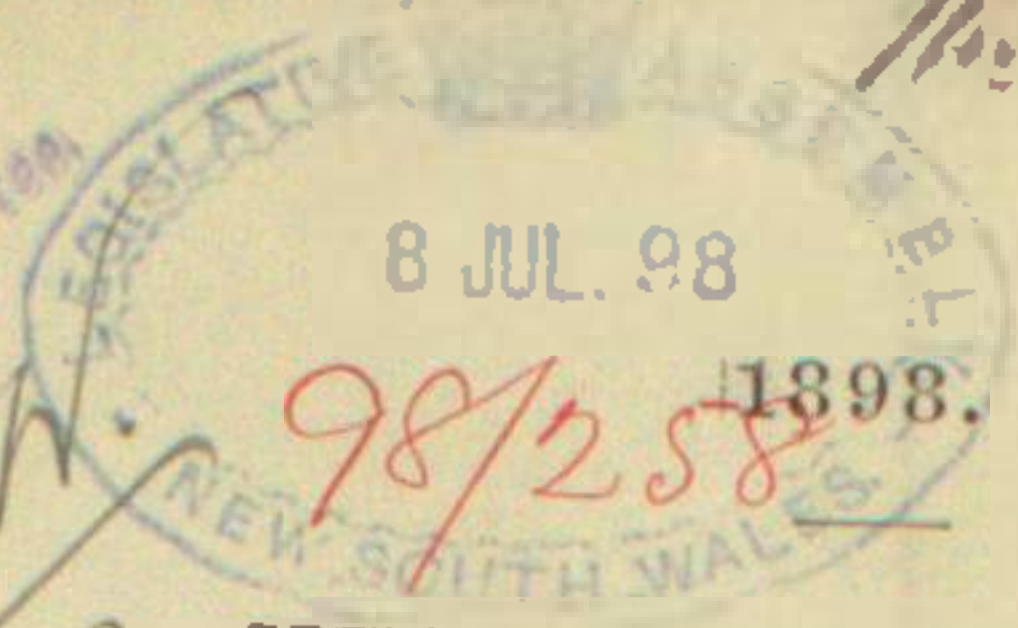


21950

*Mr. Gurney*

*Laid upon the Table and referred to the Printing Committee*



*J. W. N. 7. 7. 98*

NEW SOUTH WALES.



PARLIAMANTARY STANDING COMMITTEE ON PUBLIC WORKS.

*(51)*

*One plan.  
To Mr. Gurney*

REPORT

TOGETHER WITH

MINUTES OF EVIDENCE, ~~APPENDICES~~, AND PLANS, *~*

RELATING TO THE PROPOSED

*Nambucca*

HARBOUR WORKS AT ~~HASTINGS~~ RIVER.

Presented to Parliament in accordance with the provisions of the Public Works Act, 51 Vic. No. 37.


*Printed under the Report from Standing Committee 7 July, 1898.*


SYDNEY: WILLIAM APPLGATE GULLICK, GOVERNMENT PRINTER.


# NEW SOUTH WALES HARBOURS

## NAMBUCCRA RIVER ENTRANCE

### NOTE

Work completed shewn thus 

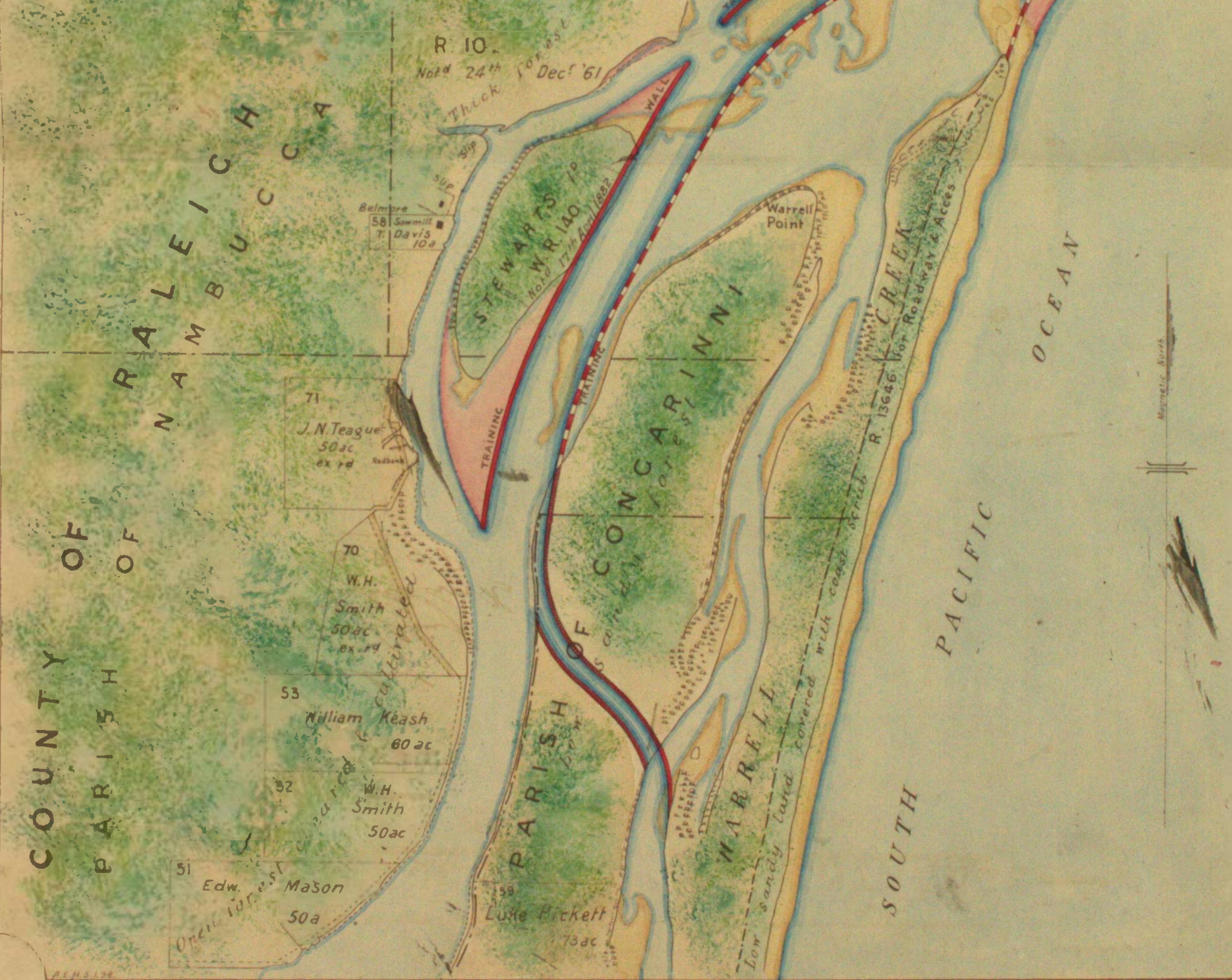
Work now recommended 

Remainder of scheme 

SCALE 20 CHAINS TO ONE INCH

*John W. Darling*  
*Superintendent*  
*Public Works*  
4.7.98  
6.7.98

*Filed upon the Table*  
*referred to the Printing Office*





*Fig. 51*

MEMBERS OF THE COMMITTEE.

LEGISLATIVE COUNCIL.

- The Honorable FREDERICK THOMAS HUMPHREY, Vice-Chairman.
- The Honorable JAMES HOBKINS.
- The Honorable CHARLES JAMES ROBERTS, C.M.G.
- The Honorable WILLIAM JOSEPH TRICKETT.
- The Honorable DANIEL O'CONNOR.

LEGISLATIVE ASSEMBLY.

- THOMAS THOMSON EWING, Esquire, Chairman.
- HENRY CLARKE, Esquire.
- CHARLES ALFRED LEE, Esquire.
- JOHN LIONEL FEGAN, Esquire.
- THOMAS HENRY HASSALL, Esquire.
- GEORGE BLACK, Esquire.
- FRANCIS AUGUSTUS WRIGHT, Esquire.
- FRANK FARNELL, Esquire.

MEMBERS OF THE SECTIONAL COMMITTEE.

*Charles Alfred Lee, Esquire, Chairman*  
*The Honorable William Joseph Trickett*  
*Henry Clarke, Esquire*  
*Frank Farnell, Esq.*

*The Hon. Charles James Roberts, C.M.G.*

GENERAL INDEX.

- Report by the Committee.
- Minutes of Evidence taken by the Committee.
- ~~Appendix to Evidence taken by the Committee.~~
- Report by the Sectional Committee.
- Minutes of Evidence taken by the Sectional Committee.
- ~~Appendix to Evidence taken by the Sectional Committee.~~
- Plans.

LIST OF WITNESSES.

[Examined by the Committee.]

	PAGE.
Cecil West Darley, Engineer-in-Chief for Public Works, Department of Public Works	1-3
Francis Clarke, Esq., M.P.	4-8
Charles Edward Ronnie, Chief Draftsman, Department of Lands	8
Harold Kinglake, master of the schooner "Empress of India"	8-11
Henry Richard Carleton, Principal Assistant Engineer, Harbours and Rivers Branch, Department of Public Works	11-15
William John M'Donnell, Accountant	15-21
Captain Louis Paulsen, master, schooner "Rosedale"	21-22
William Henry John Sizer, Chief Inspector of Mines, Department of Mines	22-28
Alderman Francis Bueckle, steam-tug proprietor	28-30
John Lowry Ruthven, civil engineer	30-35
George Charles Yeo, Draftsman, Stock Branch, Department of Mines	35-36
Reginald Creagh Mitchell, clerk, Government Statistician's Department	36
John See, Esq., M.P.	37-41
Walter Shellshear, Divisional Engineer, Department of Railways	41-48

*To be completed*

*2*

# List of Witnesses.

Examined by the Committee.

- Robert R. P. Nickson. Under Secretary  
& Commissioner for Roads, Department  
of Public Works. 1-3.
- Cecil West Darley. Engineer-in-Chief  
for Public Works, Department of Public  
Works. 3-5, 7.
- John McLaughlin. Esq. M.P. 5-7.
- Patrick Hogan. 7-9.
- Charles Edward Rennie. Chief  
Draftsman, Department of Lands. 10.
- George Charles Yeo. Draftsman.  
Stock Branch, Department of Mines. 10.
- Henry Spoudy. Compiler, Government  
Statistical Office. 11.
- Alderman Francis Buckle.  
Steam-tug proprietor. 12-13.
- Lewis Palsou. Master of the  
steamer "Roseadale". 14-15.
- Henry Richard Carleton. Principal  
Assistant Engineer, Harbours &  
Rivers Branch, Department of  
Public Works. 15-19.

Examined by the Sectional Committee.

- David Houston. District Engineer.  
Macleay, Hastings & Cadzow  
Haven Districts. .... 1-3.
- John Richman. Sawmill  
proprietor & storekeeper. Nambucca  
Heads. 4-6.
- William John Whites. Pilot. Nambucca Heads. 6-9.

David Mitchell. Engineer & dredge master.  
 Maubucca River. 10-11.  
 William Bragg. bee-farmer,  
 Loper Maubucca. 11-12.  
 Thomas Bolton. President. Macksville  
 Progress Association. Macksville. 12-16.  
 Edward Kitchin, auctioneer.  
 Warrell Creek & Macksville. 17-19.  
 Angus Mc Kay. storekeeper. Macksville. 19-20.  
 William Ego. storekeeper.  
 Macksville. 20-21.  
 Frederick Holey. general  
 storekeeper. Macksville. 21-22.  
 Ralph Shaylor. first class  
 constable. Macksville. 22-23.  
 William Woods. bootmaker  
 & Secretary to the Macksville Progress  
 Committee. 23.

Plan.

Maubucca River: entrance

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

HARBOUR WORKS AT NAMBUCCA RIVER.

REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, appointed during the first Session of the present Parliament, under the Public Works Act of 1888, 51 Vic. No. 37, the Public Works Act Amendment Act of 1889, 52 Vic. No. 26, and the Public Works (Committees' Remuneration) Act of 1889, 53 Vic. No. 11, to whom was referred the duty of considering and reporting upon "the expediency of constructing harbour works at Nambucca River," have, after due inquiry, resolved that it is expedient the proposed works ~~estimated to cost £72,500 in addition to the amount already expended~~, should be constructed; and, in accordance with the provisions of subsection IV, of clause 13, of the Public Works Act, report their resolution to the Legislative Assembly:—

*U*  
*with such*  
*alterations*  
*as are suggested*  
*in the Report*

DESCRIPTION OF THE RIVER.

1. The Nambucca River, situated about 219 nautical miles north of Sydney, has a length from its source to the sea of about 58 miles, and drains an area of about 552 square miles. In a report to the Department of Public Works of a survey of the river in 1891, it is stated that the river is north 9 sea miles from the Macleay River Heads, and the same distance south of the Bellinger Heads. The entrance is on the south side of a clifly headland; what is known as the south head is a sharp sandy point capped with thick scrub. The navigable channel is nearly always close under the north head, usually following the shape of the headland. It can be followed for about 4,000 feet, where the limit of navigation by ocean-going boats is reached. The depth in this channel shoals from 12 to 18 feet to 2 and 3 feet at low water, and its width varies from 50 to 150 feet. Above the limit mentioned the trade of the river is carried on by droghers. From a point on the river known as Red Bank to the Government wharf at Macksville, 6 miles further up stream, the river is free from obstruction for vessels drawing under 9 feet of water. Half a mile above the wharf the river divides into two arms—the Bowra River and Taylor's Arm. A vessel drawing 7 feet can get 3 miles up the Bowra River above the junction, or 12½ miles from the entrance, but above this point the river gradually decreases in width and depth to the township of Bowra, the head of navigation, 17½ miles from the entrance. A vessel drawing 6 feet can get to the Government wharf at Congarini, up Taylor's Arm, 12 miles from the entrance, but only at high water, as there is only 4 feet at low water in the reach below it. For about 7 miles above Congarini the river narrows, and there are numerous obstructions to navigation even by a boat at low water.

Warrell Creek joins the Nambucca River at its entrance, and runs to the southward. It has deep reaches, but navigation is much impeded in the lower 4 miles of its course by sand-bars formed at intervals right across.

THE

*5*

## THE PROPOSED WORKS.

2. The scheme designed by the Department of Public Works for the improvement of the river entrance consists of the construction of breakwaters 500 feet apart on the northern and southern sides of the entrance, and low stone walls extending about 11,000 feet up stream for confining and training the river waters, together with the diversion of Warrell Creek into the main river, so as to obtain the greatest possible scour. The total length of breakwater and walls, including the stone facing to new cutting, is about 33,800 feet, the estimated cost of the complete scheme being £149,700.

Up to 31st December, 1897, 1,394 feet of the northern wall had been constructed at a cost of £5,503, and it is proposed to extend the northern wall and breakwater a further distance of 1,756 feet, construct two training-walls on the left side of the river extending up stream from near the root of the northern wall, the length being 10,650 feet, and divert Warrell Creek into the main river, the estimated cost of these works being £72,500.

By the construction of these works, it is explained, the scouring power of the main river will be augmented by the addition of the waters of Warrell Creek, and the river currents will be brought into one channel and given a more direct course to the sea, instead of, as at present, winding through the extensive sand-flats within the entrance, and passing along an irregular foreshore where most of the force is lost. A perfect entrance is not expected without the construction of the southern breakwater, but, it is pointed out, the improved scour which will follow on the completion of the works now proposed will be such as will, with a little dredging, ensure the river being permanently navigable for all vessels likely to use the port for many years to come.

## DETAILS OF THE PROPOSED EXPENDITURE.

3. The following are the details of the estimated cost of the proposed works:—

ESTIMATED Cost of Improvements at the Entrance.					
Description of work.	Dimensions of walls.			Amount.	Total.
	Length.	Width on top.	Height.		
Portion completed to 31st December, 1897.					
Northern training-wall .....	1,304 ft.	12 ft.	4 ft. above H.W.	£ 5,503 0 0	£ 5,503 0 0
Portion now recommended.					
Stewart's Island training-wall .....	6,400 ft.	5 ft.	level with H.W.	18,492 10 0	
North-western training-wall .....	4,250 "	3 "	" " "	13,910 0 0	
Northern wall extension .....	256 "	12 "	4 ft. above H.W.	1,687 10 0	
Northern breakwater .....	1,500 "	15 "	16 " "	27,675 0 0	
Bank across Warrell Creek .....	800 "	5 "	4½ " "	2,161 5 0	61,765 0 0
Cutting Warrell Creek to main river .....				2,100 0 0	
Stone facing to sides of cutting .....	4,800 "	3 ft. thick	4½ ft. above H.W.	858 0 0	<del>62,097 5 0</del>
" " eastern side of River .....	1,500 "	3 "	4½ " "	1,033 10 0	7,242 15 0
					69,007 15 0
				Supervision, &c., 5 per cent. (say) .....	3,492 5 0
				Portion now recommended—Total .....	72,500 0 0
Portion required to complete scheme.					
Eastern training-wall .....	9,600 ft.	5 ft.	half-tide level	15,908 15 0	
Southern breakwater .....	3,300 "	15 "	16 ft. above H.W.	52,450 0 0	68,358 15 0
				Supervision, &c. (say) .....	3,338 5 0
				Total .....	£71,697 0 0

Estimated cost of complete scheme—£149,700.

## THE COMMITTEE'S INQUIRY.

4. In making their inquiry concerning these proposed works, the Committee examined several official witnesses, including the Under Secretary, the Engineer-in-Chief, and the Principal Assistant-Engineer of the Harbours and Rivers Branch, Department



Department of Public Works, the Member for the district, the owner of the subsidised steam-tug at the Nambucca, and the master of the North Coast Co.'s steamer which has traded between Sydney and the river. A Sectional Committee was then appointed to visit the river and district, and their report is published with the evidence taken by them.

#### THE NAMBUCCA BAR.

5. The bar at the entrance of the river is regarded as being the worst on the coast ~~and at times dangerous~~. The water ~~is so shallow that in order to have~~ ~~a vessel of sufficiently light draught to cross it~~ the North Coast Steamship Company has found it necessary to build ~~one~~ with a draught of 4 feet. Formerly, a steamer drawing 7 feet 6 inches, when loaded, traded to the river, but the water on the bar becoming too shallow for a vessel of that size, it had to be withdrawn. Besides the small steamer, there are at present trading to the river, the Committee are informed, ~~about thirty~~ small sailing vessels employed in the timber trade.

The depth of water has not been improved by the short length of training-wall already constructed, but the condition of things generally at the entrance is somewhat better than it was before the wall was commenced. No very material improvement can be expected, it is explained, until the proposed works have been carried out to an extent which will lead the river current on to the bar so as to scour it away. The Sectional Committee were informed that the farmers and business people on the Nambucca suffer great inconvenience, and frequently are heavy losers, because of the uncertain movements of the steamers which trade to the river, and complaints against the excessive freights charged are general. ~~The carrying out of the proposed scheme, it is believed, will result in such an improvement that vessels would be able to enter and leave the river with certainty in any but the roughest weather.~~

#### PRODUCE AND TRADE OF THE DISTRICT.

6. The country to be served by the construction of the proposed works, the Sectional Committee say in their report, "very closely resembles that drained by the Bellinger, both in its physical features and in the nature and value of its productions. The evidence given by the pilot stationed at Nambucca Heads shows that during 1897, 39,630 bags of maize, 2,910,000 feet of hardwood, and 84,000 feet of cedar were exported, while pigs, poultry, eggs, cream, and general farm produce of considerable value were also sent away, the total value of exports for the year being estimated at £38,922. The Committee ascertained that the export of all classes of commodities shows a continual yearly increase. As on the Bellinger, farmers have of late years extensively engaged in dairying, and with quicker and more regular means of shipment this industry is likely to become of considerable importance. This will occasion the clearing and occupation of land which is not considered of sufficiently good quality for agriculture, and will bring a large number of settlers into the district."

21960  
21960

THE COMMITTEE'S RECOMMENDATION.

7 In the consideration of these works the question arises whether such a large sum as that proposed to be spent on the Nambucca should be expended upon a river the trade of which is at present comparatively ~~very~~ unimportant. The estimated population of the district at the end of 1897 was 2,130. The Committee definitely reject the ~~proposal~~

The three most important of the works proposed are, the northern training wall and breakwater, the training wall extending south-westerly ~~to~~ near ~~the west of~~ the northern breakwater, and the cutting to divert the water of Warrell Creek. The northern wall and breakwater are expected to straighten and strengthen the ebb current at the place where its force is now almost lost in flowing over the rough irregular northern foreshore; the north-western training wall will assist in guiding the current on to the northern wall and thence out over the bar at the entrance; and the cutting, by diverting the water at the Creek, will increase the flow in the main river. The construction of these works before any others are undertaken is, it is admitted, the order in which the scheme should be carried out; and the Committee are of opinion that before any other portions of the scheme are commenced the two walls and breakwaters, together with the cutting, should be ~~completed~~ *proceeded with*, and the results from their construction definitely ascertained. The estimated cost of these works is as follows:-

North-western training wall	£9,295.
Northern Wall extension	£1,687:10:0.
Northern breakwater	£27,675.
Cutting and bank Warrell Creek	£7,242:15:0.
	£45,900:5:

To this must be added cost of supervision , &c.,

at 5 per cent ~~£~~ £2295:--

Total £48,195:--

The expenditure suggested to the Committee by the Department such alterations as are suggested in the report was £72,500. The Committee definitely reject the ~~Stuart's~~ <sup>Stewart's</sup> Island Training Bank, estimated to cost £18,492:10:07 and they have reduced the cost of the north-western training bank, in accordance with ~~the~~ <sup>a</sup> departmental statement, to £9,295, ~~which~~ representing a saving of £4,615, or, with the amount it is estimated the ~~Stuart's~~ <sup>Stewart's</sup> Island Training Bank will cost, <sup>a total saving of</sup> £23,107.

*Stewart's*  
*Chairman*

Committee on Public Works.

Monday, 7th July, 1898

The internal works, which are intended to project the water on to the bar, should be carried out as speedily as possible; ~~but~~ <sup>and</sup>, if in the construction of the northern breakwater, it should be found that a fair depth of water has been obtained before the whole of the breakwater has been carried out ~~the~~ <sup>that</sup> work should in the opinion of the Committee be then dis-continued.

The Committee believe <sup>it</sup> to be highly probable that an expenditure of between £30,000 and £40,000 will bring about the desired results at the Nabucca, and, in their opinion, that is a sufficient sum to be expended upon the river. It is not, however, possible to state a definite amount, because experience alone can show at what point the northern breakwater may safely be dis-continued.

The Committee have passed the following resolution:-

"That, in the opinion of the Committee, ~~the~~ it is expedient that the proposed Harbour Works at the Nabucca River, be carried out, with <sup>reference to the Committee by the Legislative Assembly,</sup>

*Chairman*



21960

# PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

## MINUTES OF EVIDENCE.

### HARBOUR WORKS AT NAMBUCCA RIVER.

THURSDAY, 14 APRIL, 1898.

Present:—

THOMAS THOMSON EWING, Esq. (CHAIRMAN).

The Hon. FREDERICK THOMAS HUMPHREY.  
 The Hon. JAMES HOSKINS.  
 The Hon. CHARLES JAMES ROBERTS, C.M.G.  
 The Hon. WILLIAM JOSEPH TRICKETT.  
 The Hon. DANIEL O'CONNOR.  
 HENRY CLARKE, Esq.

CHARLES ALFRED LEE, Esq.  
 JOHN LIONEL FEGAN, Esq.  
 THOMAS HENRY HASSALL, Esq.  
 GEORGE BLACK, Esq.  
 FRANCIS AUGUSTUS WRIGHT, Esq.  
 FRANK FARNELL, Esq.

The Committee proceeded to consider the expediency of constructing Harbour Works at Nambucca River.

Robert R. P. Hickson, Under Secretary and Commissioner for Roads, Department of Public Works, sworn, and examined:—

1. *Chairman.*] You have a statement to read to the Committee? Yes; it is as follows:—

R. R. P. Hickson.

#### NAMBUCCA RIVER.

The entrance to the Nambucca River is about 219 nautical miles north of Sydney. From its source to the sea, the river has a length of about 58 miles, and drains an area of about 552 square miles. 14 April, 1898.

The following particulars are taken from the report of the late Captain F. Howard, who made a complete survey of the river in 1891:—

"The Nambucca River is north 9 sea miles from the Macleay River Heads, and the same distance south of the Bellinger Heads. The entrance is on the south side of a cliffy headland, with a remarkable peaked rock at its south-east extreme. What is known as the South Head is a sharp sandy point capped with thick scrub, and bearing south-west  $\frac{1}{2}$  west 3,000 feet from the peaked rock.

"The navigable channel is nearly always close under the North Head, usually following the shape of the headland, which, inside the peaked rock, forms two small bays, both with small sandy beaches, but fronted with numerous jagged reefs, which extend southward, and interfere with the set of the tidal streams.

"The North Head rises steeply from the beach, and is, at the points of the bays, cliffy. The land above shows in three open grassy hills.

"The South Head is the northern point of a long sandy beach extending southward in a curve a distance of 6 sea miles to Scott's Head. Extending northward from the South Head is a sand spit, generally awash at high water, the size and shape of which is constantly changing.

"Inside the South Spit and Beacon Rock Point, the river opens out into a large basin 3,500 feet wide and 5,500 feet long. The greater portion of this space is filled with large sand-banks, the river finding its way through them in narrow winding channels, with less than 1 foot at low-water springs.

"The only navigable channel is close round the northern shore inside the Head. This can be followed for about 4,000 feet, when the limit of navigation by ocean-going boats is reached. The depth in this channel shoals from 12 and 18 feet to 2 and 3 feet at low water, and its width varies from 50 to 150 feet.

"There is at all times a strong tidal stream in the fairway channel from the Beacon Rock outwards, particularly when the South Spit extends right across, leaving only a narrow passage round the rocks. The ebb stream is then forced into the bay under the signal-staff, and takes from thence a south-west by south direction, scouring out a channel on that bearing. Frequently, when this is the case, there is an eddy or slack in the outer bay, and sand is deposited in the usual channel until it is completely blocked. The passage in, after passing the outer bar, is then very dangerous. Vessels coming in with any sea on are liable to be caught by it on the starboard quarter and sent to the northward out of channel, which is always at these times very narrow.

"Stewart's Island lies about 2 miles from the entrance. The channel on its north-west side is used by droghers, and carries about 9 feet at low water. The river south-east of Stewart's Island, though from 800 to 1,400 feet wide, is mostly shallow. There is good water close along the south-east side of the island, but it is blocked by shoals at each end. Above the island the river opens out to a width of 2,000 feet. On the west bank is a red cliff point known as Red Bank. The river between Red Bank, Stewart's Island, and the opposite bank is shoal right across.

