerary on that platform, as he came, at best, but to echo the sentiments of those gentlemen who had preceded him. Any man who had had the privilege of coming up the river and seeing it for the first time as he had that day could but rejoice from the bottom of his heart to think that the natural possibilities that had been passing the doors of the people for ages were at length to be made use of. They were at the beginning of a new chapter of Australian history, a chapter that was to introduce quite a new era. The Murray would do



**THE WILLIAM R. RANDELL
LOCK & WEIR - BLANCHETOWN**

SKETCH SHOWING STEAMBOAT PASSING THROUGH THE LOCK

The weir is shown by letters **A.A.**

The navigable pass by letters **ct. ct.**

for Australia what the Nile had done for Egypt. When the Nile was low the land around was a desert, but when the river ran high the same land was a Garden of Eden. All that water had done for Colorado, Arizona, and California, it would do in South Australia. His Excellency had accomplished his great work in a way exquisitely worthy of the action, and he was privileged to support the vote of thanks in his favor.

Confidence in the Scheme.

Sir Richard Butler said he was pleased to join the other speakers in thanking His Excellency for placing in position the stone that would fix the site of the William R. Randsell Lock, named after one of the honored pioneers and one of the earliest traders on the river. The Governor's name henceforth would be closely associated with the work, which was one of supreme magnitude, of the greatest importance, and of far-reaching and ever-increasing advantage to the people of the Commonwealth—the controlling and utilising to the fullest degree the waters of this great river and its tributaries, the one great water highway of Australia, penetrating into the interior for over 3,000 miles. Though His Excellency would not be in South Australia long enough to see the whole work on the river completed, he would be able to watch its progress, and rejoice with the people of the State if in the next few weeks the agreement arrived at last year was ratified by Victoria, South Australia, and the Commonwealth Parliament. Nothing in his public career of nearly a quarter of a century would give him (Sir Richard Butler) greater pleasure than the acceptance and ratification of an agreement arrived at after over 50 years of discussion. The conference he attended in Melbourne last year was the second at which he had been present as a representative of South Australia. The first was with Mr. J. G. Jenkins, and the last with Mr. Peake. As probably was the case with the other representatives, they did not get all they would have liked. He thought, however, that after last year's conference there was a unanimous opinion that the lines agreed on should be accepted. He thought Mr. Holman, who had been present at that conference, would agree with that. In fact, he had given evidence of it by passing the Bill embodying the agreement through the New South Wales Parliament without amendment, and he wished to say how much he appreciated the attitude adopted by Mr. Griffith, then Minister for Public Works in New South Wales, at the conference. This was the attitude South Australia had always taken, and what better evidence could be had in justification of that statement than the fact that per capita this State would spend £4 to every £1 spent by the two other States. In addition, South Australia would also have to face the difficult problems confronting it between Blanchetown and the Murray mouth. They were not navigationists only, but what they did contend was that navigation and irrigation were one and indissoluble, and that by assisting one both were assisted. He was glad Mr. Fisher was with them, especially as he had assured them that his party would honor the promise made by Mr. Cook at the last conference, and that the Federal Parliament would share with the States the cost of the work.

This cost was put down at four and a quarter millions, but this sum was only problematical. He was hopeful that the work could be carried out at well within that amount. The estimate of the cost of the 17 locks in Victoria had been increased by about one million, and the South Australian estimate, carefully prepared with the assistance of two experienced American engineers, remained about the same as before. As the locks should prove much more costly in this State, where the river was much wider, he thought they could only assume that the amount put down in the agreement would not be required, and in any savings made all the States would participate. Before concluding, he wished to apologise for the absence of Mr. Simpson Newland, the Chairman of the River Murray League. Mr. Newland appreciated the courtesy of the Government in inviting him to be present, but his medical adviser would not consent to his making the journey.

His Excellency Thanked.

The Commissioner of Public Works conveyed the thanks of the gathering to the Governor, and in response His Excellency said he would watch the progress of the work with the greatest interest and sympathy. In connection with the Murray lands, which would be parcelled out by degrees, he only hoped that the Government would have some scheme by which the splendid men now fighting for King and Empire would be able to get land on easy terms.