"From Red Bank upward, the river is entirely free from any obstruction or vessels drawing under 9 feet of water up to the Government wharf at Macksville, which is 6 miles above Red Bank. Half a mile above this wharf the river divides into two arms—the Bowra River and Taylor's Arm. A vessel drawing 7 feet could get 3 miles up the Bowra River above the junction, or 12  $\frac{1}{2}$  miles from the entrance. Above this point the river gradually decreases in width and depth to the township of Bowra, the head of navigation, 17  $\frac{1}{2}$  miles from the entrance. A vessel drawing 6 feet could get to the Government wharf at Congarini, up Taylor's Arm, 12 miles from the entrance, but only at high water, as there is only 4 feet at low water in the reach below it. For about 7 miles above Congarini the river narrows, and there are numerous obstructions to navigation even by a boat at low water.

"Warrel Creek joins the Nambucca River at its entrance, and runs to the southward, nearly to Scott's Head, for a distance of 7  $\frac{1}{2}$  miles, the average distance across from the creek to the ocean beach being  $\frac{1}{2}$  mile, it then turns abruptly westward. The creek is about 700 feet wide at its entrance, gradually contracting to about 150 feet at the bend westward. It has deep reaches, but navigation is much impeded in the lower 4 miles of its course by six sand-bars formed at intervals right

10

B. R. P.  
Hickson.

14 April, 1898.

across. From the vicinity of Scott's Head, Warrel Creek runs for  $7\frac{1}{2}$  miles in a westerly direction in long straight reaches, mostly through hilly country thickly wooded; thence in a south by west direction for 5 miles to the head of navigation for boats.

"The rock of which the North Head is formed is mostly very soft clay slate; but the strata below, and many feet above high water appears to be much harder though brittle, with numerous small veins of quartz running through it. Judging by the way the numerous jagged reefs hereabout appear to have withstood the action of the sea and currents for ages, I believe that the same description of rock, quarried from the cliffy points at either end of the bay, would stand well in the proposed dyke.

"The whole of the country drained by the Nambucca and its tributaries appears to have been one unbroken forest, excepting a few small swamps near the entrance. At one time cedar was plentiful and much exported, but at present nothing but hardwood, mostly blackbutt, tallowood, and ironbark sawn at the mills is to be obtained. The crop usually grown by the farmers is maize, but little is to be seen on the main river until above Macksville. The soil in the upper reaches, near the head of navigation, seems more suitable for its growth than that below."

The official papers show that from the year 1878 onwards, numerous representations were made by the residents as to the inconvenience and loss which they sustained in consequence of the shoal condition of the entrance. Vessels were often bar-bound for several weeks at a time—some for as long as eight weeks—and then were compelled to leave only half loaded. The depth on the bar at these times was reduced to from 3 to 5 feet, and in April, 1884, the pilot reported the bar so bad that the sand was awash at low water from the North Head to South Beach. There were also serious obstructions to navigation in the portion of the river from Redbank downwards. At one time vessels were able to proceed up the river, but owing to the extensive sand-flats which had formed within the entrance they were now able to get inside the Heads only, and consequently the whole of the produce of the district had to be punted down to the Heads, entailing heavy loss upon the producer on the river. Urgent requests were therefore made that some works might be undertaken which would ensure a permanent navigable channel at the entrance and in the lower course of the river.

In 1885 Lieutenant Francis who had made a survey of the entrance reported as follows:—"Both the bar and the flats continually shift, and seldom remain in the same position for three months at a time. The depth of water on the bar varies considerably, sometimes there being 8 feet at high water, and at other times so shallow that vessels are detained inside for weeks, or else cross out light and anchor off the south beach, having their cargoes of timber rafted off to them. The principal export from the river is timber, which is brought down in flat-bottomed punts and stern-wheeled droghers."

In January, 1885, in response to an urgent appeal of the residents for the construction of some works for the improvement of the entrance, the Minister called for "a report as to whether the expenditure of the available money (a vote of £3,000 taken in 1884) would of itself be advantageous to the entrance, and if not, how much more would be required to give reasonable expectation of some improvement without going into a comprehensive scheme." Mr. Darley thereupon prepared a complete scheme for the improvement of the entrance, the carrying out of which would form a permanent harbour. The estimated cost of this scheme is £149,700. Although the expenditure of this amount was out of proportion to the resources of the district, he pointed out that a measure of relief could be given by the construction of the inner portion of the northern breakwater at a cost of £11,000. This wall would straighten and strengthen the ebb-current at the place where its force is now almost lost in flowing over the rough and irregular northern foreshore. Another very important part of the work which he considered should be taken in hand as soon as funds were available, was the training-wall extending south-westerly from near the root of the northern breakwater. With regard to the £3,000 already voted, no useful work could be carried out for so small a sum, and unless a further amount of (say) £10,000 were made available it would be injudicious to enter upon the work.

In October, 1895, an additional vote of £5,000 having been taken, tenders were invited for the construction of the inner end of the northern breakwater, and that of Wooden, Rogers, and Frost, accepted in February, 1896, at rates of 3s. 8d. per ton for stone 1 ton to 4 tons in weight, and 1s. 6d. for ballast. This contract is still in progress.

The amounts voted for the work are as follows:—

1884 Loan.....	£3,000
1885 .. .. .	5,000
1897 .. .. .	5,000
Total.....	£13,000
The amount expended to 31 December, 1897 was.....	5,503
Balance at 31 December, 1897.....	£7,497

The scheme designed by Mr. Darley, and now submitted for the consideration of the Committee, includes the construction of breakwaters 500 feet apart on the northern and southern sides of the entrance, and low stone walls extending about 11,000 feet upstream for confining and training the river waters, also the diversion of Gurravambi or Warrel Creek into the main river, so as to obtain the greatest possible scour. The total length of breakwater and walls, including the stone facing to new cutting, is about 33,800 feet, the estimated cost of the complete scheme being £149,700. The work carried out up to 31st December, 1897, was the construction of 1,304 feet of the northern wall at a cost of £3,503.

In addition to the work already done, Mr. Darley recommends the extension of the northern wall and breakwater a further distance of 1,756 feet, the construction of the two training-walls on the left side of the river extending upstream from near the root of the northern wall, the length being 10,650 feet, and the diversion of Warrel Creek into the main river, the estimated cost of these works being £72,500. By the construction of these works, the scouring power of the main river will be augmented by the addition of the waters of Warrel Creek, the river currents will be brought into one channel and given a more direct course to the sea, instead of, at present, winding through the extensive sand-flats within the entrance, and passing along an irregular foreshore where most of the force is lost. Although a perfect entrance cannot be expected without the construction of the southern breakwater, yet the improved scour which will follow on the completion of the works now recommended, will be such as will, with a little dredging, ensure the river being permanently navigable for all vessels likely to use the port for many years to come.

2. What has been the effect of the works already in progress on the Nambucca? I cannot say. I was only on the river once, and then for a very short time, so that I really know nothing about it.
3. Can you tell us anything about the population or the resources of the district? No, I cannot.
4. *Mr. Black.*] Do you know why it is proposed to leave Worrall Creek open at the top end? That opening does not matter, because it is intended to divert the water of the creek into the main river by a cutting lower down.
5. Do you know of any reason for leaving the entrance to the creek open? Well, it is not worth the expense of closing it.
6. *Mr. Hoskins.*] Do you know how many people are engaged in timber-getting on the river? No; but there are two mills there.
7. *Mr. Lee.*] In the matter of importance, how does the Nambucca rank amongst the north coast rivers? I am not in a position to say, because I know very little about the river.
8. *Mr. Hoskins.*] Is the country between the Nambucca and the Macleay level? It is not level, but it is not very heavy. I have driven across it.
9. Did you ever consider whether it would not be cheaper to construct a tramway from one river to the other than to make these improvements? I do not think the matter has been considered, but I fancy that a tramway would cost a good deal of money.
10. *Mr. Lee.*] Can you tell us the distance in miles from the Bellinger to the Nambucca, and from the Nambucca to the Macleay? By sea, it is about 9 miles in each case. The distance by land would probably be about 12 miles.
11. *Mr. Black.*] The Nambucca very much resembles the Tweed its northern headland, its uncertain southern headland, and the wide flats just inside the entrance? Yes.

R. R. P.  
Hickson.

14 April, 1898.

12. Do you not think that if the eastern training-wall is not constructed the tide will have a tendency to form a bar on the flats? You will not get as good a result with one training-wall as with two; but the question is whether you can afford to build the two, and whether the northern wall alone will not give a sufficient depth of water for the trade of this place.

13. Do you not think that it will be discovered when one training-wall has been made that so much sand will be deposited at the entrance, caused by the action of the tide, as to make navigation dangerous? No; I think the construction of the northern works alone would give a sufficient depth of water for the trade of the place; but, of course, you would not get as good an entrance as if the whole scheme were carried out. There is very much less traffic on the Nambucca than on the Tweed. On the Tweed a greater depth of water is required, and, therefore, both breakwaters are necessary. Here, one is hardly justified in recommending the large expense of two breakwaters.

14. Is the staple industry of the district timber getting? Yes; and there is also some maize grown.

15. You have not formed any idea as to whether the trade of the district warrants the proposed expenditure? No.

16. And I suppose you would not like to express an opinion upon the point? No.

17. Where do the pilots keep their boats? The pilot-station is shown on the map. There is a small slip in the bay, just inside the north head, where they keep their boats. The entrance to the Nambucca very much resembles the entrance to the Tweed.

Cecil West Darley, Engineer-in-Chief for Public Works, Department of Public Works, sworn and examined:—

18. *Mr. Black.*] You only recommend the construction of training-walls on one side of the river? Yes. C. W. Darley.

19. Do you recommend the construction of two breakwaters? No; I only recommend the construction of the northern breakwater.

14 April, 1898.

20. Do you think the construction of the northern breakwater and of the two training-banks on the west side of the river will keep the channel open? Yes, I think so. These works will guide the current on to the bar, and will provide a sufficient depth of water for the trade of the port.

21. In heavy weather will not sea break over the low patch of sand coloured pink on the map? Yes; but in heavy weather the vessels must keep off.

22. Will not that sand be carried into the channel and thus form a bar? No; the ebb and flow of the tide will keep the channel along the breakwater open.

23. But will not deep water be only right alongside the breakwater. Will there be any great width of deep water? There will be a sufficiently wide channel for the trade of the port. I should like to carry out the whole scheme if the place could afford it; but, inasmuch as the place cannot afford the expenditure of £149,700, I have recommended a modification of the scheme.

24. Do you think the place can afford anything? That is not an engineering question. I have reported as to what I think is the least that can be done to improve the navigation of this river.

25. You venture the opinion that the place cannot afford the southern breakwater and eastern training-wall? I do not think the Government can afford to spend £150,000 on the Nambucca River.

26. There is a doubt in your mind as to whether the Government can afford the other expenditure; but you do not care to express an opinion yourself? I do not care to express an opinion upon the point.

27. Do you think the diversion of Worrall Creek will be sufficient to prevent the silting up of which I spoke? It will have that tendency. At the present time Worrall Creek discharges near the South Spit, and its waters cause a very complicated state of the currents, and the formation of sand-banks. Until the waters of the creek can be diverted and trained into the main channel it will be impossible to do anything to improve the entrance. I thought that the best way to get rid of this complication of currents was to make Worrall Creek discharge into the main river, and then train the water down so as to get a scour on the bar. Some time ago I was instructed by the Minister, Parliament having voted money for the work, to design a scheme for the improvement of this entrance. I designed what I considered a complete scheme, and then I set myself to ascertain how much of this scheme, if carried out, would effect a sufficient improvement. I recommended the construction of the northern breakwater, and the Minister having authorized the work, a contract was let, and a portion of the wall has been constructed. The ebb and flow of the tide formerly went into the different bights below the north head, the ebb tide coming down the river meeting the discharge of Worrall Creek, and preventing any scour. Captain Howard, in his report, also pointed out the necessity of keeping the conflicting currents out of the rocky bay just within the entrance on the north side. The effect of the work already carried out has been to divert the rival currents from the bay I speak of, and we have already fairly deep water along the breakwater. I would urge the continuation of this work. If only one part of the scheme is to be carried out, this part will do more good than any other towards maintaining a fair depth of water at the entrance.

28. Even if you construct the northern breakwater there will be a small opening into the rocky bay you speak of? Yes; but that will do no harm.

29. Do you propose to fill up that bay with sand? No. Of course if we were dredging there, and wanted to get rid of the sand, we might pump it into that bay. The current entering the harbour would have to pass along the breakwater. Seeing that most of the traffic now going to the entrance finds its way to the saw-mills near the town, the northern breakwater may be sufficient. It is doubtful as to how far it is necessary to improve the river to let vessels go up it for any distance. There is good water past Stewart's Island for some miles. If the northern breakwater is constructed, and Worrall Creek is diverted, a good deal will be done towards obtaining a good entrance. The training-walls on the west side of the river would, of course, ensure a clean run of water down to the bar.

30. What will the northern breakwater cost? £29,862 10s. is the estimated cost of completing the northern breakwater. The diversion of Worrall Creek is estimated to cost £7,242 15s.

31. I suppose you regard that as an essential part of the scheme? Yes. These two items make a total of £36,604. Then the Stewart Island training-wall, which it is only proposed to carry up to high-water level, will cost £18,492; the north-western training-wall, £13,910; and, adding the usual percentage for supervision, £3,492 5s., the total cost of the works will be £72,500.

32. The best channel now is that on the west side of Stewart's Island? I think so; but at times the best channel is up the main river.

- C. W. Darley. 33. I suppose it will be necessary to keep open the channel at the back of Stewart's Island? Yes; I provide for the keeping open of that channel.
- 14 April, 1898. 34. Are the sand-banks shown on the plan composed of indurated sand? No; they are merely soft sand, and change their position every tide.
35. Do you anticipate that, if the northern training-wall is constructed, the scour will be sufficient to keep the river open? A little dredging may be required in the first place, but after that the channel should be maintained by the scour. Our experience in other places is that once we give the scour a slight lead we have done all that is necessary.
36. The lower end of the northern training-wall turns in towards the land? Yes; that is to prevent too much of the water of the main river passing behind.
37. I suppose you have various reasons for leaving openings opposite the town? Yes; we want to allow the shipping to go in there.
38. Will those openings form a wave-trap? The waves will run in along the breakwater, and expend themselves. With only one breakwater the waves would probably expend themselves on the sand spit at the entrance.
39. During heavy easterly gales I suppose the waves break over the sand-banks? Yes. We have done some dredging on the sand spits in front of the town to widen the channel. We went down pretty deep there; but we had only clean sand to deal with.
40. Is there any rock in any of the channels? There is a rock between the north-western training-wall and the Stewart's Island training-wall. Of course, on the northern side of the entrance it is all rocky; but the foul ground will be covered by the breakwater.
41. There will be no difficulty in deepening the channel? No.
42. I suppose that near the heads the country is very poor? Yes; like all coast country. I have not been far inland; but I think that it improves.
43. *Mr. Hoskins.*] You have been in this district? I have not been far up the river. I only know the entrance.
44. The only persons living in the locality are timber-getters? Yes; and the people engaged in maize-growing.
45. Are you familiar with the country between the Nambucca and the Macleay? I have not been across it, but I know its appearance.
46. There would be no great engineering difficulty in the way of tramway construction there? No. There is a ridge between the two rivers; but it would not prevent the construction of a tramway.
47. Would it not be cheaper to construct a tramway than to expend £74,000 in improving this entrance? It is 9 miles from the Nambucca to the old entrance to the Macleay, but to the new entrance, which is 6 miles further south, the distance would be 15 miles.
48. If a tramway could be laid down for £2,000 a mile, it would only cost £30,000, as against your proposed expenditure of £74,000? I am afraid that sawn timber would not stand the expense of a second banding. A tramway might suit the maize traffic.
49. The timber vessels are mostly flat-bottomed, and draw very little water; but vessels carrying maize require a greater draught of water;—do you not think that a tramway would suit the district better than the improvement of the entrance, putting the timber traffic on one side. It does not appear that the expenditure of £74,000 would make a very good entrance? This expenditure will make the stream fairly navigable. The channel will not be very deep; but the depth will be constant.
50. Do any steamers go to the river? They do not go up the river; they only go just inside the entrance. They like to go in on one tide and out on the next. I think the "Rosedale" trades to a number of these rivers. Of course a tramway would only get the traffic of the district occasionally, because whenever the bar was open it would go by sea, because of the saving in handling and in freight.
51. *Mr. Trickett.*] What depth of water would you have on the bar at low tide if your modified scheme were carried out? I think we shall always be able to count on having from 8 to 9 feet at low tide.
52. That will be ample for the class of vessels trading there? Yes.
53. At the Tweed, where the entrance is similar to the entrance at the Nambucca, you have constructed an eastern training-wall;—do you not think that an eastern training-wall will also be necessary here? On the Tweed the concave bank is the eastern bank; here the concave bank is the western bank. The current always clings to the concave bank.
54. Can you give us particulars of your proposed expenditure? Yes, ~~they are shown in the following table~~



55. Would you recommend the carrying out of this work by contract? I would recommend the completion of the northern breakwater by contract; but I think that the training-walls might be carried out by day labour. C. W. Darley.  
14 April, 1896.
56. I suppose a pilot and tug-boat service is provided at the Nambucca Heads? Yes.
57. That service will be necessary after these works have been carried out? Yes.
58. Does the sea break over the sandy tongue of land between the river and the ocean? No; that piece of land is covered with timber and mangroves. The sea only breaks over at the northern extremity.
59. There is no danger of your works being damaged by the force of the waves? I think not.
60. If you divert Worrall Creek, I suppose the end near the entrance will gradually silt up? Yes.
61. Is it proposed to leave openings between the northern training-wall and the town? Yes; vessels will pass in to the wharf behind the wall.
62. Where do the steamers go at the present time? To the wharf in front of the town. A certain amount of tidal scour will pass round the foreshore, and I have left openings at both ends of the training-wall to enable vessels to get up to the town.
63. Will the proposed works, if carried out, enable steamers to go up the river? If the training-walls are carried out steamers will be able to go up the river for a few miles.
64. Will both the training-walls be necessary to give that result? No; only the concave wall.
65. If your modified scheme is carried out, they will be able to get up? Yes.
66. How far? To the township of Macksville, a distance of about 9 miles. There is very fair water for 10 or 12 miles after you pass Stewart's Island. The head of navigation is about 19 miles up.
67. You think that the expenditure of £72,500 is a reasonable experiment to make? Yes.
68. If the modified scheme is carried out, the complete scheme may be left for some time? I do not think that it is necessary to expend more than the amount you name.
69. *Chairman.*] Where does the shipping go now? The steamer goes to the Government wharf opposite the township, whilst small vessels take timber from the saw-mill on the western side of the town and from the Belmore saw-mill to the west of Stewart's Island.
70. What is the draught of the "Rosedale"? About 7 feet.
71. If the north-west training-bank be carried out as shown the probability is that there will be dead water at the Government wharf and at the wharf opposite the saw-mills; there will be no tendency for that channel to silt up? No.
72. Supposing Worrall's Creek is diverted, as proposed, and that the Stewart's Island training-bank is not constructed, is it probable that enough water will flow past the Belmore Saw-mill to keep the channel there open? I think that that channel can be kept open with a little dredging occasionally.
73. The river would then be good as far as the north end of Stewart's Island, but there would probably be a shallow piece from there until you got to the deep water at the entrance? Probably so.
74. You think it would be well to make the north-western training-bank, but you do not regard it as of so much importance as the two works you have spoken of as essentials? It comes next to them in importance.
75. Does the north-western training-bank rise to the importance of an essential? It is essential to open the river for navigation, but it is not essential simply to open the entrance.

WEDNESDAY, 20 APRIL, 1896.

Present:—

THOMAS THOMSON EWING, Esq. (CHAIRMAN).

The Hon. FREDERICK THOMAS HUMPHERY.  
The Hon. JAMES HOSKINS.  
The Hon. CHARLES JAMES ROBERTS, C.M.G.  
The Hon. WILLIAM JOSEPH TRICKETT.  
The Hon. DANIEL O'CONNOR.  
HENRY CLARKE, Esq.

CHARLES ALFRED LEE, Esq.  
JOHN LIONEL FEGAN, Esq.  
THOMAS HENRY HASSALL, Esq.  
GEORGE BLACK, Esq.  
FRANCIS AUGUSTUS WRIGHT, Esq.  
FRANK FARNELL, Esq.

The Committee further considered the proposed Harbour Works at Nambucca River.

John McLaughlin, Esq., M.P., sworn, and examined:—

76. *Chairman.*] You represent the Raleigh Electorate in the Legislative Assembly? Yes.
77. The Nambucca River is in the Raleigh Electorate? Yes.
78. *Mr. Hoskins.*] Are there many settlers on the Nambucca River? A considerable number. There are settlements at Bowraville, on Taylor's Arm, at Macksville, and in other parts of the district.
79. When you were canvassing the district, did you consider it worth your while to go to these places? Yes, I went to all of them.
80. Are there many vessels trading to the district? Yes, there are several sailing vessels, and the steamship "Rosedale" used to trade there; but, lately, "the Euroka," a vessel of a smaller draught, has been engaged in the trade. She brings her cargo to the Macleay, and sometimes direct to Sydney.
81. I suppose the cargoes carried from the Nambucca are not very large? The vessel is always fully loaded.
82. What cargo does she get? Maize principally. Large quantities of maize are grown in the district.
83. I thought the principal production was timber? No, the chief production is maize.
84. Did you ever go to the Nambucca by sea? No, I have always gone overland from the Macleay.
85. You have never gone through the entrance then? I have never been through the entrance, but I have been to the entrance.
86. What sort of an entrance is there? The entrance is not good now. There are about 6 miles of sandy beach to the south, which render the navigation difficult. I think that when the training-walls are completed there will be a very fair entrance.
87. The Government have already carried out some works on the river? Yes; they had spent about £5,000 when I was there last.
88. The money has been spent principally in making a training-wall? Yes, in making the northern training-wall.

J.  
McLaughlin,  
Esq., M.P.  
20 April, 1896.

J.  
McLaughlin,  
Esq., M.P.  
20 April, 1898.

89. Has this wall improved the entrance so far? I think so; but there has not been enough of it made to enable me to speak with confidence.
90. What is the opinion of the people trading there? They think that the work when carried out will give a good entrance.
91. The alluvial flats there are not very large? Yes; they are large.
92. They are nothing like the flats on the Macleay? The district is not as large as the Macleay district, but there is a lot of fine land on the Nambucca.
93. Do you think the people would object to pay moderate tonnage dues if the improvement of the river were effected by this scheme? They would not object to pay tonnage dues if similar dues were charged on the Clarence, the Richmond, and on other rivers where similar works have been carried out. Of course, if dues were not charged on those rivers, the people on the Nambucca would also expect to go free.
94. The Nambucca is only about 9 miles from the Macleay? About 9 miles by sea, and about 12 miles overland. The country between the two rivers is hilly.
95. Would it not be better, in the interests of the residents on the river, instead of spending so much money in improving the entrance to the river, to make a tramway to the Macleay, so that they could send their produce away from the Macleay? I think that such a tramway would cost a very large sum of money, and the extra handling would make the cost of transit too high.
96. I suppose that a depth of 7 or 8 feet of water at the entrance would suffice for the traffic? I think so. I think that if they could get that they would not complain very much.
97. *Mr. Humphery.*] Do you know anything about the trade of the district? There are two saw-mills there, and a large quantity of maize is grown on the river. They are always complaining that they are unable to get to market at the proper time, because of the state of the entrance.
98. What disabilities do the residents labour under at the present time? They cannot always send their produce to Sydney regularly.
99. Is that owing to the bad state of the bar? Yes; sometimes they are bar-bound for months.
100. What is the difference between the depth of water on the bar and the depth of water between the bar and where the settlement is? I am told that sometimes there is only about 4 feet of water on the bar, but that after you get inside the entrance there is plenty of water. The river is navigable close up to Bowra, with ordinary dredging. The difficulty is at the entrance.
101. You are not prepared to express an opinion as to whether the proposed works would be effective? It seems to me that they will be as successful as the works at the Bellinger have been. They very much resemble the Bellinger works.
102. Do you know what the population of the Nambucca district is? I cannot say exactly, but I know that it is scarcely as large as the population on the Bellinger.
103. How many voters are there on the electoral roll? I fancy that there must be about 300 on the Nambucca. There are settlements at Bowraville, Taylor's Arm, Macksville, Worrall Creek, Argent's Hill, and at other places.
104. The people residing at all these places are served by the river? Yes; it would never pay them to cart their produce to the Macleay.
105. *Mr. Lee.*] I believe that Coff's Harbour, the Bellinger, the Nambucca, and the Macleay are all within your electorate? Yes.
106. Do you know what the Government expenditure at Coff's Harbour has been? I cannot say exactly.
107. Exclusive of that expenditure, it is proposed to spend on the Bellinger, the Nambucca, and the Macleay the sum of £216,500. Considering that the Bellinger is only about 8 miles from the Nambucca, and the Nambucca only 12 or 14 miles from the Macleay, do you not think it would be better to improve only one entrance and to give communication by railway from the other places to that entrance? No; I think that it would be better to keep all the river entrances open.
108. Do you think that the importance of the three rivers named is sufficient to justify the expenditure of so large an amount? I do. I believe that the population of these places would increase very rapidly, if they were given regular communication with Sydney.
109. Are you prepared to offer any suggestion whereby this proposed expenditure could be lessened? I think you must improve all these entrances.
110. Do you hold the opinion that the produce of the district would not stand railway freight to a port? I think that the extra handling which would be necessary would deprive the producers of all profit.
111. Has it not been found that the most convenient way of dealing with the maize traffic is to send it down the river on a drogher and tranship it to the steamer? Yes, that is what they do with it. If a railway such as you propose were constructed, there would not be enough traffic for a daily train, and whenever the river entrances were good the produce would go by river.
112. Would the interests of the residents be served if the improvement of these entrances were abandoned and the North Coast railway made? Yes; but in the meanwhile, what would happen to the unfortunate people—they have no chance of getting a North Coast railway for the next seven years.
113. If there were a North Coast railway, could they afford to send their maize to Sydney by it? Yes. People send maize to Sydney by rail from Gundagai, which is a longer distance, and it costs them less than it costs to send maize by steamer from the Nambucca. The North Coast Company charge 1s. 6d. a bag freight from the Nambucca.
114. That is 15s. a ton? Yes. If they had to wait for a north coast railway they would abandon their holdings.
115. Supposing the entrances were improved, and that afterwards the North Coast railway were made, would not the steamer competition rob the railway of the traffic? I do not think so, any more than the Hunter River steamers rob the Newcastle line of its traffic. I believe that there would be traffic for both the steamer and the railway.
116. Only a limited quantity of maize is grown in the district;—if that traffic were divided between the railway and the steamers, neither of them would pay? Well, the passenger traffic would increase five-fold if there was a railway. A number of people in that district have never been to Sydney. They will not travel by the small steamers, because they are afraid of the risk and the discomforts of the voyage. I have seen people 23 and 24 years of age who have never been to Sydney.
117. I want to make sure that any money spent on the improvement of these rivers will not be wasted? I do not think it will. The keeping open of the rivers must always be of advantage to the district.

118. Do you hold the opinion that whether the North Coast Railway is or is not made, it is of importance to the Colony that these river entrances should be kept open? Yes; it may be that the people may want to send their produce elsewhere than to Sydney—to the north, or to New Zealand, for example. They are exporting timber from the district to England at the present time. The sailing vessels, when they load, go straight away to England without coming to Sydney.

119. If this scheme were carried out it would only give a sufficient depth of water to enable small vessels to enter the river? I understand that it would give a depth of 8 or 9 feet, and you do not know how much more you might get later on. It is expected that the entrance will improve after the works have been carried out.

120. What capacity for development has the district? It will grow everything that can be grown in any part of New South Wales. It is a very good fruit-growing district. Citrus fruits do remarkably well there.

121. What is the probability of agriculture on a larger scale;—is there land for it? There is a large quantity of really good land.

122. Is it available for settlement? Yes; there is still a large quantity of Crown land.

123. Has not all the good land been alienated? No. Only the other day I received a petition asking that a reserve might be thrown open for selection. A large number of families want to take up land there, but the Crown has not yet thought fit to offer it for sale.

124. You think that the proposed expenditure is both necessary and justifiable? Yes; I do not see any escape from it.

Patrick Hogan, sworn, and examined:—

125. *Chairman.*] You are at present residing in Sydney? Yes.

126. You are in business here? Yes.

127. You at one time represented the Nambucca district in the Legislative Assembly? Yes.

128. *Mr. O'Connor.*] For many years you have carried on the business of a commission agent in Sydney? Yes.

129. *Mr. Humphery.*] I understand that you are familiar with the whole of the district which will be served by the proposed work? Yes.

130. From what part of the Nambucca district does the principal traffic come? Bowraville is the principal township. It is the Government township.

131. What facilities have the settlers of the district for getting their produce to market at the present time? They can only use the ocean steamer.

132. There is no other way of getting to Sydney than by steamer? Unless you come overland by road.

133. What is the distance overland? I daresay it is 280 miles.

134. And the expense of coming overland would be much greater than the expense of coming by sea? Yes.

135. Under what disabilities do the people there now labour in regard to the disposal of their produce? They labour under the disability of a bad harbour. The entrance to the river is always bad, more or less.

136. A good entrance is all that they require to enable them to make the best use of their land and to dispose of their produce to the greatest advantage? I do not know of any other way in which their wants can be fulfilled than by the improvement of the river entrance.

137. Does your knowledge of the river enable you to express an opinion as to whether the proposed harbour works would be effective in providing a good entrance? I am thoroughly satisfied that you can make the entrance sufficiently good for the trade of the district.

138. Can you say from personal experience that the traffic of the district has at times been stopped by the defective character of the entrance? Yes; the "Rosedale" has not been to the river for the last six months, owing to the defective entrance.

139. You have been trading with the district for a considerable time? Yes. I have had a thorough knowledge of the district for more than thirty years.

140. What is the extent of the trade of the district? The trade of the Nambucca is pretty well on all-fours with the trade of the Bellinger. As I said last week, about 40,000 bags of maize are grown annually on the Bellinger, and very little less is grown on the Nambucca. Pigs and poultry are produced there, and the timber trade is considerable.

141. Approximately, what is the value of the produce coming from the district? It would be worth more than £10,000 or £50,000 a year. I should say that the value of the maize produced in the district would be between £20,000 and £30,000 a year.

142. What is the value of the goods sent to the district? I am satisfied that £10,000 worth of goods is sent to the district annually.

143. Then £50,000 would approximately represent the annual value of the trade of the district? I venture to think that it would be nearer the mark to say £100,000. It must be worth between £50,000 and £100,000 per annum.

144. With an improvement of the entrance, do you think that the steamship boat rates would be reduced? The company undertook to bring maize from the Bellinger at 10s. a ton, if the entrance were improved so as to enable their steamer to enter and leave the river with safety, and to load up fully each trip. I fancy they would make the same reduction if the Nambucca were similarly improved.

145. Steamers would then go to the river more frequently? Yes. The company has had to build a vessel of light draught for the trade of this river, because there is not enough to let the "Rosedale," which draws 7 ft. 6 in., go in and out.

146. What is the name of the vessel you refer to? The "Euroka."

147. Is she the only vessel trading to the river? The only steamer.

148. Do many sailing vessels go there? There are five or six, or more, used in connection with the timber trade.

149. Has that trade been regarded as profitable? Yes; the timber trade has been established there for more than twenty years.

150. Has it developed in that time? Yes; there has been a large development. There are at least three mills there now.

J.  
McLaughlin,  
Esq., M.P.

20 April, 1898.

P. Hogan.

20 April, 1898.

- P. Hogan. 151. Can you say from personal knowledge that the population of the district has increased during the last six or seven years? It has increased.
- 20 April, 1898. 152. And has the trade of the district substantially increased during this time? Yes.
153. Are there a greater number of storekeepers in the district now than there used to be? Yes.
154. Is there much land still available for settlement? I fancy that on the arms of the river, and up at the head, there is land available for settlement.
155. Is it likely that dairying will be carried on in the district to any extent? Just as on the Macleay and on the Bellinger, so on the Nambucca the people are going in for mixed farming. Creameries have been established there, and on nearly every farm they milk cows as well as grow grain.
156. Is the land suitable for dairying, except on the flats? Yes; there is a very large area of good dairying land there, though I cannot say whether it has been selected. The land there is all good grazing country, even though it may not all be suitable for maize-growing.
157. Seeing that the trade of the district is worth only something over £50,000 a year, do you think that the expenditure of £72,500 upon the improvement of the river entrance is justifiable? I have a thorough knowledge of the work now proceeding. I was there very recently, and I made a thorough examination of it. In my opinion a good harbour could be made for considerably less than the sum you named. The work already carried out is of a thoroughly substantial character.
158. That is the work shown in black on the plan? Yes. The work has been well carried on so far. When the southern training-wall is made, I fancy that there will be a sufficient depth of water for the ocean steamer.
159. Would the works you refer to produce a sufficiently strong scour at the entrance? In my opinion the scour created would give a sufficient depth of water for the trade of the district.
160. Of course you are aware that the Departmental evidence does not agree with your evidence upon this point? I am well aware of that. In my opinion the resources of the Colony do not warrant the carrying out of so large a scheme as the Department have put forward. A good entrance can be made for a much smaller sum of money.
161. What work do you consider necessary? I think that the works proposed on the southern side are too large, and more than the district warrants.
162. What is your opinion upon the suggestion to make a railway to the Macleay? I think that nothing short of an improvement of the river entrance will suit this district.
163. If the river entrances are improved, do you think that the North Coast railway will be unnecessary? The best thing you can do for the people on the North Coast is to improve their river entrances and thus give them access to Sydney by sea.
164. That is the cheapest highway that you can provide for them? Yes.
165. You think that if the river entrances are improved, the construction of a railway will be unnecessary? I do not know what the local opinion is; but in my judgment the railway is a secondary consideration.
166. *Mr. Clarke.*] Is the "Euroka" the only steamer trading to the Nambucca at the present time? Yes.
167. What do the sailing vessels which trade there carry? They bring away sawn hardwood.
168. Is the cedar trade at an end there? Not quite; but very little cedar is sent from there now.
169. I suppose the trees are too far back from the river? The price does not justify the expense of drawing the timber.
170. At one time a large quantity of cedar came from that district? Yes.
171. The value of the maize trade fluctuates with the price of maize in Sydney;—last year maize was high in price? In my opinion the value of last year's output of maize was between £20,000 and £30,000.
172. The price of maize is not now quite so good as it was? I think that it would be about the same as last year. This year has been an exceptionally good one, and the produce of all these northern districts has increased about 25 per cent.
173. In the event of the river entrance being improved, I suppose the freights will be reduced? I think so.
174. *Mr. Lee.*] In round figures the freight paid on maize brought from the Nambucca last year would be about £300,000? About that.
175. If 3 per cent were charged upon the proposed works, that would come to £2,170 per annum, or nearly the value of the annual freight? Yes.
176. I suppose it is in view of figures like these that you expressed the opinion that the cheaper works would do? My opinion is that less expenditure would do; but, of course, I am not an engineer.
177. It would appear from the figures before us that the trade of the district is not of very great importance in comparison with the cost of improving the entrance to the river? If there were any cheaper way of improving the condition of the residents on the river I would suggest it; but there is no cheaper way.
178. Do you think that if the river entrance were improved the steamship company would reduce the freight on maize to 10s. a ton? My impression is that that is about what would be charged.
179. The improvement of the entrance would be of little advantage to the local residents if they got no reduction in freight? It would be of great advantage to them to have a safe entrance, even if they got no reduction in freight. I have known the people there to be in a state of starvation, because of the want of access to market. Of course, that has not occurred lately.
180. I believe that as a matter of fact the steamer is now rarely detained for more than ten days? Very rarely.
181. And then only occasionally? Yes.
182. How can we give relief to these people unless we give them cheaper freights and a good entrance? I do not know of any other way than that now under consideration.
183. Supposing the proposed works are carried out, and a considerable reduction of freight takes place, would not that leave the the coast clear for the consideration of the advisability of imposing a tonnage rate to recoup the State for its expenditure? I think it would be manifestly unfair to levy tonnage rates upon the people of this district alone, because they have not had the advantage of the public expenditure that has been given to people in other places. They are entitled to these works in equity and fairness.
184. And they are entitled, you think, to have them carried out at once? Yes. I think that they are going on now very successfully, and I think that long before £70,000 has been expended you will be satisfied with the results obtained.
185. Do you think that if a good entrance is made the population of the district will double itself within a reasonable time? I do not think it will double itself.

21960

186. Say within ten or fifteen years? I do not think there is room for the population to double itself. There are 400 electors in that portion of the district, nearly all of whom are settlers. The employees at the timber mills of course are exceptions. P. Hogan.  
20 April, 1898.
187. There would at any rate be a marked increase in the population? Yes. There is room for an increase in the population.
188. *Mr. Fegan.*] Has the work already done been of any assistance to navigation? Not much up to the present time.
189. The contract was let in 1894, and they have been working there for more than two years? I did not think it was so long.
190. At any rate you say that so far there has not been much improvement? I do not think that a good result will be obtained until the southern breakwater is constructed, and the scour is confined.
191. Can you suggest any way in which the design of the work can be improved? The southern training wall is the principal wall to be made. The work on the Nambucca will not be as expensive as the work on the Bellinger, and not one-fourth of £70,000 has been spent on the Bellinger.
192. The main channel on the Bellinger is not so much exposed as are portions of the Nambucca? Both rivers are on all-fours so far as exposure is concerned; but the Nambucca has a northern headland, while the Bellinger has not.
193. You say that the southern training wall ought to be made for less than the expenditure proposed? Yes.
194. How would you lessen the cost? They only pay by the results. The cost of material would not be large.
195. Where do they get the material used? You can throw a stone from the quarry into the water where they are making the sea wall.
196. What kind of stone is obtained there? The great bulk of it is conglomerate; but there is a vein of hard bluestone, which is the stone they are utilising at the present time.
197. *Mr. Black.*] Can they get any of this stone in large blocks? Yes, all the stone used must be in blocks weighing so many tons each. I have seen stone on the scales weighing 10 tons.
198. *Mr. Fegan.*] Is there a large quantity of this stone? Yes; but there is not an unlimited quantity of it. There is, however, an unlimited quantity of rubble, which, I think could be very profitably and cheaply utilised.
199. What is the extent of the quarry? They are quarrying a hill about as big as Nobbys at Newcastle.
200. *Mr. Black.*] Is it all stone? No; the stone is in lumps.
201. *Mr. Fegan.*] You say that the southern breakwater is the more important.—the northern breakwater must be of some value? It is of great value. The object of that wall is to prevent the water from spreading into the bays on the north side of the entrance. When both breakwaters are made you will get a good scour. To the south of the entrance there is now nothing but sand and sea.
202. How far can the steamer go up the river? As far as Macksville, about 9 miles.
203. What depth of water is there? Once you get inside the river there is plenty of water.
204. There is a great deal of hardwood in the district. The hardwood trade has come into prominence of late years? Yes, there is a lively trade in hardwood now.
205. Can the timber on the Nambucca be compared with that on the Bellinger? Yes. The quality of the timber there is very good.
206. You say that the soft timber there has all been taken away? There is still a little left.
207. But the quantity is insignificant compared with what there has been? Yes.
208. Do you think it would be fair to construct these works at a cost exceeding the value of the produce coming from the district? I think that the expenditure of £70,000 is not required; but I think that the place is of sufficient importance to justify the creation of a good harbour.
209. *Mr. Wright.*] Would you be surprised to hear that the Secretary to the North Coast Steamship Co. has told us that the trade of the district is only 20,000 bags a year. This was his evidence in his examination upon the question of extending the railway from Maitland to Taree.
1273. Going farther—farther north, what is the next place? We came to the Nambucca. The trade there is very small it is something the same as at Port Macquarie.
1274. Twenty thousand bags of maize? I think there might be more sometimes; but taking the average for five years, I suppose that the two places would not differ very much.
1275. What freight? One shilling and sixpence; this is on account of the bad entrance.
1276. How many passengers go there? If we get five going out and five coming back, we think it a good trip.
1277. What outward freight? Twenty tons about every ten days.
1278. What inward freight? I suppose that if we get 500 bags, that is 50 tons of maize we would think that we had a good trip.
1279. Do you mean in a good season? No; in a good season in ten days we would get 100 tons.
2180. And in dull times 50 tons? At times we would not get 10 tons.
1281. Do any cattle come from there? No; eggs, poultry, and pigs.
1282. The next river we come to is the Bellinger? Yes; that is rather better than Port Macquarie and the Nambucca.
1283. The same cost? Yes. I may mention, to give you an idea of the trade, that a boat like the "Coraki," which carries about 160 tons, does the whole of the trade of the three rivers.
- ? He was speaking of flood years; I am speaking of this year and last year.
210. He said that the average export of maize was 20,000 bags? Taking bad years with good years, up to the time he was speaking of, the average export of maize from the district might have been 20,000 bags.

14

FRIDAY, 22 APRIL, 1898.

Present:—

THOMAS THOMSON EWING, Esq. (CHAIRMAN).

The Hon. FREDERICK THOMAS HUMPHREY.  
 The Hon. JAMES HOSKINS.  
 The Hon. CHARLES JAMES ROBERTS, C.M.G.  
 The Hon. WILLIAM JOSEPH TRICKETT.  
 The Hon. DANIEL O'CONNOR.  
 HENRY CLARKE, Esq.

CHARLES ALFRED LEE, Esq.  
 JOHN LIONEL FEGAN, Esq.  
 THOMAS HENRY HASSALL, Esq.  
 GEORGE BLACK, Esq.  
 FRANCIS AUGUSTUS WRIGHT, Esq.  
 FRANK FARNELL, Esq.

The Committee further considered the proposed Harbour Works at Nambucca River.

Charles Edward Rennie, Chief Draftsman, Department of Lands, sworn, and examined:—

C. E. Rennie. 211. *Chairman.*] You have certain figures relating to land tenure in the Nambucca district to lay before the Committee? I produce a map showing within a red line the watershed of the Nambucca. The alienated land within that area is tinted blue, and represents about 59,200 acres; the reserves are tinted green, and embrace about 55,300 acres; while the untenanted Crown land is tinted brown, and represents about 253,500 acres.

22 April, 1898.

212. What kind of country is embraced in the reserves? They are nearly all forest reserves. The presumption is that that country is inferior.

213. Some of them were not proclaimed until 1891;—not very much good land close to a coastal river would remain unselected until 1891? No.

214. *Mr. Lee.*] The map would show that the alienation has followed the rivers and creeks? Yes.

215. There does not appear to be much alienated land back from the water-courses? No; practically none.

216. Are you doing anything with the untenanted Crown land? It is proposed to set apart about 5,000 acres at the head of Taylor's Arm for settlement. There is another area of 4,500 acres in the parish of Denison, running back from the same arm of the river for 3 or 4 miles, which it is also proposed to set apart.

217. Why have you selected these isolated portions of land for settlement? I presume that the District Surveyor has picked out the land which he thought most likely to be applied for. There is another small area of 700 acres, 3 miles north-west of Nambucca, which it is proposed to set apart for settlement, and an area of 6,000 acres at Warrall Creek near Scott's Head, which it is proposed to set apart.

218. Has that land been held under reserve? No; it is open country.

219. Do you know the land revenue of the district? No; I have not got those figures.

George Charles Yeo, Draftsman, Stock Branch, Department of Mines, sworn, and examined:—

G. C. Yeo. 220. *Mr. Clarke.*] Have you a statement to make to the Committee in reference to the number of stock in the Nambucca district? Yes; it is as follows:—

22 April, 1898.

*Description of Area to include the undermentioned Stock.*

COMMENCING at the mouth of the Nambucca River, on the sea-coast, and bounded thence by that sea-coast north-easterly about 5 miles; thence by a line westerly about 25 miles; thence by a line southerly about 16 miles; thence by a line north-easterly about 20 miles to the sea-coast aforesaid; and thence by that sea-coast north-easterly about 8 miles to the point of commencement:—

31st December, 1897.

Horses.	Cattle.	Sheep.	Pigs.
694	2,822	21	1,866

INCREASE IN PORT MACQUARIE SHEEP DISTRICT.

Horses.	Cattle.	Sheep.
	1895 over 1894.	
891	917	3
	1896 over 1895.	
385	659	70
	1897 over 1896.	
334	5,859	Decrease, 160.

221. Do you know how many milch cows there are in the district? No; but during the last twelve or eighteen months they have started dairying there, so that probably the greater part of the cattle would be milking cows. The dairying industry accounts for the increase in the number of cattle in the district in the years 1896-1897.

Henry

Henry Spondly, Compiler, Government Statistician's Office, sworn and examined:—

H. Spondly.

222. Mr. Lee.] You have a return to give the Committee showing the population of the Nambucca district? The information which I have prepared for the Committee is comprised in the following return:—

22 April, 1898.

NAMBUCCA.	
Estimated population at end of 1897	2,130
Alienated lands—	
Freehold	27,850
Private leasehold	10,275
	37,925
Crown lands	6,625
Occupied area	44,550
Unoccupied area	267,130
Total area	311,680
Area under various crops—	
Maize	5,450
Other grass crops	80
Lucerne and sown grasses	5
Sorghum	45
Root crops	65
Sugar-cane	20
Vineyards and orchards	35
Market gardens	10
Minor crops	75
Total area under crop	5,785
Area under permanent artificially-sown grasses	4,215
Total under cultivation	10,000
Live stock—	
Horses	1,070
Cattle—	
Dairy	910
Ordinary	1,950
Sheep	280
Swine	280
Production of butter	52,000 lb.
Production—	
Maize	255,750 bushels.
Hay	75 tons.
Potatoes	165 tons.
Sugar-cane	155 tons.

223. What boundaries do you give for the district to which your figures relate? The district would be bounded on the north by a line about midway between the Nambucca and the Bellinger; on the south by a line about midway between the Nambucca and the Macleay; and on the west by the Dividing Range. It comprises rather more than the electorate of Raleigh, and about one-half of the county of Raleigh.

224. In obtaining figures as to areas under crop do you exclude areas under 1 acre? Our figures take into account areas of 1 acre and upwards.

225. Has there been an increase or decrease in the population during the last two years? I cannot say, but I could get you the information.

226. You do not know the value of the trade of the district? No; there is no trade from the district to any place outside the Colony.

227. Do your figures apply to the Coff's Harbour country? No.

228. You have returned the maize crop of the district at about 6,693 tons, while other witnesses have put it down at about 4,000 tons as an excessive estimate? Well, there is a difficulty in determining what boundaries to fix.

229. Possibly you take into consideration the country traffic from which goes by way of another river? That is quite possible. I have had to get my information from the shipping companies. I do not know anything of the district myself.

15

THURSDAY, 12 MAY, 1898.

Present:—

THE HON. FREDERICK THOMAS HUMPHERY (VICE-CHAIRMAN).

The Hon. JAMES HOSKINS.

The Hon. CHARLES JAMES ROBERTS, C.M.G.

The Hon. WILLIAM JOSEPH TRICKETT.

The Hon. DANIEL O'CONNOR.

HENRY CLARKE, Esq.

CHARLES ALFRED LEE, Esq.

GEORGE BLACK, Esq.

FRANCIS AUGUSTUS WRIGHT, Esq.

FRANK FARNELL, Esq.

The Committee further considered the proposed Harbour Works at Nambucca River.

Lewis Paulson, master of the steamer "Rosedale," sworn, and examined:—

- L. Paulson. 285. *Mr. Clarke.*] From an examination of the plan you are pretty well aware of the nature of the proposed improvements to the entrance to the river Nambucca? Yes.
- 12 May, 1898. 286. Have you been trading to the river? Yes; for four or five years.
287. Is it a dangerous bar? It is pretty dangerous; it is one of the worst bars we have, I think.
288. You consider it is necessary to make some improvements to the entrance, such as are laid out on that plan? I am sure it is. We have had great difficulty in crossing the bar for some considerable time.
289. It would be the means of increasing the trade to and from the river? Certainly; it would facilitate regular transit.
290. What draught of water is there on the bar at present? The last report I heard was that there was 6 feet at high water, which would mean 3 feet at low water.
291. What draught of water does the "Rosedale" require to get in? I have not been there for the last eighteen months, because there is not sufficient water to enable me to cross. We withdrew from the trade because there was not sufficient water on the bar. The "Euroka," which draws 4 feet of water, was built specially for that trade. But for the "Euroka" we could not communicate with the Nambucca at all.
292. Has the bar improved lately? I think for the last two years it has been very bad.
293. Unless the river is made more navigable than it is you think it will be a great disadvantage to the settlers? I do. They can never be sure of having a direct service or regular communication unless some step is taken to improve the entrance.
294. The freight is, I suppose, much more than it would be if they had a better entrance? Considerably more. We must charge extra for the extra boat we put on.
295. Can you say that the trade is increasing? It increased considerably during my time, but since I left off going there they have been handicapped very much. Last year they were not able to get their produce away till the latter part. It was some months before they could secure a service at all—not until this boat of ours was constructed.
296. How does the freight to the Nambucca compare with the freight to the Bellinger and the Macleay? It is a third more. We charge 1s. 6d. a bag for maize, which is about 15s. a ton, and we charge about £1 a ton for back freight.
297. If the entrance to the river were improved the freight would be much less than it is? We would reduce it considerably.
298. Is not £72,000 a very large sum to expend on a river such as the Nambucca? I do not know. I suppose, unless some improvement is made to enable the settlers to send their produce away, the whole district will become of no value.
299. What description of produce comes from there? General farm produce, besides pigs and poultry. It is maize principally. A great quantity of timber is sent away.
300. About how many bags of maize are sent to Sydney? Between 30,000 and 40,000 bags, I should think.
301. That is equal to about 4,000 tons? Yes.
302. And what quantity of timber? I could not say. The saw-mills have been handicapped through the bar not being approachable. For three months they had to knock off working through the bar being blocked.
303. What other kinds of produce come from the Nambucca? They have gone in for dairying. They were sending their cream to Sydney; but I think they have had to close up their places through not being able to send their cream away.
304. Would it be an inducement to vessels to go there for butter and cream;—would not the freight of butter and cream be very small compared to the freight of maize and lumber? There is a lot of land which is well suited for dairying purposes; but unless they can secure regular transit for their produce it is of no use to start dairying.
305. Although it would not be beneficial to the owners of steamers and sailing-vessels it would be an advantage to the farmer? Yes.
306. Is it probable that the maize-growers would go in for dairying? They would go in for both. A lot of the land is not well adapted for maize-growing; but it is splendid land for dairying.
307. Is it low-lying land, away back from the entrance? Yes.
308. It is grazing land, I suppose? Principally.
309. Would not the alluvial flats still be used for growing maize? I would be grown on a part of them.
310. Are the low-lying lands in the district liable to be flooded occasionally? Not unless there is a heavy flood.
311. The farm-produce would increase a great lot with an improved entrance to the river? Yes. During my time the trade improved wonderfully as regards poultry and pigs. I could see the trade increasing every year, but as soon as we left off running there the trade dropped off.
312. Would population increase if greater facilities were given to get the produce away from the river? I am sure it would.
313. Is it advisable to carry out the improvements shown on the plan? I reckon the plan is a very good one; it would meet the requirements of the place. On the northern side of the entrance there is a rocky headland. The channel used to come very close to the rocks, and we lost one of our steamers there, the "Wellington."



314. *Mr. Lee.*] Is the entrance difficult owing to the shallowness of the water? Yes. At times we used to have a fair depth of water on the bar, but the channel was very close to the rocks on the north headland. At other times the trouble was inside the entrance. Owing to the flats in the river there was no scour on the bar. L. Paulson.  
12 May, 1898.
315. Has the piece of training-wall which has been constructed on the northern side improved the water on the bar? Not as yet. I think the current strikes that training-wall and then shoots over to the south side.
316. Will not the western training-wall wonderfully improve the entrance? I believe it will improve the bar considerably, and avoid the risk we have to run.
317. What depth do you require at low-water? Eight feet for the vessels trading there. At one time we used to have 10 or 12 feet on the bar; it is constantly changing. The "Rosedale" draws 7 ft. 6 in. loaded.
318. Have you had to bring her out with half cargoes owing to the state of the bar? Yes, often. Once I narrowly escaped a chance of being bar-bound there for six weeks.
319. You think that to make the port of any value there must be a continuous depth of 8 feet on the bar at low-tide? At least 8 feet.
320. I suppose the "Rosedale" is big enough to do all the trade of that river? Yes.
321. They are not likely to require a vessel bigger than the "Rosedale" for years to come? Not for twenty years.
322. To give a floating depth of 8 feet it means that we must provide 10 feet of water? Yes. It would ensure regularity of transit at all times.
323. Do you think that can be got without building the southern breakwater? I think you would secure a fair depth from the construction of the western and northern training-walls.