At the conclusion of the ceremony the assemblage gave renewed cheers for the Governor, the Prime Minister, the Premier, and the Australian heroes on Gallipoli.



LOCKS AND WEIRS.

(Particulars Supplied by the Engineer-in-Chief, Mr. Graham Stewart, M. Inst. C.E.).

The inauguration of the system of weirs and locks by the construction of the first of the series at Blanchetown, to be known as the William B. Randell Weir and Lock, will prove of immense benefit not only to the settlers and traders on the river, but to the State and Commonwealth as a whole.

An agreement has been drawn up and signed by the Premiers of the riparian States of New South Wales, Victoria, and South Australia, and the Prime Minister of the Commonwealth, which authorises the construction of large storage works for the regulation of the flow of the Murray River and tributaries for the purposes of irrigation and navigation, and also of a system of navigation weirs and locks in the Murray as far as Echuca, and in the Murrumbidgee as far as Hay, or, alternatively to the latter, in the Darling River as far as an equivalent expenditure will allow. This agreement has been ratified by the Parliament of New South Wales, and is now before the Parliaments of the other two States, and after being ratified by them will be submitted to the Commonwealth Parliament for the same purpose. There is a very good reason to believe that the agreement will be favorably considered by all the Parliaments. Prior to the agreement having been drawn up, South Australia had decided to proceed on her own account with the construction of the lock system within her own boundaries, to provide a minimum depth of 6ft. 6in. of water, and, subject to an agreement with New South Wales and Victoria, to extend the system as far as Wentworth, in New South Wales, and to construct the Lake Victoria storage works.

South Australia has spent a large sum of money in making the necessary surveys and doing exploratory work, which are most important preliminaries to undertakings of this description, and the investigations have been completed and a design prepared to give permanent navigation by the building of locks and weirs to control the river as far as Wentworth, in New South Wales.

The weirs designed for South Australia on the advice of Major E. N. Johnston, Corps of Engineers, U.S.A., whose services were obtained through the courtesy of the Government of the United States of America, will have a lift of from 10ft. to 11ft., so that practically none of the flats adjacent to the river will be submerged, but the raised water level will reduce the lift of water to be pumped for irrigation purposes, and in some cases the weirs will act as diversion works for filling storages and channels.

The portion of the lock system to be carried out by South Australia comprises nine locks and weirs, six of which will be situated between Blanchetown and the State boundary and three between the State boundary and Wentworth. No. 9 lock will act as a diverting weir to direct the water into Lake Victoria, which will be converted into a large storage, containing 22,000,000,000 cubic feet, for the regulation of the flow of the river. This will insure a supply of water for irrigation, as well as water for the lock system, and it may be well to state here that the water required to maintain a locked and permanently navigable river is a mere fraction of that necessary to provide for navigation in an open river, thus rendering a much larger volume of water available for irrigation purposes than would otherwise be the case, without injury to navigation.

The weir will consist of two parts, viz., the "navigable pass" and the "sluices." The former, which is 199ft. in width, will be entirely removed during high river periods, and remain open for navigation. The stop logs, which in low periods are placed between the sluice piers to form the weir, will also be removed, the only obstruction left in the river being the piers themselves and the lock walls. In low river periods the navigable pass and sluices will be closed, and navigation will be carried on through the locks.

Very careful consideration has been given to the matter of determining the size of the lock chamber, with a view to meeting present and future requirements, and a size, 56ft. wide and 275ft. long between the gates, has been adopted. It is anticipated that when the river is made permanently navigable boats of the most modern design for both passenger and freight traffic will replace many of the older vessels now in use.

The question of carrying out works on the lower portion of the river, with a view of prolonging the period of freshness of Lakes Alexandrina and Albert, and also to provide a harbor as a means of communication between river vessels and ocean-going vessels, is now receiving the very careful consideration of the Government.

The whole of the work connected with South Australia's portion of the scheme is being carried out by the Engineer-in-Chief's Department, and the construction of the William R. Randell Lock is under the immediate supervision of Mr. B. C. Cutting, S.B., A.M.A.S.C.E., who was engaged in America for this purpose on account of his large experience on similar works.