WEDNESDAY, 18 MAY, 1898.

Present:—

THE HON. FREDERICK THOMAS HUMPHERY (VICE-CHAIRMAN).

The Hon. JAMES HOSKINS.

The Hon. WILLIAM JOSEPH TRICKETT.

The Hon. DANIEL O'CONNOR.

GEORGE BLACK, Esq.

FRANCIS AUGUSTUS WRIGHT, Esq.

The Committee farther considered the proposed Harbour Works at Nambucca River.

Henry Richard Carleton, Principal Assistant Engineer, Harbours and Rivers Branch, Department of Public Works, sworn, and examined:—

324. *Mr. Wright.*] Have you recently visited the Nambucca River? Yes.
325. Is the construction of the training-bank tinted black on the map, going on, or is it stopped? No; the contractor is still running, on a monthly agreement, I think. We have extended 20,000 or 30,000 tons, at a schedule rate of 3s. 8d. or 3s. 9d. a ton. H. R.  
Carleton.  
18 May, 1898.
326. The Department, I understand, can stop it at any time? Yes.
327. Did you make a report of the result of your recent inspection? No; there was nothing special on these works to draw the attention of Mr. Darley to. They are going on as well as could be expected. But the stone is of a decidedly inferior character; it never was good.
328. Where are you obtaining the stone from? From the headland just at the route of that wall.
329. Is there any other stone obtainable in the district? Not within a reasonable distance. It is just possible that we might get good stone up Warrel Creek.
330. What is the nature of the stone? It is a rotten slate; it is very poor.
331. Is it affected by the action of the water? It gets a slimy grass weed on it at once which protects it. I should like to use much better stuff.
332. I should have thought that the slate would open out under the action of the water? No.
333. Can you get blocks of any size? Up to 3 or 4 tons.
334. Are they likely to remain intact, or will they separate? They are standing fairly well in the work, better than you would expect from looking at the stone in the headland. I looked into that matter very carefully.
335. Although it is not of the best quality, still you think that it will answer the purpose? It is serving the purpose fairly well. The contractor is going down deeper, and it seems to be somewhat better in the lower beds.
336. Will you give the Committee some idea of the proposed stoppage of the waters of Warrel Creek, and the channel which leads into the main stream? That is a very useful part of the scheme. It is to divert the waters of Warrel Creek into the main river at the upper end of our work.
337. The proposal is to cut a canal and then to dam the creek? Yes; it will secure the advantage of a double scour.
338. Do you think the proposed training-wall in front of Stewart Island is a necessity? I do. I would rather see that north training-bank to the east of Stewart Island built than this cutting made. I consider that to be the most important training-wall after the present one is extended.
339. It will have the effect of shooting the scour against the training-wall in progress? Exactly; instead of allowing it to wander around this irregular bay as it does at present.
340. Is it advisable to allow that channel to exist on the western side of Stewart Island? There is a saw-mill in there. We would interfere with their rights if it was not kept open.
341. That is the only object in keeping it open? It is the only object I am aware of.
342. It means a diversion of waters to a certain extent and a loss of power? Certainly. Some waters will go round the back of the island. I would expect the upper end of this to silt up, and the only access to the mill itself will be through the lower entrance.
343. There is another access left at the eastern end of the northern training-wall? That is to give access to

H. R.  
Carleton.  
18 May, 1898.

- to the township. There are two saw-mills at least in the township. The Government tugboat and the Government wharf are in there also, so that it is absolutely necessary that an opening should be left.
344. You think that there ought to be an opening left there? Yes, and eventually, I take it that the whole of that part will be reclaimed.
345. What do you think will be the effect of the construction of these works altogether on the entrance and on the river itself? We should probably have a channel carrying 10 feet at low-water between the walls as far as they extend, and out over the bar into the ocean.
346. What depth of water have you along the existing northern wall? I think recent soundings show from 7 up to as much as 18 feet.
347. Is that much different from what it was before the wall was built? Yes; it scours along the wall as it advances.
348. It has the effect of creating a channel? Yes; right along the wall. There is good water along the wall as far as it goes.
349. It is not proposed to construct the two breakwaters, as shown on the plan? The northern one is included in the scheme before the Committee, but the southern one is not. The works shown by dotted red lines on the plan are included in the whole scheme.
350. These two dotted portions, comprising both breakwaters, are not included in the modified scheme? The northern breakwater is included in the modified scheme, but the southern one is not, nor is the training-wall on the eastern side.
351. From your knowledge as an engineer, and from what you have seen of the work, do you think it is going to produce the satisfactory results which the Engineer-in-Chief fancies he will obtain from it;—will it secure a permanent deep channel between Stewart Island and the Heads, and also have the effect of permanently removing the bar at the Heads? I think it will. It will not ever be as deep a bar as the bars on the other rivers, such as the Bellinger or the Hastings will improve to. That is simply because the watershed of the river is so very much smaller; they have not got anything like the scouring power there that they have in other rivers.
352. You still think the proposed works will give a depth of water sufficient to allow trading vessels of a certain class to visit the river? Yes; I think we will get 10 feet there.
353. That is a sufficient draught of water, I suppose, for any vessel likely to be wanting to trade to the river? Yes, for any vessel they deserve to have there either.
354. It is a comparatively small district? I should say it is the least important of the rivers.
355. Therefore it is not likely to require a larger class of vessels to trade there? No; it is a very fine timber district, no doubt; but so far as farming goes they have not anything like the same extent of land.
356. The timber trade is always conducted in comparatively shallow vessels? Yes.
357. Very few vessels drawing more than 7½ feet are engaged in the timber trade? Some of the schooners, I think, draw up to 8½ and 9 feet.
358. How long is it since you were at the Nambucca? A fortnight or three weeks ago.
359. Were you over the bar? No; I was out at the edge of the bar. It was too shallow to get over it at the time with the steamer. It was dead low-water, and she could not go out.
360. What depth of water is there on the bar at high-water? It is about 7 feet 6 inches.
361. Do you think you will increase that depth by 3 or 4 feet by the construction of these works? I think so. We are carrying deep water right down with that wall as we go.
362. Is that channel of any width? It is quite wide enough; it is from 80 to 100 feet wide.
363. You argue from the fact that the present wall is producing satisfactory results, that the construction of other works will produce similar results? I think so. The wall is further out than is shown on the plan at present; it is some time since the plan was compiled. Standing on the end of the wall at present you seem almost to have reached the bar.
364. Is there much shallow water outside for any distance? No, you drop into deep water very soon.
365. At what distance due east from the headland do you obtain 8 or 10 fathoms? You would be in 30 or 40 feet as soon as you are out as far as the headland. The bar is actually inside the headland.
366. You get 6 or 7 fathoms after you reach the headland? Yes.
367. There is no possible chance of any accumulation of sand there? No, it is carried out to the ocean current.
368. What, in your opinion, causes the bar? First of all, the weak river current, and not being able to scour it. It is first brought up from the southern beach.
369. Is there a northerly current setting in? We have not taken any observations; but as a general rule inside the headland there is a northerly current—a kind of eddy. The current on the coast is from north to south, and shoots directly from headland to headland. Inside of that line there is a kind of eddy.
370. There is a continual tendency to drive the sand from the whole of that southern shore up to the north? Yes; and across the bar.
371. I suppose the action of the northerly set-in meeting the outflow of the water causes the precipitation of the sand on the bar? Exactly.
372. Looking at that aspect of the case, does it not strike you that a very important thing to protect that entrance would be a southern breakwater? No doubt it would be better to have both breakwaters; but we consider that we will so strengthen the current by straightening it out with the north breakwater that it will be sufficiently strong in itself to scour out a channel to a reasonable depth. At present it loses its force and strength winding along that irregular shore. It would act as a barrier; but you could never bring the water to it; it would work to the north.
373. The foreshores are rock along the southern headland? Yes, inferior rock.
374. You think that by continuing that wall straight out to a certain depth the scour will hug it, and always keep a channel open? Yes, it would cling to the wall.
375. *Mr. Hoskins.*] How long were you at the Nambucca during your last visit? About half a day.
376. Did you see any vessels go up and down the river? No; one vessel, the "Pelican," passed out just before I got there.
377. Did you see any white men there? Plenty of white men, but no black men.
378. Did you go up the river any distance from the Heads? I stayed a night at the town of Maxwell, which is about 10 miles up the river. Higher up still, on the North Arm, is the town of Bowra.
379. It is proposed by your Department to spend £72,500 on this river;—did you see sufficient realisable improved

21960

H. R.  
Carleton.

18 May, 1886.

improved property on the river to represent the value of £72,500? Certainly, and farms more than that value. There are at least six or seven important saw-mills on the river alone.

380. The sawn timber is taken out by flat-bottomed sailing crafts, and if the entrance was very much shallower than it is they could go out? No; they are delayed there at times in consequence of the river being too shallow.

381. *Mr. Trickett.*] The estimated cost of the modified scheme is £72,500, and the completed scheme is estimated to cost £149,700? Yes.

382. How far is the Nambucca River from the Macleay River? From head to head it is about 9 miles.

383. You are aware, I suppose, that there is a proposal before the Committee to expend on the Macleay River a sum of £108,000 on a modified scheme and the completed scheme is estimated to cost £218,000? Yes.

384. How far is the Bellinger River from the Nambucca River? From head to head it is 9 miles.

385. You are aware that there is a proposal before the Committee to spend £26,000 on a modified scheme of harbour works at the Bellinger River, and the completed scheme contemplated for that river is estimated to cost £171,000? Yes.

386. Are not these very large sums to expend on rivers within such a very short distance of each other? Yes; if you take the distance by water, but the distance by road from the Nambucca to the Macleay is between 40 and 50 miles, and you could not connect the two rivers in any way for the sum it is proposed to spend on either of them, or both of them—or for anything like that money.

387. But still, it is a large sum of money to spend there? Yes. Viewing it from the standpoint of the distance along the coast, of course it looks as if they were very close together, but they are quite distinct and independent rivers, with their own watersheds and valleys, and separated by high ridges in every instance, except the Hastings and the Macleay.

388. You are not called upon and do not express an opinion as to the resources of the district? No; only in so far as Mr. Hoskins asked me if I thought the valley of the Nambucca was worth the expenditure, or if it was worth £72,000. I certainly would like to have it for that sum.

389. Do you look upon the entrance to the Nambucca as a place which is favourable to the carrying out of harbour improvements? Yes; but it is the weakest of those before the Committee.

390. It is the most difficult one to do any good with? Yes; we have very little to assist us there in the way of upland water compared with what we have on other rivers; it is a small watershed. It has a headland on the wrong side and other defective points.

391. I suppose that in great measure accounts for the large sum of money which is required? Yes.

392. The statement handed in by Mr. Hickson contains this paragraph:—

There is at all times a strong tidal stream in the fairway channel from the Beacon Rock outwards, particularly when the South Spit extends right across, leaving only a narrow passage round the rocks. The ebb stream is then forced into the bay under the signal staff, and takes from thence a south-west by south direction, scouring out a channel on that bearing. Frequently when this is the case, there is an eddy or slack in the outer bay, and sand is deposited in the usual channel until it is completely blocked. The passage in, after passing the outer bar, is then very dangerous. Vessels coming in with any sea on are liable to be caught by it on the starboard quarter and sent to the northward out of channel, which is always at these times very narrow.

How do your works propose to deal with that difficulty? We drive the shipping out of that portion altogether. That paragraph, which is from Captain Howard's report, alludes to the bay under the northern headland which the channel used to wind round formerly. Our proposed northern wall and northern breakwater will cut off the whole of that bay and drive the shipping out of there, and make a straight run in inside.

393. And do away with that eddy? Yes, and twisting round that bay past the rocks.

394. That would seem to be one of the worst parts of the entrance in bad weather? It is, undoubtedly; and that is why Mr. Darley started with this wall in the first instance.

395. The construction of that wall would be a very expensive part of the scheme? The per foot run with wall will cost somewhat more than training-walls.

396. You say that one of the disadvantages of this scheme is that the rocky head-land is on the wrong side of the entrance? Yes; the worst weather on this coast comes from the southward; therefore, it is better to have the head-land on the southward if possible, as in the case of Newcastle, the Clarence, and the Hastings. All those three rivers are better protected and better sheltered in consequence of the head-land being on the southward side. Crookhaven bar is another instance. I suppose it has the best sheltered bar on the South Coast. The opening there leads somewhat to the west of north; it is a very well-sheltered entrance.

397. That necessarily makes the construction of the southern breakwater an expensive item, because it is so exposed to the ocean? Yes.

398. I see from Mr. Hickson's statement that Lieutenant Francis, in 1885, reported that "both the bar and the flat continually shift and seldom remain in the same position for three months at a time." Does the same state of things prevail there now, as prevailed in 1885? Except in so far as we have driven the current out of the bay under the north head-land by the construction of the training-wall as far as it has gone.

399. You think that the work which is so far done has been done to some advantage? I am certain it has. There is not the same length of delay now as there was formerly. They still have delays from the silting up of the bar, but it does not remain bad for such a long period.

400. Does the bar shift about in the same way now? It does shift still, but not over so great an area.

401. Has the depth of water been improved by this short length of training-wall? I do not think so.

402. Do you not think that the two training-walls and the breakwater at the entrance would be sufficient without going to the great expense of these long training-walls up the river? No, you want to lead the river current down on to the bar, and obtain a scour from it. The construction of the two breakwaters would prevent the carrying in of sand no doubt on to the entrance, but it would not strengthen the current in any way, and scour out the sand lying between them. The breakwater, of course, is a far more costly work per foot run than the training-walls are. The future extension alone of the southern breakwater is estimated to cost £52,450.

403. I understood you to say that owing to the Nambucca not being a very large river you want the training-walls more particularly to accentuate the current? That is the reason.

404. How far up the river do vessels go? A small steamer goes up to Maxwell, 10 miles.

18

H. R.  
Carleton.  
18 May, 1898.

405. The steamer which trades to Sydney? No, a local steamer or a steamer which comes round from the Macleay. The smaller class still go up the North Arm to Bowra.

406. Where does the steamer which trades to Sydney pull up, in the Nambucca? At the wharf alongside the township near the Heads.

407. You want to leave an opening to allow the vessels to get in behind your training-wall? Yes, to load at the saw-mill. There are always vessels lying in that bay loading timber for Sydney.

408. I suppose that place behind the training-wall will take a long while to fill up if it does fill up at all? I should think the best thing would be to reclaim it by pumping in sand and to let the township go out to the training-wall.

409. That might involve claims for compensation? I think the frontage is all Government property.

410. Mr. Hickson in his statement refers to a complete scheme prepared by Mr. Darley, at the request of the Minister, in January, 1895; and speaking of Mr. Darley's scheme he says:—

The estimated cost of this scheme is £149,700. Although the expenditure of this amount was out of proportion to the resources of the district, he pointed out that a measure of relief would be given by the construction of the inner portion of the northern breakwater at a cost of £11,000.

How much of that sum of £11,000 have you spent? £5,503. That enables vessels to get in and out to the township. Once over the bar there is no block.

411. Mr. Hickson goes on to say in his statement:—

This wall would straighten and strengthen the ebb current at the place where its force is now almost lost in flowing over the rough and irregular northern foreshore. Another very important part of the work which he considered should be taken in hand as soon as funds were available was the training-wall extending south-westerly from near the route of the northern breakwater.

Where is that? It is the training-wall extending in a south-westerly direction from the route of the present wall.

412. How much would that cost? £18,910.

413. In 1895, the idea of the Department seems to have been that the expenditure of these two sums in carrying out these two particular works would afford considerable relief to the district? Those are the two most important portions of the scheme.

414. Do you not think it would be well before we spent or contemplated spending so large a sum as £72,500, we should expend those two sums in constructing these two works which the Department in 1895 thought would afford a considerable amount of relief to the river? That certainly is the order in which the works should be put in hand.

415. Your idea is, first to complete the northern one, and then to go on with the training-wall extending south-west from the route of the present wall? That is what I consider the relative importance of the works.

416. Would you like to say it would be worth waiting to see the result of these two works before going on with the more extensive works, seeing that it is such a very large expenditure for the district? It might be prudent to do so. If you are anxious to save, I certainly think that is the order in which the work should be carried out, if anything has to be struck out of the scheme.

417. I see it is stated in this *precis*:

In October, 1895, an additional vote of £5,000 having been taken, tenders were invited for the construction of the inner end of the northern breakwater; and that of Wooden, Rogers, and Frost, accepted in February, 1896, at rates of 3s. 8d. per ton, for stone 1 to 4 tons in weight, and 1s. 8d. for ballast;

is that contract still in existence? Yes.

418. I suppose that is a very reasonable price? It is about the average rate for contract work on the coast.

419. Were you, at your recent visit, satisfied with the works as they are progressing? I was very pleased with the work as far as it has gone. I was struck with how close the end of the works is approaching to the bar. Although the wall is going out to sea, the bar does not seem to be going any further. In some cases we just push it further out and form another sand-heap. It does not seem to me to be any further out. It seems to be much closer to you.

420. Have you had any reports as to the effect of the recent rough weather on the training-wall? The recent storm cut about 2 feet off the top of the wall for a length of 800 or 900 feet.

421. That loss will fall on the Government? We will have to make it up. You will see that it is not a very large item, when I tell you that nearly half of it is already repaired.

422. How wide is it on the top? About 14 feet.

423. And at the base? The slopes are about 1 to 1, and the base depends on the depth of water it is in. For instance, if a wall were 10 feet high the base would be about 34 feet. We tip the stone from a truck over the end of the wall, keeping it 14 feet wide on top, and it runs out to what is called its natural slope.

424. The material finds its own bottom on its own slope? Yes; it is approximately 1 to 1 with random stone.

425. I see that since the former designs were contemplated you wish to bring the scouring power from Warrel Creek into the river? Because we found that the river itself was meeting the Nambucca at the entrance, creating disturbing eddies and conflicting currents.

426. What is that work estimated to cost? The deviation of Worrel Creek, including the cutting and protecting the sides of the cutting, is estimated to cost £7,240 15s.

427. Do you think the extra volume of water you will get from this creek is worthy of such a large expenditure? We must cut it off in some way, otherwise it will affect us lower down. That is the trouble. We may as well make it assist us when we do cut it off.

428. If you did not do that up above you would have to do something down below, to make a side-wash? Yes, it would injure us down below.

429. By making an eddy? By striking the river current in the side and weakening it.

430. Was this scheme reported on by Sir John Coode? No; he was not asked to report on this river.

431. Have agitations gone on for any length of time in regard to its improvement? Yes; for a considerable time there have been papers in connection with this improvement.

432. How long have you been in the Department? Nearly twenty years.

433. How long is it since they wanted money expended there? Since before I came to the head office. I was a good deal in the field on the North Coast in the olden days.

434. Did you notice whether any particular industry is engaged in except maize-growing and timber-cutting on the Nambucca? That is all. I know the valley of the river fairly well; in fact I know the valleys of all the rivers fairly well, up to the head of navigation, and in some cases beyond it. I should say that it is the least important of the rivers which are submitted to the Committee.

435. Does grazing go on to any extent there? There are some good flats about Maxwell.

436. Is any dairying going on? There is now.

437. Not much? I could not say what the extent of it is.

438. Any creameries or factories? I am basing my statement on the fact that they are erecting creameries.

439. More than one? I would not be sure about that.

440. Where is the maize all grown—on the river flats? On the river. The valley of the river is not very wide anywhere; it is a big scrub really. When you get back from the river flats it is fine timber—good scrub and a good deal of semi-tropical vegetation about there. Then up at the head of navigation I believe they are mining for antimony, or some other minerals.

441. *Mr. Wright.*] The mines are not very valuable about the Yarrahappinni; I do not think they are working any mines there now.

442. *Mr. Trickett.*] The district, as a whole, may be regarded as a forest district? Yes, it is forest land.

443. The cedar in the district is pretty well exhausted? I think so. I do not think there is much cedar brought out now. I believe there is still a great deal of cedar up at the head of the river, but it is rather difficult to get it out just now. It is likely to remain there for some time yet.

444. It would not pay them to bring it out? I suppose that is the reason they are not taking it out. At the head of the Nambucca it cannot be very far from the Don Dorrigo Scrub, and all that good land.

445. Have you been to the head of navigation? Yes, on all of the rivers.

446. In the case of the Nambucca, what is the character of the land at the head of navigation? At the head of navigation there is a nice little township called Bowra. It is what you call open forest country.

447. Is there much agricultural land there? I should not say there is much; but there is not beyond the head of navigation.

448. That, I suppose, is at such a distance that it would be too far for the settler to get his produce to market? Yes.

449. So far as you have been able to judge, the timber-cutting and maize-growing on the river flats are the two chief industries of this district? Those are the principal products.

H. B.  
Carleton.  
18 May, 1868.

19

WEDNESDAY, 15 JUNE, 1898.

Present:—

THE HON. FREDERICK THOMAS HUMPHERY (CHAIRMAN).

The Hon. JAMES HOSKINS.

The Hon. CHARLES JAMES ROBERTS, C.M.G.

The Hon. WILLIAM JOSEPH TRICKETT.

HENRY CLARKE, Esq.

CHARLES ALFRED LEE, Esq.

FRANK FARSELL, Esq.

The Committee further considered the proposed Harbour Works at Nambucca River.

Cecil West Darley, Engineer-in-Chief for Public Works, Department of Public Works, sworn, and examined:—

450. *Mr. Trickett.*] In reference to your evidence given on the 14th April, I find that in reply to questions C. W. Darley, 30 and 31 you say—

What will the northern breakwater cost? £22,362 10s. is the estimated cost of completing the northern breakwater. 15 June, 1898.

The diversion of Warrell Creek is estimated to cost £7,242 15s.

I suppose you regard that as an essential part of the scheme? Yes. These two items make a total of £36,605 5s. Then the Stewart's Island training-wall, which it is only proposed to carry up to high-water level, will cost £18,492 10s.; the north-western training-wall, £13,910; and, adding the usual percentage for supervision, £3,492 5s., the total cost of the works will be £72,500.

Upon visiting the site of these works the idea somewhat forced itself upon me that the Nambucca River is one of the smallest of those which are about to be served by these harbour improvements, and that if it were possible to save any portion of the proposed expenditure at the outset it would therefore be advisable to do so. Upon looking at the works with the other members of the Sectional Committee, and with some of the residents, it occurred to me that we might possibly, in the first instance, carry out only that portion which I indicated in the amendment I submitted, and which was not carried. The three portions I suggested—subject of course to your opinion—were, the northern breakwater at a cost of £29,362 10s., the north-western training-bank at a cost of £13,910, and the diversion of Warrell Creek at a cost of £7,242, leaving out the other training-walls for the present. Now I should like to ask you whether you think, seeing the large expenditure which it is proposed to make upon this river, we could with safety, and with a prospect of getting a reasonable entrance, carry out those three portions in the first instance, leaving the construction of the southern breakwater, and the Stewart Island training-wall, together with the southern training-wall for the future? In giving evidence before, I recommended the postponement of the southern breakwater, and the southern training-wall, and the Stewart Island training-wall. Taking them in the order of importance, no doubt the Stewart Island training-wall comes last; but I am afraid the result will not be satisfactory without it; and for this reason: You will notice that you are making an alteration in the present location of the channel by moving it out into the bay from the deep bight in which it is now situated in front of the township. That will require a good concentration of all the current in order to fight against the existing contending forces. With that object I was anxious to see the Stewart Island training-wall completed, so as to direct the ebb-tide well on to the wall to maintain the channel through the sandspits which are now in the middle of the harbour.

451. *Mr. Lee.*] Was not the idea of closing Warrell Creek put forward with a view to throwing the current well out so as to touch the wall at Stewart Island, and then throw it along the northern side on to the breakwater? That will be the action of the current; but the direct object of the cutting is to divert the creek and take it away from the point at which it now meets the river, where it causes a most unsatisfactory state of affairs.

20

C. W. Darley. 452. Warrell Creek is now a source of great trouble? Yes. My object was to divert it and take it into the main river, making use of the tidal influence we get from that and the scour. I am rather afraid there would be some trouble if we omitted the Stewart Island training-wall, throwing the current across the main river current. I want to concentrate the current on to the north-western wall.

15 June, 1898.

453. *Mr. Trickett.*] I understand you to say that you think that unless the Stewart Island training-wall is constructed the current will lose a great deal of its force? I think it would be difficult to maintain a satisfactory channel either in front of or behind the island.

454. If the diversion of Warrell Creek is to be carried out, you regard the training-wall around Stewart Island as a necessity? Yes.

455. Will you give us more information in reference to the southern breakwater. On looking at some of your other reports in cases where there is a northern head, and where it is proposed to construct a breakwater along from that head, and where the southern spit is composed of sand as it is in the case of the Nambucca River, there seems to be a tendency always for the sand to drift over towards the northern breakwater, and to narrow the channel along the course of that breakwater. Do you not think that that will occur here in the absence of the southern breakwater? No doubt it will to some extent, but I do not think the circumstances warrant the extra expense. I thought we were justified in going on with the lesser work, with a view to see whether it would not meet requirements. The channel will cling to the breakwater, and, although it might be a little narrower, it will be sufficiently wide for some time to come I think for the traffic of the district. I thought we might omit the southern breakwater for some time to come. A certain channel is always maintained there without any breakwater at all. The effect of the breakwater will be to move the channel out into better water and less foul ground. You will find that there will be a good navigable channel.

456. You think that the effect of the proposed works will be to put an end to the sand trouble and that the tidal action will maintain the channel? Yes.

457. Although the channel will be narrower than if the southern breakwater were constructed, you think it will be sufficient for all purposes for some time to come? I think it will be. Of course the construction of the southern breakwater would make the channel more efficient.

458. *Mr. Lee.*] It was pointed out to the Sectional Committee by the resident engineer that the effect of the present work had been to give an increased depth of water immediately under the northern wall—more than sufficient for navigable purposes. It was also pointed out that one of the chief features in the proposal would be to get the terminal point of the northern breakwater at such a point in the bay as to secure a distribution of the sand by means of the current and tidal action;—you confirm that view? Yes.

459. As to the training-wall around Stewart Island, the effect of the diversion of Warrell Creek throwing the waters into the main arm would necessitate the consideration of some work at Stewart Island;—if that work were not constructed would there not be a possibility of your losing the benefit of some of the current and scour? Yes.

460. The real object of the proposed training-wall at Stewart Island is to tap the current and compel it to go along the wall at that point? Yes.

461. The shingle which exists opposite Stewart Island would secure a good foundation to the low level wall there? Yes.

462. If the proposed works are carried out it will be an absolute certainty that the water diverted from Warrell Creek will get into a larger sectional area and be taken down until it strikes the upper portion of the training-wall? Yes; there will be one straight current right round.

463. When you get the current to the southern point of the north-west training-bank, is there any danger of its splitting there? Not to any serious extent. The current will take the most direct channel along the wall.

464. It was also pointed out to the Committee that if the channel were dredged a little below Stewart Island it would act as a shoot or spout compelling the current to strike the training-wall? The main current will go right round the wall. No doubt part of the water will go through the opening you indicate. An opening is left there with the object of allowing a portion of the water to get through keeping open a reasonable navigation in front of the township; but, as I have said, most of the water will pass along the wall. The tidal gradient will be greater, and where you get the greater gradient you get the greater velocity. The weight of water will follow the main channel.

465. At the present moment you have tidal scour enough at that point to keep the channel open? Yes.

466. The trouble is not immediately underneath the completed works, but above that point, running inside the proposed training-wall and under Stewart Island, that is where the water is shallowest? Yes.

467. That is caused by Warrell Creek distributing itself over that large area, and by the occasional influx of tidal-water? It is due to the total absence of concentration.

468. You have designed a work which will scour out the channel at those shallow places, and which will give a good navigable channel right down to the terminal point at the Heads? Yes.

469. You get navigable water to the southern end of the works, and the moment you get that, you have a channel with navigable water up as far as Maxwell? Yes.

470. Is there not better navigable water lying behind the entrance to the Nambucca than is usually found behind the entrance of these rivers? Yes; and there is also fair navigation up Warrell Creek.

471. Do you think the scour you set up will be enough to provide for a channel at the opening under any circumstances? Yes. If the channel were going to close there is no reason why it should not do so now, but we find that it does not do so. There will be a better tidal action when the northern breakwater is constructed than you have at the present time.

472. The entrance of the harbour will always be a straight one; you are relying upon that? Yes.

473. Do you think any trouble is likely to be caused by reason of sand-bars being created, and making the channel tortuous? I do not think so.

474. You reply upon the straight and strong run to keep a good navigable channel? There will be one straight channel with varying depths and widths.

475. When that is obtained as a bar-harbour, you have got over the greater portion of the difficulty? Yes.

476. It is the tortuous entrance to these bar-harbours which is the source of danger? Yes.

477. *Mr. Roberts.*] Is it not solely on the ground of economy that you do not recommend the immediate construction of the southern breakwater? Yes.

478. It would make a more satisfactory work if it were carried out, but in view of the large expenditure which would be necessary, and feeling satisfied as you do that the northern breakwater will answer the requirements of the port for many years to come, you have thought it wise to omit the southern breakwater? I do not think, looking at the matter entirely on the grounds of economy, I should be justified in recommending the construction of the southern breakwater at the present time. C. W. Darley.  
15 June, 1898.

479. As to the north-west training-wall, and the Stewart Island training-wall, they are necessary to afford improved navigation to the river? Yes, for that portion of the river unquestionably. Those works will have the effect of confining the scour to one channel, and the entrance will then maintain itself without any further dredging. We look to the tidal action to maintain a good channel right along the wall.

480. *Chairman.*] Does your proposal mean that all vessels which have entered the Heads will be able to proceed up the river beyond Stewart Island? They will be able to go right up to Maxwell—

*Macdonald*



21960

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

SECTIONAL COMMITTEE.

HARBOUR WORKS AT NAMBUCCA RIVER.

REPORT.

THE Sectional Committee, consisting of Messrs. C. A. Lee (Chairman), Henry Clarke, Frank Farnell, the Hon. C. J. Roberts, and the Hon. W. J. Trickett, appointed on Thursday, 12th May, 1898, to "inspect, take evidence, and report with reference to the proposed Harbour Works at Nambucca River," left Sydney on Tuesday, 17th May, and reached Grafton on the following Thursday. The construction of harbour works at the Bellinger having been referred to them, several days were devoted to an inquiry into that matter, the Committee arriving at the Nambucca Heads on Tuesday, 31st May. A careful inspection was there made of the portion of the northern training-wall already constructed, and the Members of the Committee visited the quarry from which the material for the work is being obtained, and were shown the method of removing the stone and placing it in position. In the afternoon they opened their inquiry at the Victoria Hotel, and, continuing their journey, on Wednesday, 1st June, visited Macksville, the chief centre of population, a township situated about 16 miles up the river. A number of witnesses was there examined, and the Committee concluded their inquiry the same night.

The following witnesses were examined. At Nambucca Heads, David Houston, district engineer; John Eichmann, saw-mill proprietor and storekeeper, Nambucca; William John Whaites, pilot, Nambucca Heads; David Mitchell, dredge-master, Nambucca; and William Bragg, bee-farmer, Lower Nambucca. At Macksville, Thomas Bolton, President, Macksville Progress Association; Edward Hitchins, auctioneer, Warrell Creek and Macksville; William Ezold, storekeeper, Macksville; Frederick Notley, storekeeper, Macksville; Robert Quayle, first-class constable, Macksville; and William Woods, secretary, Macksville Progress Association.

In the course of their investigations the Committee drove through a large part of the district, and were thus enabled to form some opinion of its character and value from personal observation. In addition, every effort was made to secure full and reliable evidence regarding the quality of the land, its productiveness, and the prospect of development. Testimony was also obtained as to the advantages which would be secured to the settlers by the success of the scheme, the probable efficiency of the works to be undertaken, and the warranty in the trade of the port for the expenditure necessary to bring about a satisfactory result.

The country to be served by the construction of the proposed harbour works very closely resembles that drained by the Bellinger, both in its physical features and in the nature and value of its productions. The evidence given by the pilot stationed at Nambucca Heads shows that during 1897, 39,630 bags of maize, 2,910,000 feet of hardwood, and 84,000 feet of cedar were exported, while pigs, poultry, eggs, cream, and general farm produce of considerable value were also sent away, the total value of exports for the year being estimated at £38,922. The Committee ascertained that the export of all classes of commodities shows a continual yearly increase. As on the Bellinger, farmers have of late years extensively engaged in dairying, and with quicker and more regular means of shipment

51 (a)

*[Handwritten signature]*

22

shipment this industry is likely to become of considerable importance. This will occasion the clearing and occupation of land which is not considered of sufficiently good quality for agriculture, and will bring a large number of settlers into the district.

At the present time the farmers and business people on the Nambucca state that they suffer great inconvenience, and frequently are heavy losers, because of the uncertainty of the movements of the steamers which trade to the river; and complaints against the excessive rates of freight are general. The carrying out of the scheme before the Committee will, it is believed, result in an improvement of the bar which will enable vessels to enter and leave the river with certainty in any but the roughest weather. In this way not only will the benefits of a sure and regular steamer service be secured, but it is hoped that the removal of the present obstacles and dangers to navigation will result in a considerable lowering of rates.

What is shown on the plans as the northern training-wall has already been constructed, and the breakwater commenced, and it was pointed out by the Resident Engineer in charge of the works that if the breakwater and training-walls were pushed on simultaneously, the small stone which cannot be used where the full force of the sea has to be resisted, and which it is necessary to remove in order to get out the larger blocks, could be disposed of to great advantage and at a considerable saving in the construction of the training-walls. The work already completed, while beneficial, has not gone sufficiently far to make a very great improvement in the channel, and it was the opinion of Mr. Trickett that the result of the completion of the northern breakwater, the completion of the north-west training-bank, and the diversion of Warrell Creek should be ascertained before the other works suggested by the Department were carried out. An amendment to that effect, however, was rejected by four votes to one, the Committee being of opinion, from what they saw of the effect of similar works on the Clarence, and, to a less degree, on the Bellinger, that the ultimate success of the project was undoubted.

For these reasons the Committee recommend that the proposed scheme as submitted by the Engineer-in-Chief be carried out.

CHARLES A. LEE,  
Chairman.

Kempsey, June 7th, 1898.

---

21960

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

MINUTES OF EVIDENCE.

HARBOUR WORKS AT NAMBUCCA RIVER.

[TAKEN BEFORE THE SECTIONAL COMMITTEE.]

TUESDAY, 31 MAY, 1898.

[The Sectional Committee met at the "Victoria Hotel," Nambucca, at 2 p.m.]

Present:—

CHARLES ALFRED LEE, Esq. (CHAIRMAN).

The Hon. CHARLES JAMES ROBERTS, C.M.G.  
The Hon. WILLIAM JOSEPH TRICKETT.

HENRY CLARKE, Esq.  
FRANK FARNELL, Esq.

The Sectional Committee proceeded to consider the proposed Harbour Works at Nambucca River.

David Houston, District Engineer, Macleay, Hastings, and Camden Haven Districts, sworn, and examined:—

1. *Chairman.*] The Nambucca River is in your district? Yes.
2. Had you charge of the district before the present works were commenced? Yes.
3. You initiated them? Yes.
4. And have carried them out to their present point? Yes.
5. Will you explain to the Committee the works it is proposed to carry out? It is proposed to continue the northern training-wall and breakwater to a point just west of the outer rock on the northern side of the entrance. The wall will end about 100 feet from the rock.
6. What is the nature of that work? We are out 1,711 feet from the starting-point.
7. What has the work cost so far? To the beginning of May it had cost about £6,200. We are raising the training-wall on an incline of 1 in 150. It was originally carried 1,650 feet on a level 4 feet above high water, and from that point it was to rise for 900 feet on an incline of 1 in 75 until it reached a height of 12 or 18 feet, when it was to continue at that level for 1,200 or 1,600 feet. Now we commence to rise on an incline of 1 in 150 when we are out 750 feet until we reach the same elevation as before, and then the wall is to be continued out level.
8. Why have you raised the height of the wall? The order to raise it came up since the Committee has been in the district. It is to be raised because of a washaway.
9. How much was washed away? From about 600 feet out to about 1,500 feet out. There were breaks all along that portion, caused by the action of a south-east gale.
10. Is it anticipated that when the wall is raised it will be able to resist such a sea? Yes. Small stone is put into the work at 1s. 6d. a ton, and for large stone we pay 3s. 8d. a ton. The small stone is put on top of the breakwater, as a rule.
11. Does the sea in a south-east gale break over the breakwater at its original level? We have had seas quite as big as that which did the damage, but not during such high tides.
12. The damage took place during a very heavy tide? Yes.
13. When the height of the wall is increased will you be secure from the effects of the weather? I think so.
14. What will be the cost of increasing the height of the wall? It will take about £3,000 to fill it in. That will strengthen and consolidate the work.
15. The whole of the work that has been done has been carried out under contract at the prices you have named? Yes.
16. Do they include the quarrying of the stone and the placing of it into position? Yes.
17. Now, regarding the north-west training-bank? That is part of the present proposal.
18. Is it intended to be made of stone of the same weight as the breakwater? No; of smaller stone.
19. What height is it to be kept? Four feet above high water.
20. Will that training-wall be subject to the range of the sea? Very little. The range has come in as far as the Government wharf, I have heard.
21. What is the object of this training-wall? To train the water down on to the breakwater.
22. What is the next work? The Stewart Island training-bank.
23. What will be the length of that wall? 6,400 feet altogether.
24. It will cost? £18,492 10s. This wall will only be raised to high-water level.
25. What will the northern breakwater cost? £27,675.
26. Now for the bank across Warrell Creek? That will be 800 feet long.
27. Then there is the cutting from Warrell Creek to the main river? Yes; that will cost £3,190.
28. Then there is the stone-facing on the eastern side of the river? Yes.
29. That will cost £1,033 10s.? Yes.

D. Houston.  
31 May, 1898.

23

- D. Houston. 30. Then there is the stone-facing for the sides of the cutting;—those comprise the whole of the works referred to the Committee? Yes.
- 31 May, 1898. 31. What result do you expect from the design before us? We expect to get a continuous stream of water down along the walls on to the bar.
32. Is it intended to direct down the tidal water or the flood-water, or both? Both. We hope to meet every contingency.
33. Will not your intention be defeated to some extent by the openings at the ends of the north-western training-wall? I do not think so.
34. Will not the tide split at these openings, both in and out? I think not. It is more likely to deposit sand inside.
35. Will you not lose a certain amount of scour there? Very little.
36. What is the reason for leaving a break between the north-western training-wall and the Stewart Island training-wall? To give access through to Back Creek. That is the main channel at the present time. There is no traffic down the main river.
37. If the proposed works are effective, what result do you think they will have on the bar? They will greatly improve the depth of water.
38. What depth have you now? 5 ft. 6 in. at low water.
39. What depth do you expect to get? Eight or 9 feet at the least.
40. What is the nature of the bottom? Sand. Inside, along the training-wall, we have rock.
41. At what depth? About 7 feet.
42. Is it intended to do anything with that? Something can be done.
43. Are the rocks in the fairway? No, they are close along the wall.
44. Will there be a sufficient depth of water on the bar, when the works are finished, to enable the trade of the river to be carried on satisfactorily? Yes.
45. In your opinion could any part of this work be left over for a time? I hardly think so. Part of the Stewart Island bank would be the only portion of the work that might be left over, and that would break the continuity of the work.
46. Would you get the same result, so far as the crossing and the bar are concerned, if you omitted any part of the design? I think not.
47. You think that the whole of these works are necessary to obtain the end desired? Yes.
48. Suppose it became necessary to reduce the cost, what part of the work could, in your opinion, be left undone? Part of the Stewart Island training-bank.
49. Do you attach importance to the proposed cutting from Warrell Creek into the main river? Yes; that is one of the chief parts of the work.
50. You would carry that out under any circumstances? Yes.
51. Has deep water followed along the training-wall as it has gone out? Yes. For some time the channel left the wall and went out in a southerly direction, but now it is keeping along the wall, and the bar is gradually working north.
52. What is the direction of the bar crossing now? About south-east.
53. Are you going to give a straight opening simply by making one wall? I think so. Originally the channel used to follow round the rocks on the north side of the entrance, but the South Spit used to come up so far that it made the crossing very difficult.
54. I suppose at the present time the worst seas come from the south-east, so that the sand piles upon the south side of the entrance? Yes.
55. If you only make the northern training-wall and breakwater, will not the entrance always be exposed to the south-east gales? To a certain extent, but we expect that the scour caused by the river water and the tide will keep a channel.
56. You do not wish it to be understood that one wall will make as good a job as two would make. No.
57. But it will give a sufficient depth of water to enable the boats that now come here to enter with safety? Yes.
58. It is only intended to improve the entrance to the river, and that part of the river immediately inside the entrance;—nothing is to be done to the upper river? No.
59. If the proposed work is carried out, will the country have to go to the further expense of removing the rocks you speak of? That will be a very slight expense.
60. But some of those rocks will have to be removed? There are pinnacles, here and there, which will have to be removed.
61. Do you know how this work is to be carried out? No; I have received no instructions on the subject. My present instructions are to continue the existing contract.
62. The contractor has all his gear and appliances on the spot, and can supply the stone at a minimum cost? Yes.
63. The stone required for the north-west training-wall and the Stewart Island training-bank would have to be punted? Yes; but for that work we could use small stone which is now useless to us.
64. Have you sufficient stone for the work at the quarry you are now using? I think so, for the work in hand.
65. Have you sufficient heavy stone to complete the northern breakwater? I think so.
66. What is about the weight of the blocks you are putting in there? Some of the stones weigh about 4 tons.
67. Is that the minimum weight? No.
68. You use smaller stone in between these large blocks? Yes.
69. If the training-walls were carried on simultaneously with the breakwater all the small stone and spoil could be used? Yes.
70. That would reduce the cost of the work? Yes.
71. Suppose the northern breakwater were to be continued by contract while day labour was used for the other work, would there not be a conflict? You could not put both parties into one quarry.
72. Is the quarry Government property? Yes.
73. Has it been leased to the contractor? No; he has simply been given the right to go there.
74. Can the Government take what stone they like? Yes.
75. And the contract is terminable at a month's notice? I do not think so. I think it is to go on until the money voted has been expended. The amount available for the work is about £13,000. 76.

76. If the proposed works are recommended, it will be a matter to be decided afterwards whether they shall be carried out by day labour or by contract? Yes. D. Houston.
77. When Warrell Creek is diverted and the training-walls constructed, will the work have any influence upon the flood waters in the higher parts of the river? No. 31 May, 1898.
78. These works will not be detrimental to the low land on the river banks higher up? No.
79. They are more likely to prove beneficial to them by giving a quicker get-away for the water? Yes.
80. Do you consider the Nambucca a rather bad entrance? It has been.
81. How does it compare with the other river entrances on the coast? As a rule, it is the worst in my district.
82. You are satisfied that the work already done has improved it? Yes.
83. Inasmuch as the Department has been able to give great relief by the expenditure of between £6,000 and £7,000, the Committee would like to know why such an enormous sum as £70,000 should be expended to bring about a comparatively small further improvement? We have always had great trouble in keeping the channel open just in front of the township here. It is not long since it was all dredged.
84. Do you not think that it would be wiser to continue the northern breakwater to its terminable point, and to await the effect of that before carrying out other works? That is the present intention.
85. If the object desired is attained by the construction of that breakwater, there will be no necessity for other works? The other works are necessary to enable steamers to get up to the Clarence.
86. Could not a channel be kept clear by means of the dredge? Yes; but she is to be used up the river to let the droghers come down. The "Euroka" goes up to Macksville nearly every trip. I have seen her there several times lately.
87. Could not the waterway be kept open by putting in an inexpensive training wall? I do not know. We have always great trouble with it now.
88. The original design for improving this place was prepared by Sir John Coope? We have followed his design very nearly.
89. It would appear that to a certain extent the inside works will be experimental? Yes, the inside works.
90. There can be no doubt about the outside works because of the experience that has been gained in regard to similar works in other places? Yes; the only experiment will be in connection with the openings in the walls.
91. How would it do to make only the north breakwater and the north-west training wall as a start? We should have to make part of the Stewart Island training bank to guide the water on to the north-west training bank. We have trouble now at the foot of Stewart Island. It is silting up there again, although it is not long since the place was dredged.
92. You will have the same trouble even when these walls have been carried out to a certain extent? Wherever a wall is made the channel generally hangs to it.
93. Do you expect the north-west training wall to cut away the sand deposit? Yes; but we should also probably use the dredge there, and pump the sand over the back of the wall.
94. What depth of water do you get immediately outside the bar? I cannot say.
95. Does it shoal gradually there? No; I think the water there is very deep.
96. What is the set of the current there? It is northerly.
97. Will the sand be spilled sufficiently far out for it to be swept round the point? Yes.
98. There will be no danger of its coming back again? No.
99. *Mr. Trickett.*] What is the object of keeping the back channel open? Well, there is a saw-mill round there, and other vested interests.
100. It would not be sufficient to have only one opening to the creek, at the north end? No.
101. Did the recent heavy weather do much damage to your works? I estimate that we lost from 1,200 to 1,500 tons of stone.
102. That was at the end of the wall? No; in the middle of it. The end was hardly touched at all.
103. Will similar damage be prevented in the future by the raising of the wall? Yes. So long as we can keep the water below the wall, very little damage will be done. The wall, when it was damaged, was being carried out on a dead level, 4 feet above high water.
104. Was this damage anticipated? No; we have had very big seas here before, and they have done no damage to the wall.
105. *Mr. Darley* gives it as his opinion that the material you are using is of a soft slaty character;—do you think it is likely to last? I think so; it does not fret.
106. Have you any works in your mind which can be looked upon as a guide in the construction of the proposed northern training-wall and breakwater? The only other similar work is at the Hastings; but there the wall is on the south side of the entrance, and it is more protected.
107. Do you not think that without a southern training-wall and breakwater there will always be trouble at this entrance? I think not.
108. When the water coming down the north-western training-wall strikes the northern breakwater, do you not think it will bound off from it? I do not think so.
109. You think that the current will hug the wall right along? That has always been our experience.
110. Were you a party to the designing of this scheme? No; I merely carry out the work in accordance with instructions forwarded to me.
111. Is it a work that can be carried out by day labour? I have three works which are being carried out by day labour, and three which are being carried out by contract. Day labour works entail an immense amount of bother to the officers in charge of them.
112. You keep open the end of the north-western training-wall to serve existing interests? Yes.
113. Do you think that the inner portion will gradually silt up? I think so.
114. Are the prices stated by *Mr. Darley* based upon current prices? Yes; from these and other works.
115. His prices are not likely to be exceeded? So far as I can see, they are rather over-estimated.

John

24

John Eichmann, sawmill proprietor and storekeeper, Nambucca Heads, sworn, and examined:—

- J. Eichmann. 116. *Mr. Trickett.*] How long have you resided here? Sixteen years in October.  
 117. Prior to that, how long were you trading on the coast? About twenty-eight or thirty years.  
 31 May, 1898. 118. During that period you frequently came to the Nambucca Heads in command of sailing vessels?  
 Yes.  
 119. Therefore you have a thorough knowledge of the district and of the various changes which have taken place at the entrance? Yes. I have seen the entrance at all times.  
 120. What was the condition of the entrance when you used to come here first? The bar was something as it is now, but it was never very bad? There used to be good water, though the crossing was generally narrow. Generally there was 8 or 9 feet of water on the bar.  
 121. That was before any work was done at all? The works have straightened the channel. When we came in before, we used to have to follow round by the rocks on the north side. Sometimes the south spit worked so far north that you could not get out at all. I have had vessels in here for five and six weeks at a time, and then they could only get out in ballast.  
 122. And sometimes vessels have been unable to get in? That very seldom happened. If the wind was favourable we could generally get in.  
 123. How did you get out? Sailed out, or hauled out.  
 124. In those days there were no tugs to assist you? No.  
 125. You have watched the progress of the Departmental works? Yes.  
 126. What do you think their effect has been? I think that they have done a great deal of good, and that they will do more good when the walls get a little further out.  
 127. What good have they done so far? So far, the deep water has followed right along the wall; and I think that if the wall goes out a little further the entrance will be still more improved.  
 128. There is a bit of a bend in the wall;—that I understand is necessary because of the rocky nature of the bottom? There is a rock which used to have a beacon on it, and round this the vessels had to go. By carrying the wall out in the way to which you refer they are getting 7 or 9 feet of water. If they had gone out straight they would have got only 6 feet.  
 129. You think they have gone out in the right way? Yes; it is better to have the channel out in deep water.  
 130. What depth of water had you on the bar in the olden times? The depth varied from 7 feet to 9 feet and 10 feet, and sometimes it was more. After a flood it was perhaps 11 or 12 feet.  
 131. Has the work that has been done improved the channel? It did not do so until lately. A spit used to form in front of the wall, but now the channel is running out straighter, and I think that when we get the wall out a little further there will be a straight channel.  
 132. You think that the scour will be stronger, and that the bar will be moved further out? I think so.  
 133. Do you think that the channel will go out in a straight line, or is it likely to make a turn, as it does at the Macleay? It may turn if there is no southern wall to stop it, but I do not think that it will. If there is a wall on the south side it could not help going out straight.  
 134. To construct a breakwater on the southern side would mean an enormous expenditure; therefore I should like to know from you whether you think the northern breakwater will make the entrance sufficiently good for the class of vessels that are likely to trade here for some years to come? That is a hard question to answer. I think that the tide will follow the wall. Before the wall got out so far as it is now the channel went right over to the south, but as the wall was extended the deep water followed it out.  
 135. Mr. Darley told us that if the modified scheme were carried out there would always be a depth of 8 or 9 feet at low tide;—do you think there will be that depth if only the northern breakwater is constructed? If the water of the river is confined as it is proposed to confine it we must have a better scour and a deeper channel.  
 136. There are openings left at each end of the north-western training-wall;—do you think that will affect the scour very much? I do not think so, but I am afraid that it will block us up.  
 137. You are not raising any difficulty? No.  
 138. You look at the general good? Yes.  
 139. When the work is carried out will it still be necessary to keep a dredge here? I do not think so. I do not see what good it could do. I think the scour will always keep the channel open.  
 140. The sand banks now existing in the channel will have to be removed by the dredge? Yes.  
 141. When they are once removed, and the training-wall constructed, do you think they will be likely to form again? I do not think so. I think the current is sure to keep the channel open.  
 142. Is 8 or 9 feet of water a sufficient depth to provide for the trade of this river? Yes; that would allow a vessel of 500 tons to come here, and such vessels will do us for years to come—for 100 years to come.  
 143. What vessel trades here now? The "Euroka," but the "Rosedale" has come here. The "Rosedale" has come here. The "Rosedale" is about 300 tons gross, and the "Euroka" is nearly as big, but she is differently constructed, and does not draw so much water.  
 144. Can the "Rosedale" come here at all times? Yes; she used to come here regularly, but the bar got very bad and she went away. She draws about 7 ft. or 7 ft. 6 in.  
 145. It is proposed to draw the waters of Warrell into the main river;—do you think that that would be an advantage in increasing the scour? It ought to be. At the present time there are half a dozen different channels, none of them of any depth.  
 146. Now you never have a good channel? There are so many openings for the water that none of the channels is of any depth. If all the water came down one channel we should get a better scour and a greater depth.  
 147. How far do the steamers go up the river? The "Euroka" goes to Macksville, 8 or 9 miles by water. She could go up 15 or 16 miles, but there is nothing to go for.  
 148. Is the trade of the river taken by the steamers direct from Macksville? Yes; though droghers bring cargoes down from Bowraville, Taylor's Creek, Warrell Creek, and other places.  
 149. When once you get into the river you have a sufficient depth of water for all purposes? Yes; I dare say that there is a depth of 12 feet, except on the flats near the mouth of the river.  
 150. After you pass the sand patch opposite Stewart's Island you can go to Macksville, and still further, without any difficulty? Yes.

151. Would it be of advantage to have a channel which would allow vessels to go right up the river? J. Eichmann. Yes; because the less knocking about the live stock gets the better. At the present time live stock is sometimes kept on board the droghers for two or three days and perhaps a week; then it is some time on board the steamer, so that it wastes away, and profit is lost. 31 May. 1898.
152. I suppose, too, that the employment of droghers means extra rates? Yes.
153. What is the rate from the Nambucca to Sydney? 1s. 9d. a bag for corn, 6d. a pair for fowls, and so on.
154. 1s. 9d. a bag would be about 17s. 6d. a ton? Yes. The back freight is £1 a ton dead weight.
155. How does that compare with the rate on the adjoining rivers? On the Macleay they pay 10d. a bag; on the Bellinger they pay as much as we pay; and on the Clarence they pay, I think, 1s.
156. Although the Clarence is so much further north than the Nambucca, yet by reason of its good entrance the rates from there are less than from here? Yes, and they can use bigger boats. That makes the rates cheaper.
157. What is the lowest price per bushel that pays the farmer? If they can get 2s. 6d. or 2s. clear, that pays them very well.
158. Would 2s. pay them? They could live on that.
159. But that would be cutting things pretty fine? Yes.
160. You mean net? Yes. They could not grow maize for less than that. Of course, if the rates were lower it would help them a great deal.
161. Is much maize grown on this river? 35,000 or 40,000 bags a year.
162. Where is it grown—how near to the entrance? The farms commence about 3 or 4 miles up. One farm is only about 2½ miles from the entrance.
163. Is the district a very good one for maize? Yes; we have some very good patches. There are farms here which produce 2,000 or 3,000 bushels of maize at a time.
164. Is the land subject to floods? Most of it is. Land which is not subject to flood is no good for maize-growing, though it will grow wheat, or oats, or barley. You want very strong land for corn.
165. What other industry is carried on in the district? Plenty of pigs and fowls are raised.
166. They are sent by steamer to Sydney? Yes.
167. Is there any dairying? Yes; we have two or three factories, but not big ones. Butter and cream are sent from here now.
168. Do you think that if you had a permanently good entrance the district would progress? If we had a better entrance, and rates were lowered, people would clear more land, and would go in more for dairying, which pays well. At the present time produce often spoils on their hands. Now they have sometimes to take their cream and their milk to the Macleay. I know two or three people who have done that, because of the bad state of the entrance and the irregularity of the steamer's visits. If the steamer was regular, the traffic in poultry and eggs would be larger than it is now.
169. What other industry is there on the river? There is the timber trade.
170. That is a large industry? Yes, though it has fallen away to some extent because the bar has been so bad. There were five mills here once, and I have seen twenty-four vessels lying here loaded.
171. Now I suppose there is only one at a time? Sometimes there are two or three.
172. Schooners of about 150 tons, I suppose? Schooners of from 80 to 100 tons.
173. All the timber sent from here is sawn stuff? No; we send away cedar, beechwood, and other logs, but most of the timber that is sent away is sawn.
174. I understand that the supply of timber is pretty well exhausted? There is plenty of cedar, but there is some distance to go for it, and prices are so low that it does not pay to draw it.
175. Where have they to go for the cedar? Right to the head of the river. They have to draw it 15 or 20 miles.
176. By bullock team? Yes.
177. Is not cedar becoming expensive? No, it is very cheap. Last time I only got 13s. for it; that would not pay.
178. What is the best paying timber? Hardwood—blackbutt, gum, tallowwood, mahogany, and ironbark. The haulers will fetch in box, but we cannot get rid of it, because they will not take it in Sydney.
179. How many people do you employ at your mill? Counting in drawers, fellers, and mill hands, thirty or forty men.
180. And Mr. Ellis would employ about the same number? Yes. There are eighteen men in the mill, twelve or thirteen bullock drivers, and six or seven fellers.
181. What prospect do you see of the country being recouped the proposed expenditure;—I do not suppose that the people would agree to pay port charges? Of course there will be more trade, and people will have a reason for settling on the land and improving it. That is all that you can expect.
182. There will be an indirect return in the way of increased settlement and trade? Yes. The money will not all be spent in one year; the work may take four years. When the entrance is improved the district will be opened up, and dairying will go ahead. Sydney would be nothing without the country districts.
183. Do people stay in this district? Yes; people who were here when I came are here still.
184. It is a very fertile district? Yes; but it might be greatly improved.
185. It has a good climate? A nice climate.
186. You honestly believe that it would be a more progressive place if you could have regular steamer communication and producers could be certain of getting to market safely? Yes; if we had a regular direct boat we should be much more comfortable.
187. With regular and certain communication the rates would probably be reduced? Yes; there would be a great reduction.
188. Do cattle do well here? They do very well. Of course, close to the sea the grass is not good, but further inland we have as good dairying country as any in the Colony.
189. As an old resident of the district, and as an old colonist, you recommend the carrying out of these works because of their local and general advantage? Yes.
190. It has been suggested that the Bellinger, the Nambucca, and the Macleay districts could be served by one harbour, with which they could be connected by means of a tramway;—what do you think of that suggestion? I do not think that such an arrangement would suit.

- J. Eichmann. 191. It would be a difficult matter to construct a light line of tramway to the Macleay, because of the hilly nature of the intervening country? Yes.
- 31 May, 1898. 192. I suppose your experience has shown you that water-carriage is always the cheapest? Yes, by far.
193. If to the steamer rates railway charges had to be added, you would be greatly handicapped? Yes. The steamer rates from any harbour you might make would be about the same as they are from here, and then there would be the tram charge in addition.
194. Has the value of property increased here? Yes; when I came here sixteen years ago this was all bush, and I had to clear my way through. The land then had no value, but now we have to pay £50 to £60, and as much as £80 for a small allotment.
195. You have every reason to feel confident of the prosperity of the district? Yes.
196. *Mr. Roberts.*] Is 1s. 9d. the lowest rate that has been paid for maize here? Yes; so far as I know. If the rate has been reduced it is only lately.
197. The secretary to the North Coast Steamship Company, in giving evidence in Sydney, said that the rate from the Nambucca was 1s. 6d. a bag? Well, it has been 1s. 9d. quite lately.
198. Are you aware that the rate charged on the Bellinger is only 1s. 6d.? In that case their rate is lower than ours, unless our rate has been very recently reduced.

William John Whaites, pilot, Nambucca Heads, sworn, and examined:—

- W. J. Whaites. 199. *Chairman.*] How long have you been here? Twenty-four years on the 6th of next month.
- 31 May, 1898. 200. *Mr. Roberts.*] Prior to being appointed pilot were you in command of vessels? Yes; I had been in command of several vessels.
201. Vessels trading on this coast? Yes.
202. Did you trade to the Nambucca? Yes.
203. Then you have a knowledge of the state of the entrance for a considerable time? Yes.
204. Was it subject to much variation when you came here first? Yes, to great variation.
205. I suppose, for the whole period prior to the commencement of the harbour works, it was not as good as it is now? The channel used to come in under the North Head and sweep around by the rocks. The South Spit would sometimes work right up north, and then the river would break out through the spit and make a new entrance to the south.
206. Was that channel sufficiently wide to enable vessels to go through with safety? Yes; we have taken vessels out through the spit day and night. When the channel through the spit was open the channel round the rocks was shoaled up.
207. Was the channel through the sand-spit caused by the rush of flood-waters? No; the South Spit would work up to the north so far that the channel round the rocks became shoaled up, and then the river would cut through the spit to the south.
208. What depth of water did you get then? We got various depths. I have known there to be a depth of 10 feet and 11 feet at low tide, but sometimes there were only 3 or 4 feet.
209. What depth of water did you get when the channel came round under the North Head? From 10 feet to 12 feet at times. The channel was generally shallower when it went outside. Sometimes there was not as much as 4 feet of water in the channel through the sand.
210. Could vessels get in then? Yes.
211. You got them in at high-water? Yes.
212. Has the entrance ever been so bad that sailing vessels could not get in? Yes, often.
213. Have they been loaded outside? No; they have waited until there was an improvement.
214. What is the longest time that you have known vessels to wait for an opportunity to come in? A week or eight days.
215. And how long have you known them to wait for an opportunity to get out? Five weeks.
216. For how many years has a steamer been trading here? For fourteen years.
217. What steamers have traded here during that period? The "Mary Cochrane," draught 8 feet; the "Noblie," draught 8 feet; the "Fernmount," draught 7 ft. 6 in.; the "Wellington," draught 9 feet; the "Rosedale," draught 7 feet; and the "Euroka," draught 5 ft. 6 in.
218. Was not the "Euroka" built specially for the Nambucca trade? She was built specially for shallow bar-entrances.
219. Is the "Euroka" a regular trader to the river now? Yes.
220. Was not the "Wellington" lost near here? Yes.
221. Was that in an attempt to enter? No, in crossing out.
222. Did she get stuck on the bar? There were 10 feet of water on the bar at the time, but she struck and it affected her steering.
223. Was it blowing hard at the time? No. The channel was then close to the rocks, and she struck with her keel. Before the master could get way off her she slewed round broadside on to the rocks.
224. Did she become a total wreck? Yes.
225. Has the northern breakwater advanced sufficiently for you to be able to say if its effect will be beneficial? Yes.
226. Are you of opinion that when it is completed it will answer the expectations of its promoters? I think it will.
227. Was not a large part of it washed away recently by the south-east gales? The top of it was levelled off by an exceptionally heavy sea during a high tide.
228. How often would you have such a sea—once in twelve months? I have not seen such a heavy sea for seven years.
229. Was that what is now known as the "Maitland" gale? Yes.
230. That part of the wall which is washed down had not been finished when the gale occurred? It was finished, but since then they have come to the determination to raise the wall.
231. Do you think it will be an improvement? Yes.
232. Do you think it will render unnecessary the construction of a southern breakwater? I should certainly recommend the other work. Of course, at times, the tide may shoot out through the South Spit.
233. Do you think that something should be done on the south side to protect the entrance? Yes.



W. J.  
Whaites.

31 May, 1898.

234. Do you regard that as a very important matter? I think it would be of great advantage if something were done to prevent the tide from crossing the South Spit. The channel now hangs close to the northern breakwater.
235. Do you fear that the northern breakwater may be washed away, or would what you suggest increase the depth of water in the channel? What I suggest would increase the depth of water in the channel, and would make it permanent.
236. Do you not think the channel will be permanent if only the northern breakwater is made? No, because it is possible that the water may cut through the southern spit at times. I think, however, that the northern breakwater will give excellent results. At the present time the scour shoots away from the breakwater for a short distance and comes back to it.
237. Do you not think it would be desirable to await the effect of the northern breakwater before doing anything on the south side? The northern breakwater is certainly the more important work of the two.
238. It is giving a good depth of water in the channel as it proceeds? Yes.
239. You do not apprehend any danger of the wall being washed away after it has been raised? No, though it may settle a bit.
240. Your principal reason for recommending the southern breakwater is so that there may be a better channel? To make the water hang to the northern breakwater.
241. Not to protect the northern breakwater from the sea? No.
242. Do you think that the north-west training-bank and the Stewart Island training-bank will bring about the desired scour? Yes.
243. Do you think that they will bring about that scour without the construction of the eastern training-bank shown on the plans? They will create a scour, but not so good a scour as if the eastern training-bank were made. All the shoals shown on the map are caused, not by the silt coming down the river, but by the sand coming from the sea.
244. You know that it is intended to turn Warrell Creek into the main river? Yes. I think the scheme as a whole is a good one.
245. Is there good water right up to Macksville? Yes, once you get above the flats. The "Euroka" goes up to Macksville.
246. Does she go as far as Bowraville? No; she goes to within 5 miles of that place.
247. How do the Bowraville people get their produce away? They punt it down the river.
248. Where is Taylor's Arm? That is the name of the south branch of the river. It joins the main arm  $1\frac{1}{2}$  miles above Macksville.
249. Is the land above Macksville more fertile than the land lower down the river? Yes; it is richer land.
250. Is there a large area of good land there? Yes.
251. How does that land compare with the land on the Macleay? It is very good. I think the alluvial flats are equal to similar land on any of the other rivers on the coast.
252. Are they narrow? They are small flats.
253. Are they all taken up? No.
254. Is there land still open for settlement? Yes.
255. Has settlement increased since the harbour works were commenced? The settlement on Taylor's Arm has been increasing for years, but I cannot say that there has been a great increase since these works were commenced. I believe that they will have the effect of giving an impetus to settlement.
256. Have you heard complaints about the isolated condition of the district? No; but I have felt it myself. The people complain that they cannot send their produce away regularly, especially perishable articles such as pigs, fowls, eggs, and so on.
257. Have they not been asking for these improvements for many years? Yes.
258. Do you think that if the proposed works were carried out a settlement would increase? I am sure of it.
259. What causes you to form that opinion? With regular steam communication hundreds of acres of land would be used for dairying, which people are unable to use now.
260. Is there much difficulty in getting the steamer out now? No; but she has been running very irregularly. At times she is away for ten or twelve days.
261. It would not do for her to be away as long as that if there were produce waiting on the wharf? Well, sometimes she has to go all the way to Sydney.
262. Does the steamer only come here when there is a full cargo for her? People in Sydney generally communicate with the agent here, and when the maize is ready they come for it.
263. Are the farmers put to great inconvenience because of the long intervals between the visits of the steamer? Yes. Of late years the bar has been very bad. Two years before the harbour works were started the bar was very bad, and became bad every winter until this winter.
264. How long is it since the harbour works were started? About two years last February.
265. Since then has the steamer come more frequently? Yes; she was built for the river trade, and she has been coming more frequently.
266. Does she give a weekly service? About that lately, with an occasional break caused by bad weather, or something like that.
267. Given good weather, would not a weekly service suffice for the trade of the river at the present time? Yes.
268. Does the "Euroka" take away timber, or is that trade done by sailing vessels? By sailing vessels.
269. How many regular traders are there? About seven vessels trade here now.
270. What is their draught of water? From 7 ft. to 7 ft. 6 in.
271. How far up the river do they go? As a rule they load at the mills.
272. Are there only two mills on the river at the present time? Yes.
273. Were there ever more? There used to be four mills.
274. Why have some of the mills closed? One mill was burnt down, and another has been shifted to the Bellinger.
275. Does not the Nambucca timber rank among the best on the northern coast? I believe so.
276. Does much of it go to the London market? I know that consignments have gone to London, but not direct from here.

W. J.  
Whites.  
31 May, 1898.

277. Is it all dressed timber that goes to England? It is generally sawn into planks, 9 x 3, for road blocks.
278. Is any timber sent for girders? I do not know if any girder timber has been sent out of the Colony.
279. The principal demand in England is for wood blocks? Yes.
280. Would the timber supply here last for years? I think it will last for many years, though, of course, the men will have to go further back for it.
281. How far do they draw the timber now? Five, 6, and 7 miles in many instances. Some people have a less distance to draw it.
282. Is the timber trade in a flourishing state? I believe the mills have as many orders as they can cut.
283. Is less maize being grown here now than was grown a few years ago? No; more maize is grown now.
284. They are not giving up maize-growing to go into dairying? No; the export of maize is increasing.
285. Can you tell us the value of the exports and imports of the river? The following statement contains an account of the exports from the river for the year 1897, and their approximate value:—

			£	s.	d.
Hardwood, sawn...	2,868,000 feet, at 10s. per 100 super. feet	...	14,840	0	0
Cedar, rough	84,000 " 15s. " "	...	630	0	0
Girders, ironbark	42,000 " 1s. per cub. foot...	...	2,100	0	0
Shingles	104,000 at 15s. per 1,000	...	78	0	0
Palings	408,000 " 6s. " 100	...	1,224	0	0
Maize	89,680 sacks, at 10s. per sack	...	18,815	0	0
Figs	1,680 at 15s. each	...	1,260	0	0
Fowls	111 coops, at 20s. each...	...	111	0	0
Eggs	233 cases, 10s. per case	...	116	10	0
Oranges	179 " " 5s. "	...	44	15	0
Citrons	203 " " 10s. "	...	101	10	0
Hides	304 at 6s. 8d. each	...	101	6	8
Total	...	...	£38,922	1	8

286. I understand there are some antimony mines here? Some mines were working for three or four years, but the price of antimony went so low that it did not pay to continue.
287. Have those mines been abandoned? Most of them. One or two of them are keeping on in a small way.
288. What dredging is necessary to enable vessels to go up the river with facility? All along the outside of the north-west training-bank, and half way along the Stewart Island training-bank, requires dredging.
289. And from there you have a good depth of water right up to Macksville. Yes.
290. What depth of water have you at the entrance at the present time? The following statement shows the variation in depth from the beginning of 1893 up to May of this year:—

Soundings, low water, spring tides.		
1893.	Feet.	Remarks.
January	7	
February	5	Bar channel worked out south.
March	7	Worked back to N. Head.
April	7	" " "
May 1 to 10...	5	Two channels—one by N. Head, one along south beach.
" 11 to 31...	3	
June 6	3½	
" 15 to 30...	9	Freshet deepened and straightened the channel to the N. Head.
July	9	
August	9	
September	9	
October	8	
November	8	
December	8	
1894.		
January	8	
February	7	
March	7	Crossing inside 5 feet.
April	7	" " "
May	6	" " 6 "
June	6	Crossing improved.
July	7	
August	7	
September	7	
October	6	
November	7	
December	8	

Soundings

21960

MINUTES OF EVIDENCE—HARBOUR WORKS AT NAMBUCCA RIVER.

W. J. Whites.  
31 May, 1898.

1895.	Feet.	Remarks.
January ... ..	8	
February ... ..	7	
March ... ..	7	
April ... ..	8	
May ... ..	8	
June ... ..	8	
July ... ..	7	Crossing, 4 feet.
Aug. 1 to 18... ..	7	
" 18 to 31... ..	6½	" 4½ "
September ... ..	6½	" 4½ "
October ... ..	7	" 5 "
November ... ..	7	
December ... ..	7½	
1896.		
January ... ..	6	Crossing, 5 feet.
February ... ..	5½	" 5 "
March ... ..	6	" 5 "
April ... ..	6	" 5 "
May 1 to 26... ..	5½	" 3½ "
" 26 to 31... ..	5	" 2 "
June 1 to 20... ..	3	Nothing in or out; crossing, 1 foot.
" 21 to 31... ..	3	Channel broke out through south spit; nine vessels towed out half-loaded.
July ... ..	4	Channel working further south.
August ... ..	4½	
September ... ..	5	Crossing, 4 feet.
October ... ..	5	" 4 "
November ... ..	5	" 4 "
December ... ..	5½	" 4½ "
1897.		
January ... ..	6	Crossing, 4½ feet.
February ... ..	6	
March ... ..	5	" 3½ "
April ... ..	5	Channel working north 20 feet every twenty-four hours.
May ... ..	5	Two channels—one by N. Head, one out S.E.
June 1 to 13... ..	4	Both channels.
" 14 to 30... ..	2	One vessel out during month.
July ... ..	3	
Aug. 1 to 9... ..	1½	New channel broke.
" 10 to 31... ..	2½	Out along the south beach.
September ... ..	3	
October ... ..	3½	
November ... ..	4	Channel working S.E.
December ... ..	4	
1898.		
January ... ..	5	Channel working north and following the line of the training-wall of breakwater.
February ... ..	5	
March ... ..	4½	
April ... ..	4½	No crossing.
May ... ..	5½	and improving.

The depths are at low-water springs.  
Rise of tide—spring, 3 feet to 3 feet 6 inches.  
" " neaps, 1½ " 2 " 3 "

- 291. Do vessels come in here at night? No; but they can go out at night.
- 292. Does the steamer come in at night? Yes.
- 293. You regard the entrance as safer now than it ever was previously? It is better now than it has been for some years.
- 294. Have you ever known it to be better than it is now? Yes, much better. After a fresh the river used to go straight out occasionally.
- 295. Do you think that the north-east weather in summer-time is likely to silt up the entrance? No; I think that the scour will prevent that.
- 296. You think that the proposed modified scheme will answer all purposes for many years to come? Yes.
- 297. If it were not for the expense, you would like to see the southern breakwater and the eastern training-wall constructed? Yes.
- 298. That would make a complete job? Yes.
- 299. What is the population of the district? I think about 3,000.
- 300. Do you think that the importance of the district justifies the proposed expenditure? Yes.

27

David Mitchell, engineer and dredge master, Nambucca River, sworn, and examined:—

- D. Mitchell. 301. *Mr. Clarke.*] How long have you been in charge of the dredge here? Since July, 1893.
302. Were you here before that? I was here in November, 1891, for five weeks.
- 31 May, 1893. 303. Why were you removed? I went to take another man's place elsewhere.
304. What work have you done since you have been here? We have dredged the river from the pilot boatshed up the Bellwood channel, and up the main channel.
305. Has the work done by the dredge proved beneficial? Yes; but the river requires constant dredging to keep it open. It is only a year and nine months since we dredged the place where we are working now.
306. How do you dispose of the sand? We have been throwing it behind the spit.
307. Does any part of it go back into the river again? Very little of it.
308. What kind of a dredge are you working? An improved sand pump.
309. I suppose the dredge is kept continually at work? Well, we were down at the Macleay for eighteen months, on one occasion.
310. Dredging will make very little permanent improvement in the river? Of course the improvement done by the dredge is only temporary. The work has to be done over again, continually.
311. Does the river require dredging higher up? There is good water after you get past the flat at Redbank until you get about 3 miles above Macksville.
312. Do you think the proposed harbour works will improve the entrance? I think so. We could do away with the channel between the north-west training-bank and the shore. From my experience it will be necessary to take the dredge there every now and again to clear it.
313. Do you think that the diversion of Warrell Creek will be an improvement? I think it will be a great improvement.
314. Will the dredge be required after the proposed works are carried out? No doubt there will be less dredging to do; but the river will probably shoal in places after freshes.
315. Will it be possible to pump sand over the back of the dyke, and thus to strengthen the dyke? Yes; that would be a good way of disposing of the sand.
316. The breakwater already constructed has had a good effect upon the entrance? Yes; but of course the scheme is incomplete yet.
317. Do you think that the walls on the northern side of the river would be sufficient? No doubt the improvement would be greater if the walls on the south side of the river were made; but I think it would be well to complete the walls on the north side of the river first.
318. *Chairman.*] You look upon the work of the dredge as purely temporary, to keep open a channel, to enable steamers to get round at the back of Stewart Island? Down near the mouth our work is purely temporary; but further up the river, where we have been dredging through a bank of shingle, it has stood very well.
319. You are working now in a comparatively narrow piece of water; but you have not close indurated sand to deal with? No.
320. Consequently, your work is perpetually filling up? Yes, to a large extent. A lot of sand come in from the sea.
321. Does not the sand work all along the southern spit, with an incoming tide? Sometimes it does; but at other times it seems to run away from the spit.
322. Does the tide take a direct course, or does it go from the northern shore over towards the sandspit, and back again? In some places.
323. Were you working here before the harbour works were commenced? Yes.
324. In your opinion have they greatly improved the entrance? I think so. I have seen vessels bar-bound here for eight weeks at a time. Now it is a rare thing for them to be bar-bound for more than a week or eight days.
325. With such an exposed southern shore the bar must, of necessity, shift very much;—has the tendency of the northern breakwater been to straighten the bar? Until it commenced to bend it did. The water seems to strike off from the bend.
326. Is not one of the greatest difficulties in connection with bar entrances the shifting character of the bar? Yes.
327. If any scheme could be adopted to keep the bar in one position, and to deepen the water on it, that would effect an improvement? Yes.
328. The northern breakwater has been designed to drag the scour right round within a few feet of Rocky Cliff; that will draw the bar considerably to the north of its present position; this being so, do you think that there is any danger of the southern sand-spit working north across the channel? I should not think so.
329. I suppose the scour would prevent that? Yes.
330. And the sand would be spilled out over the bar into the outer current, and carried away north? I think so.
331. Do you think that the breakwater will go out sufficiently far to spill the sand into deep water? It seems to go out far enough.
332. The intention of the north-west training-wall is to assist the scour, and thus by natural means to make a channel wide enough for ordinary vessels;—if that result is obtained, the dredge will not be required lower down towards the mouth? Yes.
333. Do you not think it extremely probable that a scour will be set up from the extreme end of north-west training-wall, right round to the extreme end of the northern breakwater? Yes.
334. If the work of the dredge were confined to that part of the river which passes Stewart Island, there would then be uninterrupted navigation right into the river? Yes.
335. I suppose that the cutting through of the bed of shingle near Stewart Island will not take very long? It will take about twelve months. There are a few feet of sand, and then a bed of shingle.
336. If that piece were dredged, any vessel that could cross the bar could go up the river? Yes; so far as we have gone we have found shingle, but about the far end of Stewart Island there is sand.
337. You are getting close to deep water again there? Yes; we will end in about 10 feet of water, I think.
338. I believe that there is a lot of dissatisfaction here about the state of the bar? Yes.

339. I suppose there are plenty of complaints because of the difficulty of navigating the river? Yes; but the upper part of the river is not so bad at the present time. There used to be great complaints about the flats up above, but we have a small dredge at work up there now. D. Mitchell.  
31 May, 1898.
340. Do you know of anything that could be added to or taken from the design to improve it? I do not.
341. Have you seen the harbour works carried out at any of the other rivers? Yes; at the Clarence and at the Bellinger. The wall at the Bellinger has had a good effect.
342. And the training-walls at the Clarence have been a pronounced success? Yes.
343. Do you know of any reason why these walls should not be equally successful? No.
344. At the present time the bar is very bad? Yes.
345. And at times the people are subject to great inconvenience in getting produce away and in bringing goods here? Yes.
346. I suppose the only way to help them is to improve the bar? I do not see how else you could help them.
347. There is some talk about making a railway connection between this and other rivers, but I suppose there is nothing in that proposal? I do not see how railway carriage is to compete with water carriage.

William Bragg, bee-farmer, Lower Nambucca, sworn, and examined:—

348. *Mr. Farnell.*] How long have you been a resident of the Nambucca? About twelve years. W. Bragg.  
31 May, 1898.
349. What is the size of your holding? Forty acres.
350. How much of that is under cultivation? I have only about 4 acres ploughed, and I suppose I have 12 acres partially cleared. The trees have been felled and a crop has been put in with the hoe.
351. Where do you ship your produce? On the Nambucca.
352. Have you been put to any inconvenience by reason of the bad state of the entrance? Yes. The steamers do not run regularly, so that we have great trouble in sending anything away. It is sometimes a matter of weeks to get your stuff away. You have to keep your ears perpetually open for the whistle of the drogher.
353. Have things been improved by the carrying out of the harbour works? There has certainly been an improvement.
354. Have you noticed any improvement in the bar since the breakwater was carried out? I cannot say that I have; but I think that there will be an improvement when all the walls are carried out. There is always deep water alongside the heaps of ballast that are thrown out by sailing vessels.
355. If better facilities were given for getting produce to market, would you put more land under cultivation? I would put all the land I could under cultivation. The lower Nambucca is more suited for dairying than for corn growing. We have only about 18 inches of soil, but on the upper part of the river the soil is very deep.
356. You are engaged in mixed farming? Yes.
357. You do not grow maize to any extent? No; I do not suppose that when I get the place well worked I shall have more than 10 acres.
358. Is there plenty of land still available for settlement in the district? Yes. If you look at the map you will find that there is only a fringe of land along the bank taken up at the present time.
359. Is the country suitable for dairying and mixed farming? Yes, and especially the lower part of the river. Up as far as Macksville the country is more suited for dairying than for corn growing, while higher up, again, it is best suited for corn.
360. Have you heard other people complain of the inconvenience of the present steamer service? Yes, ever since I have been here. I have seen twenty-one vessels lying here, unable to get out. Vessels can generally get in because they are bumped over by the sea.
361. What effect has the floods on the bar? There has always been a good bar after a flood. I have heard that there has been 22 feet of water on the bar after a flood.
362. Do you think that the proposed departmental expenditure is justifiable, considering the importance of the district? I think so.
363. Do you think that if the works are carried out more land will be put under cultivation, and that the trade of the district will increase? I think so.
364. Are the people about here industrious? Yes, as a rule, the farmers here.
365. *Chairman.*] Which would be the best way to give relief to the district,—to open the port or to build a railway to the Macleay? To open the port.
366. What the settlers want is certain and regular communication with the market, which, I suppose, is Sydney? Yes.
367. It does not follow that you require either larger vessels or vessels to trade more frequently; what you require is a regular service? Yes.
368. If the port is improved to enable you to get that, you will have the advantage you want? Yes. I sent corn away in April last, upon which I paid 1s. 6d. a bag freight, whereas I heard that corn was taken from the Macleay for 10d. a bag.
369. You think that if the port were improved that would lead to the development of the district? Yes. All round me there are farms lying idle because of the bad state of the entrance.
370. Will large areas be brought under cultivation if the entrance is improved? Yes. Since these works were started three creameries have commenced operations here.
371. I suppose the land is good enough, but very heavily timbered? Yes; it is disheartening work to clear it.
372. I suppose people are turning their attention to dairying because they can get a return without expending so much in clearing? Partly.
373. *Mr. Roberts.*] You devote most of your attention to bee farming? A good deal of it, but I intend to go in more for maize growing. I intend to cultivate about 10 acres. About 20 out of my 40 acres are swampy.
374. Do you find bee-farming profitable? Yes; it was more profitable at first, but too many have gone into it, and the prices are coming down.
375. Is there a great export of honey from this district? No; except what I have sent, very little has gone away. I have sent forty-five cases away—120 lb. to the case.

28

- W. Bragg. 376. Do you get a satisfactory price? I have got as much as 3½d. a lb. for my honey.  
 377. Is the market frequently glutted? Yes; from about November it is best to hold back.  
 31 May, 1899. 378. Are you sending as much away now as you did at first? I am increasing my output every year.  
 379. Are you the only bee farmer on the river? No, another man has started.  
 380. Do you supply much honey locally? Yes; but the place is so small that it hardly pays to go round with the honey.  
 381. Do you go in for poultry and pigs? Yes; but not very much.  
 382. Have you been on your present holding long? No; I have been engaged in the mills for some time.

TUESDAY, 1 JUNE, 1898.

[The Sectional Committee met at the "Star Hotel," Macksville, at 2.30 p.m.]

Present:—

CHARLES ALFRED LEE, Esq. (CHAIRMAN).

The Hon. CHARLES JAMES ROBERTS, C.M.G.  
 The Hon. WILLIAM JOSEPH TRICKETT.

HENRY CLARKE, Esq.  
 FRANK FARNELL, Esq.

The Sectional Committee further considered the proposed Harbour Works at the Nambucca River.

Thomas Bolton, President, Macksville Progress Association, Macksville, sworn, and examined:—

- T. Bolton. 383. *Chairman.*] How long have you resided here? Over thirty years.  
 1 June, 1898. 384. *Mr. Farnell.*] I understand that you have considerable knowledge of the trade and resources of the Nambucca district, and of the difficulties and inconvenience caused by the bad entrance to the river? Yes.  
 385. Will you describe to the Committee the difficulties against which you had to contend before the harbour works were commenced? In former years the entrance was an altogether different place from what it is now. The South Spit used to overlap or be on a level with the North Head. Now the sand has all disappeared. The spit in front of the mills was 5 or 6 feet high, and mangroves used to grow on it. The channel from Warrell Creek came across to the Schoolhouse Point, but that channel is now blocked up. In my opinion the channel is not as good as it was in former years. Then they used to shoot vessels over the bar, bringing them up with the anchor on the spit. Now they cannot do that. They have not been able to do it for years. In former years the channel was narrow, but very deep.  
 386. In those days the channel was almost straight? It followed round the rocks. Of course there was a reef of rocks where the training-wall is now, and the channel was between it and the spit. A great deal of the sand that used to be there has gone away.  
 387. Has it gone away since the harbour works have been in progress? No.  
 388. Its disappearance is not owing to them? No; it is due to the flood, and to the heavy seas.  
 389. What depth of water had you before the harbour works were commenced? The depth would vary. Sometimes we had 5 ft. 6 in. at low water.  
 390. Would that be a sufficient depth for the boats trading here now? Hardly.  
 391. They would come in at high water? Yes. Part of the difficulty of entering is overcome now by the employment of the tug-boat. I have known vessels to lie inside the river for eight or ten weeks at a time. I have seen twenty-eight vessels bar-bound here at a time.  
 392. I suppose the steamers have not so much difficulty in getting out as the sailing vessels have? No.  
 393. I suppose the sailing vessels find it difficult to get steering way? Yes. Until the training-wall was made the South Spit used to come up so far that you had to make a very sharp turn to get out. The wall has caused a scour which has cut the spit away. That shows that when the scheme is completed it must do good. The channel will never be any good to speak of until we get a flood which will wash the place out.  
 394. Were the twenty-eight vessels that you speak of bar-bound since the harbour works were commenced? No.  
 395. Is the trade of the district equal to or greater than it was at that time? At that time the trade of the district was very little, and consisted principally of the export of cedar and other timber. Since then Taylor's Arm has been opened up—a place which I believe will greatly advance. Land is being cleared all round the district, and they are going in for maize-growing and dairying. The bulk of the drivers, instead of drawing logs, are going into farming and are clearing land, so that every year our exports are increasing. Our exports this year will amount to nearly as much more as the exports of last year.  
 396. What was the population of the district when you first settled here? There were a few people living at Bowra, in the cedar scrubs. There was a selection at Macksville and another one near it, and a selection at Congarini. I marked out the road that is now going to the Clybucca.  
 397. The population has increased since then? There is a larger population in this district now than there is in the Bellinger, but it is more scattered. The Bellinger is only one big valley, though a very fertile valley, while here the good land lies up the various creeks. There are settlements 25 miles above Bowra and a long way up Taylor's Arm.  
 398. What has induced people to come here? There was land for them to take up. They knew that a vessel could be got in and out of the river, and that was about all you could say for the Macleay then.  
 399. Do you think settlement would have been greater if there had been a better bar? Most decidedly.  
 400. Has the work already carried on had a beneficial effect upon the entrance? Most decidedly. As the wall has been made the deep channel has followed it out.  
 401. Have you any reason to believe that the other training-walls will prove less beneficial? Yes, most decidedly.  
 402. You are opposed to the construction of the other training-walls? Yes.  
 403. Do you think that the diversion of the waters of Warrell Creek into the Main Arm will have the effect of creating a better scour? Certainly.  
 404. I understand that you do not approve of the proposal before the Committee? Not altogether. There is a flat at the upper end of Stewart Island, and until that flat is cut through the water cannot get into the north channel to wash the bar out.

405. Do you not think that a natural scour will be created if the training-walls are constructed? If you confine the water you must increase the scour. T. Bolton.
406. It is proposed to divert the water of Warrell Creek into the main arm;—do you not think that that will bring about the desired result? Certainly. 1 June, 1898.
407. I understand that you advocate the dredge of the river; but would it not be better to create a scour which would have the same effect? It would be of no use to run the training-wall from Blackwood Point at the upper end of the island until you had removed the flat there. The channel at the upper end of the island was closed because a vessel threw out some heaps of ballast there. That flat wants cutting through, so that the channel may be opened up again. I do not see what use the training-walls can be until you open the channel. According to the surveyor, there are 11 feet 6 inches of water in the river above the flat.
408. Suppose the engineers say that the proposed works will give a good scour, and make a channel, will you not rely on their judgment? I admit that the training-walls must confine the water; but I say that the flat must be dredged first.
409. Suppose the channel is created by the scour caused by the diversion of Warrell Creek? The flat I speak of will have to be dredged through.
410. It is a sand-flat? Yes. There will not have to be a great deal more done from where the dredge left off. Then if the wall is wanted afterwards it can be made.
411. If they construct the training-wall and dredge the place, depositing the sand behind the wall, will that satisfy you? Certainly; because it will make the channel permanent. I want the channel opened first. There was never a channel on the north side of the island until of late years.
412. What steamers trade here now? The principal steamer is the "Euroka."
413. What draught has she? About 4 ft. 6 in. or 5 feet.
414. Does she supply the wants of the trade of the district? Not always. I doubt if she will be able to take all the maize away this season if she runs constantly, leaving the timber trade and the other freight out of consideration.
415. But she has met the requirements of the district so far? Well, she is only a new boat. We have had the "Rosedale," and other boats, trading here.
416. Your cause of complaint is not that you have not a good service, but that you have to keep your perishable goods a long time before you can get a boat? Yes. When we send our produce down to the Heads there is no one there to look after it.
417. You contend that it is essential to have the entrance improved in order to establish a regular service which will be of benefit to the trade of the district? I am of the opinion that once the training-wall is finished to the outer point the first flood of any note will sweep the bar away, and we shall have a port. After a heavy flood I have seen vessels beating in and out in a gale of wind.
418. From what direction? Easterly, and particularly south-easterly, winds play upon the bar. With regard to the tide at Warrell Creek, it will run out in from three-quarters of an hour to an hour after it runs out of the main river, and I will explain the cause of that. From the mouth of Warrell Creek at the Heads to Scott's Head is a distance of 9 miles, a narrow sandy beach intervening all the way. As the tide rises, it comes in under the sand and swells the water in the creek, consequently the tide will be running up in the river for half an hour or an hour, while the ebb tide is running out of the creek.
419. I suppose there is a strong flow of tidal water in Warrell Creek? There is a good flow of water there during a heavy fresh, but otherwise there is not much flow. The creek is very shallow.
420. However, by the diversion of Warrell Creek as proposed, we shall get rid of one source of difficulty? Certainly.
421. Have you any idea as to what the trade of the district amounts to? I have not had time to go into particulars.
422. Do you think 40,000 bags of maize are sent away annually? I cannot say. This year will be an exceptional year.
423. Have you any idea as to how many acres are cultivated for maize? No.
424. Have you any idea as to the average size of the holdings here? No.
425. Are you satisfied that if a good port is given, the farmers will be prepared to put more land under cultivation? They are doing that every year. The land here is very difficult and expensive to clear. It is not like the alluvial scrub land on the Bellinger and on the Macleay.
426. If we give better facilities for the export of produce, do you think more land will be put under cultivation? Yes.
427. Do you think that the improvement of the bar will lead to the reduction of freights? It should do so. Perishable goods, such as pigs, deteriorate on the journey down. Pigs that leave here fat are only store pigs when they get to Sydney.
428. What is your opinion as to the permanency to the timber trade? There is a great deal of timber here yet, but, of course, the drawers have to go farther afield each year.
429. Still, there is sufficient timber to last for many years? Yes. By the time they have got out all the good timber standing now they will be able to fall back on the young trees growing up. Trees that were saplings when I came here are now 2 or 3 feet through.
430. You think there is room for the development of the timber industry? Certainly.
431. Can you give us an idea as to whether the dairying industry promises to expand? It is only in its infancy yet; but everyone here is going in for dairying. All the talk is about it.
432. Is the land suitable for grass? There are thousands of acres that will be taken up for dairying if a proper outlet is provided.
433. Where is this land? All over the place. There are parts of the country out back where only a bit here and there has been taken up, which would keep a dozen families. It is all good grazing land.
434. Do all the lands you speak of come within the influence of the proposed works? Certainly.
435. The produce from those lands would not go to any other port than the Nambucca? No. There is also plenty of good land further out the produce of which will, I think, eventually come this way instead of going to the Macleay.
436. Do you know of an alternative proposal to construct a tramway from the Nambucca to the Macleay Heads? No.
437. Suppose that tramway or railway communication with the Macleay was given to you, and the Macleay entrance was made navigable, would that suit the people of the Nambucca? Which entrance to the Macleay would you improve? 438.

29

- T. Bolton. 438. The new entrance? Decidedly not. With two or three heavy gales the whole of the sandy beach there will be in the river.
- 1 June, 1898. 439. *Chairman*] Would such a railway suit you better with a waterway of your own? Decidedly not.
440. *Mr. Farnell*] You think that the Nambucca is the natural outlet to this district? Yes.
441. And you think that the improvement of the entrance will do all that is required by the people of the district? If the flats are opened up to the top end of the island the floods will wash the whole channel out with the aid of any training-wall, besides that which is there now. I have been in and out of those bar-harbours since 1849. I came to the Macleay in 1849, and where the new entrance is now there was then a sand-flat which we used to get water in.
442. Have you noticed any material difference in the depth of water in the main river since you have been here? No, it has always been about the same.
443. I understand that the river is navigable for many miles? Well, the "Euroka" could go up 5 miles above Macksville.
444. Would it be a convenience to the people if she could go up still further? No. The people there will always have to bring their produce down on the droghers. I believe that Macksville will be the head of navigation for all time.
445. Do you know of any other way whereby the convenience of the people of the district may be met than the improvement of the river entrance? There is no other way that I can see.
446. *Mr. Roberts*] Where is the best maize-growing land on the Nambucca? The best alluvial land is at Bowra and on Taylor's Arm. There is also good land on Warrell Creek.
447. Are there many farmers on Warrell Creek? There is more land to be taken up there.
448. Is all the best land taken up? Yes, and in some places the back land has been taken up. Nearly all the water-frontages have been taken up.
449. Is the land you speak of within easy distance of the Government wharf? It is 15 or 16 miles from the wharf to the first settlement up the creek. For the last 9 miles of its course the creek passes through sand.
450. Do the droghers go up Warrell Creek to get maize? Occasionally, when there is a load ready.
451. There is no difficulty in getting the droghers up? Not during spring tides. I have not heard of any difficulty being met with since the creek was deepened at the island crossing.
452. What freight do you pay to send a bag of maize to Sydney? I think 1s. 6d. a bag.
453. Does that include droghering? Yes, but it is 1s. 6d. a bag whether you put your maize on board the steamer at the Heads or on board the drogher at Bowra.
454. How far does the drogher go to collect maize? From the Heads to Bowra is a distance of about 20 miles. Bowra is the head of navigation for droghers. Welsh's wharf is the head of navigation on Taylor's Arm.
455. Does the drogher bring down any timber? No; there are proper log punts for that.
456. Where is most of the timber obtained for the saw-mills? From all parts of the river—from Warrell Creek, from Taylor's Arm, and on the Main Arm right up as far as Bowra.
457. Is the timber on Taylor's Arm or beyond Bowra superior to that down near the coast? It depends upon the class of timber you want.
458. What are the principal timbers you send from here? Tallow-wood, black butt, flooded gum, and ironbark. A great number of girders and piles are sent away from here.
459. Does the timber on the Nambucca compare favourably with that on the North Coast rivers? I do not think that the timber of any other river on the coast will beat it.
460. Are there many farms higher up the river than Bowra? The greater number of the farms are above Bowra.
461. What is the longest distance that the farmer has to cart his maize in order to put it on the drogher? I cannot tell you. I have seen teams at Taylor's Arm that have come down 18 or 20 miles or even more.
462. Is the river so shallow that they cannot use it? Well, at times there is only one drogher, and she is not able to attend to all the farms. The maize has been lying in the bars until the people have had to bring it right down to Macksville to get it away.
463. How much time does a farmer lose in bringing his maize 20 miles? They generally employ the services of bullock-drivers. I do not know what they pay per bag to have it brought down.
464. Have you a farm on the river yourself? Yes.
465. Where is it situated? Just where you cross the valley.
466. How many acres have you? 198.
467. How many acres do you cultivate? This year I have put about 12 acres under maize; the rest of the land is under grass, more or less.
468. Have you entered upon the dairying industry? I have done a little at it. I intend to go in for it properly, and I have spent £40 upon a separator.
469. Do you think that dairying will be a success in this district? It has to be proved yet, but I think that it will. We want a better outlet for our produce. I have been sending cream to Kempsey.
470. How far is that? Thirty-nine miles from Macksville.
471. Do you send it to Kempsey to catch the Macleay River boat? I have taken it over to the Macleay Heads, and the steam launch has carried it down from there.
472. What is the freight upon cream to Sydney? I have never sent cream to Sydney.
473. Are you able to dispose of your cream at Kempsey? Yes, to Foley Bros.' factory there.
474. From what distance do the people send their produce to Sydney by way of the Nambucca;—do the people half-way to the Macleay use the Nambucca, or do they use the Macleay? Well, it depends upon the rates to some extent. You can go to Kempsey through Clybucca. If you want to get to the entrance you have to go to Jerseyville. You can go to Stewart's Point in about 9 miles; but the road goes round about 16 miles.
475. Do you send your cream to Kempsey regularly? No; my cattle have all gone dry, and I am not dairying at the present time. The reason why I have not cultivated much land is that the land is too expensive to clear. It costs between £25 and £30 per acre to clear, and it is not tip-top land then.
476. Have you held your present farm all the time you have been on the Nambucca? Yes.
477. How much of the land you hold have you cleared? I suppose I have cleared 129 or 130 acres. As fast as I have earned money by contracting, and in other ways, I have spent it in improving my land.



478. Is there any demand for land in this district? You see people looking for land almost every day.
479. Has the demand for land increased since the improvement of the river entrance has been in contemplation? The demand for land is increasing more or less every year.
480. Is there any good land open for selection at the present time? Not land that is handy to the river. All the river frontages have been taken up.
481. But if you go far enough up the river you can get plenty of land? You can get land in patches all over the place.
482. Cannot you get water frontages some distance beyond the head of navigation? You get frontages to creeks and gullies.
483. But the land is good? You get the best land up among the creeks.
484. Is the farming land here equal to similar land on the Macleay? You may get a good patch of scrub land equal to the land on any part of the Macleay, but the Macleay land is altogether different from the Nambucca land. On the Macleay the land is alluvial, and after the third year you can plough it. The timber is scrub timber, and after a second fire it all disappears. Here, however, after felling the trees we have to draw the logs together, cut them up, burn them, and dig out the stumps. You cannot get rid of hardwood timber easily. I have known places on the Macleay where they have dug trenches and put the trees in and ploughed over them.
485. How does this river compare with the Bellinger? It is not nearly so good as the Bellinger. The Bellinger is one of the best rivers on the coast. It would be difficult to find better land than there is on the Bellinger.
486. How long have you been on the Nambucca? I selected here in 1866.
487. Why have you remained here instead of going to the Macleay or to the Bellinger? I have seen three floods on the Macleay over the river bank in twelve months, besides minor freshes. I came over here as a shipbuilder.
488. How long did you keep on shipbuilding? Not long. Then I went in for contracting, and put my nose to the grindstone to keep things going.
489. How long is it since you settled down at Macksville? I put in two years here. Then I went to the Bellinger for five years, and when I came back I stayed here. I went to the Bellinger because there was no work here at the time.
490. You have done fairly well, I hope, since you have been here? Yes. If I had sold out when the land boom was on I should have done very well. I could have sold then for £2,000, but I doubt if I could get £500 now, although I have put up a house on the land which is worth nearly the money.
491. When was the last flood on the Nambucca? Well, the flood here is more like a spring tide. I have seen tides almost as high as floods. I have seen a very high flood, but at that time there was only a narrow entrance, and a high sea running, so that the water could not get out; but after that the Spit was swept away, and ever since the bar has been coming further in. I consider that now the bar is an inner bar, not an outer bar.
492. When did you have the last flood of any importance? From seven to ten years ago. At Bowra the water might rise 30 or 35 feet, but down here a flood is only like a rise caused by a big spring tide. We are so near the entrance that the water gets away quickly.
493. What is the effect of a flood upon the land here;—does it fertilise the land? On the Macleay a flood leaves a deposit, but down here the water does not go over the land at all.
494. So that here you simply lose by a flood; you gain no advantage from it? Yes. Up about Bowra a flood will wash one point of land away and make up for its loss on the other side, perhaps. The same thing happens on the Bellinger.
495. You are Vice-President of the local Progress Committee? Yes.
496. Have the members of the committee considered the proposal to improve the entrance to the river;—is there unanimity among them on that question? They are unanimous that it is necessary to open the river.
497. Do you regard the proposal of the Department with satisfaction, or are there any suggestions which your committee would like to offer for our consideration? I do not know of any.
498. What are the principal disabilities under which the residents on the river labour;—if you got an improved entrance, will that be all you will require? We want regular communication, so that we may get our things to market at any time we send them down.
499. What you suffer from now is the uncertainty of steamer communication? Yes. Pigs, fowls, eggs, all deteriorate in transit. When they get to Sydney perhaps they fetch hardly anything.
500. How often does it happen that you lose in this way;—are you put to constant inconvenience and loss? Well, there is always inconvenience, more or less. If a vessel makes a good trip the produce gets into Sydney in good order, but if there is any delay perishable articles suffer. Pigs, in particular, fall away.
501. Do you expect a reduction in rates if the harbour improvements are carried out? I think that if we get a proper entrance there will be an opposition company, and we shall then not have to knuckle down to the North Coast Company for everything. Opposition is the life of trade. Of course vessels cannot run for nothing, steamers in particular.
502. Do you regard the charges which you have to pay now as excessive? I do not know that the company could do the work for less at the present time, but if the place is opened up, and the charges continue as high as they are now, I shall consider them very unreasonable.
503. How does a rate of 1s. 6d. a bag for maize compare with the rate paid on the Macleay? On the Macleay I believe the maize is taken away for 1s. a bag.
504. Would residents on this river be satisfied if they could get their maize taken away for 1s. a bag? They have to be satisfied to get it away at all. For pigs we pay 5s. each, large and small.
505. Is the rate for pigs higher than the rates on the other rivers? I do not know what the rate for pigs is on the other rivers. I have also had to pay 4s. 6d. a head for feed, and to meet other charges in Sydney.
506. Is all your produce sent to Sydney as a rule? We have no other market. All the steamers coming here trade to Sydney.
507. Are there not any local buyers? There may be a local buyer for maize, but he is under the same inconvenience as the shipper. I do not suppose that he gets his money until the return comes back, unless the maize is taken to pay a debt.

T. Bolton.  
1 June, 1898.

30

- T. Bolton. 508. Is any quantity of butter produced in the district? No; butter production is in its infancy here. It is only last year that we started.
- 1 June, 1898. 509. Is it fair to say that the present year will show an increase in the production of maize, timber, eggs, poultry, pigs, and so on, as compared with previous years? Well, I would not say that there will be an increase in the timber production. One mill has been removed to the Bellinger, and there are only two mills now, whereas previously there were four. One of the mills has been burnt down. A large quantity of farm produce will be sent away.
510. Do you think that the exports of this year will exceed the exports of last year? The export of maize this year will be one-half as much more as the exports of last year. In regard to my own crop, I am positive that it will be doubled.
511. Why is that? The land has got into better working order, and we have had a better season than usual.
512. In round figures, the export of last year, as shown by the ships' manifests, was 40,000 bags;—do you think that the exports this year will be 80,000 bags? No; it will be 60,000 bags.
513. That is an increase of 50 per cent.? Yes.
514. What is about the average yield of maize per acre? It depends upon the season. This year I am taking 80 bushels to the acre off one patch. Last year I did not get more than 20. On the average, I should think that the yield last year was about 20 bushels to the acre. This year I believe it will be twice as much.
515. But take one year with another? I think the yield would be about 25 bushels to the acre all through the district.
516. What is the net return per bushel? That depends upon the price obtained in Sydney.
517. What did you get last year? I got 2s. per bushel for what I sent away, and I had to pay 1s. 6d. a bag freight—4½d. a bushel.
518. So that your net return would be about 1s. 6d. a bushel? Yes.
519. How many acres of maize do you think a man would have to cultivate to keep himself and his family alive? On the Macleay a man can just manage to live on 25 or 30 acres of good land.
520. But here he would want 40 or 50 acres? Yes; and then it would not pay for the labour put into it.
521. That being so, what is to make this district productive? The clearing of the land, and the putting of it under cultivation.
522. Under cultivation for what? For maize, and the using of it for dairying.
523. But you say that it does not pay to clear the land? If a man had 40 acres of ground he would have to employ labour to work it, and by the time he had paid wages he would have very little out of his crop.
524. Then what is to make the district prosperous? Well, the land must be cleared, as in other districts.
525. But it would appear from your statement that if a man clears land he goes to the bad? Well, a man would not have to employ labour all the time; but besides that there is the expense of the crop and the expense of sending it to market.
526. What will make things better in this district? To get more land cleared and more people on the land. I will get 60 and 70 bushels to the acre this year, while last year I only got 20 bushels.
527. When the land is thoroughly cleared and worked up it will give a better return? When the land is thoroughly worked up you will get as much off an acre as is obtained on the Macleay and in any other places.
528. You say that to clear the land costs £25 an acre? From that to £30.
529. What does it fetch per acre? There is no sale for land. You might be able to give it away for £2 or £3 an acre. Of course the land must go up again in price.
530. Am I to understand that with proper cultivation a payable yearly crop will be obtained? Yes; the crop improves every year. You must understand that I am speaking of the land down here, not of the land up above Bowra, where there is alluvial soil.
531. It would appear to be of no use for a man to come here unless he had some capital to start with? I do not think a man should go on to land unless he has capital to start with.
532. What was the population of Macksville when you came here? There were only about three families here then.
533. You do not know the population now? No.
534. Has the town grown to a considerable size? Yes; it has improved in some respects, while in other respects it has gone back, like other places on the coast.
535. Do you consider that the farmers in this district are now in a sound financial position? Until you come to sound them you think that they are, but when you find out all about them you discover that most of them are in the hands of the banks.
536. Do you mean with large amounts to their credit? No; I mean that they have all mortgaged their land to the banks.
537. *Mr. Trickett*] I suppose that is because of the entrance being bad? No; it is owing to the fact that when the land boom was on they mortgaged what land they had to buy more land. I have known people on the Bellinger and on the Macleay owning first-class land who mortgaged it and then lost everything.
538. Then earth-hunger has been the cause of the present state of affairs? Yes.
539. A desire for more land, and an over-estimating of the capabilities of the land? Yes; they have been carrying on too high a game. The times were good, and people thought that they would never change; but they have changed.
540. Corn fetched a better price then than now? In my time corn came up to 5s. a bushel—from a bushel of corn to a bottle of rum. I have seen corn sold at 7s. 6d. a bushel at the barn-door, but next season I got only 1s. 5d. a bushel in Sydney, and paid 1s. 6d. a bushel in freight. You will see that I have had ups and downs.
541. Do you regard 2s. a bushel as about the lowest price that a grower can afford to get? That is about the minimum price.
542. If a man cannot get more he had better leave maize-growing alone? Yes.
543. *Chairman*.] Land that would cost £30 an acre to clear would be covered with heavy timber? Yes.
544. Would not that heavy timber be valuable? You cannot get rid of it. Most of it is pipey or knotty.
545. But would not a large quantity of it be saleable? No; I have had splendid trees on my land, but the mill will not take them. The timber I speak of is grey gum, which is equal to ironbark.

21960

Edward Hitchins, auctioneer, Warrell Creek and Macksville, sworn, and examined :—

- 546. *Chairman.*] How long have you been in the district? About fourteen years.
- 547. Have you a general knowledge of it? Yes.
- 548. *Mr. Clarke.*] You know what has been done at the entrance of the river, and what it is proposed to do there? Yes.
- 549. Do you think that if the Departmental scheme is carried out it will be beneficial to the public? Yes.
- 550. Do you think that the best means of developing the district is to make the entrance to the river navigable? That is all we want.
- 551. It has been suggested that a railway might be made to the Macleay? That would be too expensive, I think.
- 552. You are of opinion that water carriage is always cheaper than land carriage? Yes.
- 553. What do you think of the resources of the district? They are very large. The production of the district can be increased by opening up the river. There is any quantity of land here for selection and for purchase. All that is wanted is people.
- 554. But if prices are as low as they are described to be by a previous witness, do you think it would be profitable for people to come and take up land here and clear it? I think that Mr. Bolton's evidence, as to the cost of clearing land, is too high. I consider that from £10 to £15 an acre will be the cost of clearing.
- 555. *Chairman.*] Do you refer to land similar to that referred to by Mr. Bolton? Well, anywhere about the salt water the land is more easily cleared than it is down towards the mouth of the river. You have only to put a match to the softwood country and it will all burn away. Up further the land is all covered with softwood, and you only get about eight or nine hardwood trees to the acre. Down the river, of course, the timber is all hardwood.
- 556. *Mr. Clarke.*] So that the statement of the previous witness would only apply to the land on which he himself resides? To the swampy land, and to the land on the lower parts of the river, where the timber will not burn well. You might have a fire there for three months and it would not burn the timber off.
- 557. Of course, in dealing with any timber, you must fell it first? Yes. We pay from £1 to £1 10s. an acre for felling timber, and then, if it is softwood, most of it will burn away.
- 558. I suppose in many cases corn is planted among the timber with a hoe? Yes, in the first year. Then you cut up the timber, pull it together, and burn it.
- 559. After that the land is fit for maize-growing or for dairying? Yes; there is a little stumping to be done, but as the years go on the softwood timber rots, and the stumps disappear.
- 560. You cannot sell the hardwood timber to the mills? Not the timber that grows on the alluvial flats, because it is too far up the river, and the timber is not what the mills require. You have to go to the ridges for timber that suits the mills.
- 561. Do you think that the trade of the port is improved since the harbour works were commenced? Yes, considerably. The only drawback to the district is the bad state of the river. I could induce people to come here if there were facilities for getting produce away. Our resources are very large; but we require better means of communication with the market.
- 562. What are the resources of the district? Maize-growing, dairying, timber-getting, poultry, and pig-raising.
- 563. *Mr. Farnell.*] Fruit-growing? There is not much fruit-growing; but oranges will grow well here. You can get splendid self-sown oranges in the scrubs.
- 564. *Mr. Clarke.*] Pig-raising is very profitable? Yes.
- 565. Are the pigs generally sent alive to Sydney? Yes.
- 566. Is any bacon made here? No. People sometimes drive their pigs over to the Macleay, to get them away quickly.
- 567. To the factory there? No, to ship them to Sydney.
- 568. Is there any bacon factory on the Macleay? No.
- 569. After you get away from the coast is the land on the river generally good? Yes; it is as good as any land in the Colony. The alluvial flats are small, but they are very rich.
- 570. Do they extend any distance from the water? Not any great distance; not beyond 30 or 40 chains, generally.
- 571. Is the higher land good for dairying if cleared? It is what we call first-class forest land. It is good for maize-growing for six or seven years.
- 572. It is not nearly as good as the alluvial flats? Certainly not. You cannot tire out the alluvial flats.
- 573. Is much grazing done here? Not a great deal; the country is not open enough.
- 574. I suppose it will be some time before the dairying industry becomes of very much importance? No. I consider that the industry has made great strides during the last two years. I started about a year ago with one small hand-separator, and now there are thirty or forty separators in the district, including three steam separators.
- 575. Do you make butter here? No. We send away our cream to the Macleay, and to Sydney—to Foley Brothers, and to Denham Brothers, on the Macleay.
- 576. But is there not a risk of losing your cream if you send it to Sydney, because of the delays in shipment? Yes. The people have to take that risk. Some cart their cream to the Macleay, and send it from there to Sydney.
- 577. I suppose that in the future the cream will be made into butter locally? I think it will not be long before we make butter, if we get good communication with Sydney.
- 578. Butter will deteriorate if kept a long time on the steamer, unless it is placed in refrigerating or cooling chambers? Yes.
- 579. Have the vessels trading here refrigerating chambers? I do not think so.
- 580. If the entrance to the river were improved vessels of a larger size might come here, and you might get competition, which would lower the rates of freight? Yes. Once the steamers can get inside the river they can steam up to the wharf.
- 581. Do you consider that 1s. 6d. a bag is too high a rate for maize in the present state of the bar? Yes. Of course there is not sufficient trade on the river, at the present time, to employ two steamers.
- 582. It requires a considerable amount of capital to go in for dairying? Yes. If people own land of their own the vendors of cows will give them accommodation.

E. Hitchins.  
1 June, 1898.

31

- 1 E. Hitchins. 583. Do you think that dairying will be successful? Very successful.  
 584. But I suppose that on the whole mixed farming would be better? Yes. The flats here are too rich to put under grass, so that there will always be maize-growing and pig-raising.  
 1 June, 1898. 585. In the dairying industry the returns are made monthly;—you do not have to wait a long time for your money, as in the case of the maize-growing industry? Yes.  
 586. That is a great consideration? Yes. There are many risks connected with maize-growing which are not connected with dairying. In many instances it is a hundred to one that you never get a crop.  
 587. How many acres would it take to keep a cow here? I think that in some places we could put three or four cows on to one acre. In a back paddock here there are 5 acres which will keep twenty cows for twelve months.  
 588. It must be very rich alluvial land? It is rich grass land. It is surprising how much stock it will carry.  
 589. Taking everything into consideration, you think that the carrying out of the proposed works would be of considerable benefit to the whole district? Certainly.  
 590. I suppose it will be the salvation of the district? Yes. Once we can get the steamer to come up here we shall get competition.  
 591. Most of the farmers in the hands of the banks now will require to get clear before they can do much? The banks have given them splendid terms, and some of them will get their land back. The banks have given them as much as ten years in some cases.  
 592. So that things are coming to a normal condition again? Yes.  
 593. Is there anything you would like to add? I should like to say that when I came here there were only two families at Taylor's Arm, and now there about 100. Out at Warrell Creek the population had increased 200 per cent. The Unkya Creek and the Allgomera Creek people take all their maize now to the Macleay Heads, which is several miles further than to the head of Warrell Creek.  
 594. Do you think that the population of the district will continue to increase? Yes. I sold a farm a couple of days ago to some Macleay people who wanted land. That farm contained 600 acres.  
 595. What is the price of fair average alluvial land here? We can get £10 an acre for the alluvial land fronting the river.  
 596. The back land would not be so valuable? No, not in proportion. I am speaking of improved land.  
 597. *Chairman.*] Is unimproved land saleable? There is very little unimproved land, unless it is land available for selection.  
 598. *Mr. Clarke.*] What is the value of land which is not improved;—could you put any value upon it? Not unless I saw the land myself.  
 599. I suppose unimproved land here would not average much more than £1 an acre? No, it would not be worth more than that. In some parts the trees have been felled and have grown up again.  
 600. Do you think that the population and the production of the district are likely to increase by 50 per cent. within the next few years? Yes; they are both increasing very fast.  
 601. *Mr. Trickett.*] With regard to land transactions, do you find that the people here stick to their holdings well? Yes, as long as they can. Of course the banks have weeded out a few of them.  
 602. Can the struggling hardworking farmer get along here? Yes. Some years ago we had a repetition of floods, and that crippled all the farmers, but they are getting on to their legs again now.  
 603. I thought that the floods did no good here? Of course, down on this part of the river the floods do not go over the land, but higher up, where there are alluvial flats, the land is flooded. Maize is grown 40 miles up Taylor's Arm.  
 604. Has that maize to be brought down to the steamer by teamsters? It has to be brought to the head of navigation. Of course, it takes a very small rise in the river to flood the flats there. Down here, however, the water does not come over the banks.  
 605. We have been told by a Government officer that, it is intended to throw open about 5,000 acres of land at the head of Taylor's Arm for selection;—do you think that land will be taken up for farming purposes? Yes.  
 606. In what areas? From 40 acres upwards. It is very rich land, like the Orara land. That land must all be taken up. All that is wanted is facilities for getting maize away.  
 607. We have been told that there are 253,500 acres of unalienated land in this district;—do you think that if increased facilities for getting produce away are given that land will be taken up? Yes.  
 608. Do you think that there is no doubt about that? Yes; I know how the production of the district has increased of late. Last year we sent away over 40,000 bags of maize. This year the export will be 50 per cent. more.  
 609. I suppose a large quantity of the maize is consumed locally by pigs and other live stock? Yes; and a large quantity of the maize that is grown on the Unkya and Allgomera Creeks now goes to the Macleay Heads.  
 610. Have any of the banking companies an office on the river now? No.  
 611. I suppose at the present time the payment for produce is very often in return stores? I dare say in many cases it is.  
 612. Where are your bank centres? The Banking Company has a branch at Bellingen, and the A.J.S. Bank has a branch at Kempsey.  
 613. *Mr. Roberts.*] You differ from Mr. Bolton as to the cost of clearing land;—do you differ from him upon any other point? Yes; I think that he said that the "Euroka" took all the produce from here; but I should like to point out that there are several sailing vessels which come here for timber. The timber is not sent away by steamer at all.  
 614. Do other steamers come here besides the "Euroka"? Yes; the "Billy Barlow" and the "Tilbury" also comes here.  
 615. Do the sailing vessels all come up to Macksville? Not now.  
 616. Does the "Euroka" come to Macksville? Occasionally.  
 617. Is she the only steamer that can come here? The "Pelican" comes here, and tranships to the "Burrawong" at the Macleay.  
 618. The small steamers meet the "Burrawong" at the Macleay? Yes, or meet a steamer at Port Macquarie.

619. Do you think the future of the district is sufficiently good to warrant the proposed expenditure at the mouth of the river? Considering that so much money has been thrown away in other parts of the Colony, I believe that we are entitled to even a larger expenditure than is proposed. These works will have to be carried out, and the sooner they are carried out the sooner the district will improve. E. Hitobins.  
1 June, 1898.
620. Would you regard the construction of these works as the throwing away of money? No; I consider that it would be a good expenditure, because it would help to settle people on the soil.
621. *Mr. Clarke.*] And it would keep them here? Yes.
622. Do you think that 25 bushels an acre is a fair average yield of maize? No; I think that the average yield of maize in the district is from 50 to 60 bushels.
623. *Chairman.*] Is that taking one year with another? That is providing that there are no floods.
624. But take a period of ten years? For the last ten years the average yield has not, perhaps, been more than 25 bushels, but for the last five years the average yield has been from 30 to 40 bushels. On some land you get over 100 bushels.
625. How is the land held, under ordinary conditional purchase, or is any quantity of it special area land? I think the Unkya land is all special area land.
626. Has any quantity of land been taken up here under the special area system? Yes.
627. At what price? At, I think, 30s. an acre.
628. What is about the average yield of a free selector in the district? I should think about 100 bushels.
629. Are there any holdings of 640 acres? Very few.
630. That is because the land is so expensive to clear? Yes; and to get 640 acres, you have to go right back to the mountains in some places. All the frontages are taken up.
631. It is estimated that within the area contained by a line midway between the Nambucca and the Bellinger, by a line midway between the Nambucca and the Macleay, and by the dividing range, there were at the end of last year 27,600 acres of freehold land, and over 10,000 acres of privately-leased land; this year there were 5,450 acres of land under maize;—do you think that the area I have described is capable of trebling its present output? I hardly think it would treble it; but I believe that you could double it.
632. Would all the country I have described be within the influence of the Nambucca River if the entrance were made good? Yes.
633. Would the whole of this area contribute to the trade of the river? Certainly.

Angus McKay, storekeeper, Macksville, sworn, and examined:—

634. *Chairman.*] How long have you resided here? For about fifteen years.
635. *Mr. Trickett.*] I suppose you have watched the progress of the district very closely;—do you regard this as a progressive district? Of late years it has been very progressive. A. McKay.  
1 June, 1898.
636. Will you tell us what its development has been since you came here? When I came here only one small sailing vessel used to trade to the river and she did not take away more than fifty bags of maize a month, or about 3,000 bags a year. Now, however, there are about 40,000 bags of maize sent away each year. I think that about 3,000 pigs go from the district now. Last year about 10,000 bags of maize went to the Macleay from the Unkya and from Warrell Creek.
637. In your opinion, the district has improved year by year? Yes.
638. Like other districts, it has had its ups and downs? Yes.
639. Why did the place fall behind so much a little while ago? The bad state of the bar two years ago made it fall behind. Last year we were eight months without any communication across the bar, and maize was lying rotting all along the banks.
640. Was that after the commencement of the harbour works? A swell altered the channel and sent the sand everywhere, leaving no permanent entrance. Since it has gone further out, however, the channel has improved wonderfully.
641. How does the district stand in regard to floods? It does not suffer so much as the Macleay and other districts in floods. Floods go over the maize, but the houses and cattle are secure.
642. Do you look upon this as a fairly sound district? It is going to be a very sound district.
643. You have done fairly well in business here? Yes; there is not so much credit asked for now as was asked for two years ago.
644. Steam communication is getting better? Yes.
645. We hear that the output of the district is likely to be more extensive next year than it has been in the past? Yes.
646. Why do you think that that will be so? Five years ago I do not think we exported 20,000 bags of maize. This year I am certain that we shall export 60,000 bags of maize. The increase in our export is due to the larger area of land that has been cleared and cultivated.
647. How do you get your goods up from Sydney? By the North Coast Company's boat and the drogher.
648. What is the quantity of goods brought to the Nambucca by the steamers in a year? About 20 tons a week.
649. That would be general goods—groceries, ironmongery, and articles for household use and consumption? Yes; of course that is not counting the stores which are brought up by sailing vessels for the saw-mills.
650. What would be the value of those goods? I could scarcely say. I suppose a £100 worth of goods would be brought here every week.
651. So that the imports of the district would be worth £52,000 a year? Yes.
652. How many storekeepers are there here? We have four stores.
653. Are they all doing pretty well? I think so.
654. Is there any other way in which goods can be brought to Macksville than by steamer? When the bar is bad we get our stores from the Macleay.
655. Is much brought from the Macleay;—would the goods brought that way be worth £2,000 or £3,000 a year? I think so. Cream, eggs, and fowls go to the Macleay very often when the bar here is bad.
656. Does the town of Macksville serve as a centre for a large district? Yes; there is a small town up the river about the size of Macksville where there are four stores.
657. Do the goods for these stores go, up the river? Yes.
658. Do you hear many inquiries for land in the district? Yes; there is always someone wanting land. There have been two or three looking for land this week.
659. For dairying purposes? Yes. 660.

- A. McKay. 660. It looks as if dairying would be a large business in the future here? Yes; I have two steam creameries working, one here and one at Bowraville.
- 1 June, 1898. 661. Have you any cattle? No; I only buy the milk.
662. Where do you send the cream? We used to send it to the Macleay; but this month I am churning it myself.
663. Do you find that butter-making pays? Yes.
664. Are the creameries which you have started profitable? Yes, they are doing very well.
665. How many are there in the neighbourhood? One more besides my own; that is, without counting the hand separators.
666. Is dairying a large industry here? They are getting what companies they can here, and going into it as much as possible. They only started dairying here about two years ago.
667. What is the rate of freight inwards? About 30s. a ton.
668. How does that rate compare with the rates on the other rivers? The rate to the Macleay is £1 a ton for general goods, and 12s. 6d. for heavy goods—salt, flour, sugar.
669. Therefore, you are handicapped to some extent? Yes.
670. Is that because of the entrance? Yes. No parcel is carried for less than 1s. 6d.
671. With an improved entrance, do you think you would have lower rates? Yes. I have seen the ship people myself, and I have asked if they would charge lower rates. They told me that as soon as we get a better bar they would reduce the rates as they had been reduced on other rivers.
672. The reduction of the rates would be of great advantage to the people here in giving them larger profits? Yes. The ship people say "Make the bar good and we will take your stuff away at lower rates." At the present time the vessels have to go out only half loaded.
673. Do you agree with the evidence of previous witnesses? I do not agree with what Mr. Bolton said, as to the price of clearing land here, and as to the value of land. I do not think he understands anything about farming. People who are used to clearing land can clear it much more easily than he supposes.
674. What do you think land for farming purposes is worth, and what does it cost to clear for maize-growing? The maize-growing land is felled for 30s. an acre, and the timber is cleared away very quickly.
675. That land is higher up than the navigable part of the river? Yes. The timber on that country is easily burnt off.
676. Do the people who deal with you keep their engagements pretty well? Yes. The people on the land here are in a very good position. Only very short credits are asked for. A few years ago, however, we used to stand to the people for twelve months; now there is none of that.
677. Are there many abandoned holdings in the district? There are a good many old abandoned holdings, but no one has left the district during the last few years. People are continually coming into the district, because it is looked upon as a good one.
678. You think that this is a progressive district, and that lately it has been progressive at a more rapid rate than formerly? Yes.
679. You think that what has given it an extra start is the improvement in the means of communication? Yes. We ask for nothing more than a good bar. If the proposed works are carried out this district will be second to none on the coast.

William Ezold, storekeeper, Macksville, sworn and examined:—

- W. Ezold. 680. *Chairman.*] How long have you been here? Five years.
- 1 June, 1898. 681. *Mr. Roberts.*] How many stores are there at Macksville at the present time? Four.
682. Were there three other stores here when you arrived? No; there were only two here then.
683. Do you regard the increase in the number of stores as a proof of the improvement of the district? It should be considered a proof of its improvement.
684. Has your business increased since you came into the district;—is the trade of the district expanding? As there are four stores here, and each is doing about the same amount of trade as I have done, there must be an improvement in the district.
685. Are you doing as well now as when there were fewer stores? Yes.
686. Do you get all your goods from Sydney? Yes.
687. Do they all come up the river? Yes.
688. Are they brought by steamer or by sailing vessel? By steamer.
689. Do you know what quantity of general merchandise has been imported during the last few years? No.
690. The last witness told us that about 20 tons of general merchandise is imported weekly? I consider that 30 or 40 tons of general merchandise must be imported each week.
691. What would be about the value of the goods coming here weekly? I could hardly say.
692. What would be about the value of the goods you purchase in twelve months? About £2,000.
693. Do the other stores in Macksville do about the same business as you do? I could not say.
694. How many stores are there in the district altogether? In addition to those at Macksville, there are, I think, four at Bowra.
695. And how many down at the Heads? I think three.
696. And how many at other places? There are a few people who import goods and sell them, but they do not keep stores.
697. Well, suppose there are twelve stores or their equivalent in the district altogether, and each does the same business as you, the value of the imports of the river must be about £24,000 per annum? Yes.
698. Is your business confined to Macksville? No.
699. How far do you send goods? Right up Taylor's Arm for 30 miles, to Unkya, and to Allgomera.
700. Do you send any goods to Bowra? No.
701. Do you send any goods to places between here and the Heads? No; I cannot compete with people lower down the river.
702. People on the river have their goods delivered by the drogher free? Yes.
703. I suppose your goods are landed at the Government wharf here? Yes.
704. When you send goods up the river I suppose you have to pay the cost of droghering? No; my goods are taken round the district in a waggonette.

705. Is that the cheapest way of reaching your customers? There is no other way in which to reach them.
706. What freight do you pay to bring goods from Sydney? For heavy goods (sugar, flour, &c.), £1 per ton; the small goods come to £4 or £5 a ton.
707. But you have never paid as much as £5 a ton on goods? I pay at that rate for small cases. I am charged for every package brought to the wharf. I can get a parcel of drapery sent up by post for 8d. or 9d., but if it comes by steamer I have to pay 1s 6d.
708. Is not the rate for some merchandise 30s. a ton? Of course, for big boxes you may have to pay only about 30s. a ton, but for small boxes of groceries and other goods you pay much more. On the average I pay £3 a ton.
709. How do the rates charged on this river compare with the rates charged on other rivers on the North Coast? I think on the Macleay they only pay half as much as I pay. I cannot say whether they pay as much for small goods as I have to pay.
710. Is the district in a fairly prosperous state? It promises to be much better than it has been for several years past.
711. You have good opportunities for judging, because of your transactions with the settlers here? Yes.
712. Do you buy much produce from the farmers? I buy produce conditionally.
713. Do you ship it away for them? Yes. Last year I bought some corn, but I could not get it away because the company did not come for it. In the meanwhile the market dropped, and my customers were greatly annoyed, because they lost by the arrangement. The North Coast Company monopolise the trade of the river, and they do what they like.
714. Is there not a regular weekly steamer? No.
715. Is the steam communication altogether irregular? Yes. Just lately the steamer has been a little more regular. I told the company that I was very glad about it, but they informed me that when the maize trade commenced again on the Macleay they might not be so regular.
716. Do you lose much through being unable to get perishable goods to market? Yes.
717. You receive consignments of eggs, fowls, and so on, from the farmers? Yes; I take them in exchange for goods.
718. Is this business satisfactory to both parties? Yes; but the difficulty is to get things to Sydney. There is always something short. I have sent citrons and oranges away. In some cases, instead of getting a return for what I have sent, I have got a bill for excess freight.
719. Do you regard the rates charged by the company as too high? Yes; much too high. They lowered them 50 per cent. when the Farmers' League was established. That was for small cases of eggs, fowls, and so on, nominally; but actually the rates have not been lowered at all. It is very desirable that we should have competition. Without it it is almost impossible to carry on business in this district.
720. Are we to regard the district as fairly prosperous? Yes; but the storekeepers have to suffer. I think they are the only ones who suffer.
721. Is that because of the irregular steam communication? We have to compete with the Macleay prices, and we have to pay higher freights and make losses of all kinds because of the irregular steamer communication.
722. Notwithstanding all these drawbacks, do you think there is a good future for the district? I should like to see steamer competition here. The company has promised to run more regularly if the bar is made good.

Frederick Notley, general storekeeper, Macksville, sworn, and examined:—

723. *Chairman.*] How long have you been here? Nine months.
724. Where were you living before you came here? On the Macleay.
725. For how long? All my life, except two years.
726. Have you a general knowledge of this and of the Macleay district? I do not know this district as well as I know the Macleay district, because I was not acquainted with it before I came to Macksville.
727. *Mr. Farnell.*] Have you seen the works in progress at the entrance to the river? I have seen them from the boat when coming up the river.
728. You had no knowledge of the state of the entrance before these works were commenced? Only from hearsay.
729. What do you think of the future of the district? The conclusion I have come to with regard to this district is that in a few years, with improved navigation and better communication with the Sydney market, it will make leaps and strides, and become one of the principal dairying districts in the Colony. I consider that this will be a good dairying district, because so much of the land here is not subject to floods, and cattle can always find pasture upon it, while there is sufficient alluvial land to enable a certain amount of agriculture to be carried on. With agriculture there always goes pig-raising. This is also a splendid district for poultry.
730. Do you think that mixed farming can be profitably carried on here, providing that the bad state of the entrance is improved? Yes; this would then be a very prosperous district.
731. Do the natural grasses grow well here after the timber has been removed? Yes; on a good deal of the land the natural grasses grow well after the timber has been removed.
732. Do you think there is any doubt as to the capacity of the land to grow sufficient fodder for cattle? None at all. I believe that there is land in abundance to grow fodder for cattle.
733. Do you know any farmers who have been growing lucerne or making ensilage? I know that lucerne has been grown. One man told me that he cut his lucerne ten times in one season. I have seen lucerne here that would compare favourably with the lucerne grown on the Hunter. I have seen wheat and good grass growing on ridges 50 feet high, and growing to the very top of them.
734. Are you much in communication with the farmers here? A great deal. I travel throughout the district in my van.
735. Do you purchase things from them? Yes; I take almost anything in exchange for goods.
736. Do you consign this produce to Sydney? Yes.
737. Since you have been here, have you suffered inconvenience because of the irregular steamer service? Yes; I have suffered considerable inconvenience and loss through it, though I understand that the trouble was greater before I came here. Perishable articles do not get to the markets soon enough. Fowls have left here healthy and in good condition, but on reaching Sydney many of them have been dead or unsaleable. Eggs have been a month in getting to the Sydney market.

W. Ezold.  
1 June, 1898.

F. Notley.  
1 June, 1898.

33

- F. Notley.  
1 June, 1898.
738. You have no doubt as to the reasonableness of the supposition that more land would be put under cultivation if greater facilities are afforded for getting produce away? I have not the least doubt that a very much larger area of land will be put under cultivation or cleared for grass if we are given better means of communication with the market.
739. Can you tell us what is a fair price to pay for the clearing of land here, and the making of it fit for cultivation? Of course there are two kinds of agricultural land on the Nambucca. I do not know much about the land just here, but I should think that very little over £10 an acre would be sufficient to clear the land higher up the river—that is, the alluvial flats. I have seen the scrubs felled and burnt off, and a splendid crop obtained in the one season. Of course that land is covered with soft timber.
740. The £10 an acre would, of course, include grubbing, stumping, and burning;—would 30s. an acre be too much to pay for felling alone? I could not say. I have not seen any of these flats in their original state. I have only seen them after the timber has been felled.
741. In the Richmond district the timber, after being felled, is allowed to decay;—I understand that that would not happen here? No.
742. The ground is cleared here by burning off the timber? A certain amount of grubbing is done. That is not done in the first year, and when it is done the stumps have pretty well decayed.
743. What is a fair average yield in the Macleay district? Between 40 and 50 bushels to the acre. If we get 50 bushels as an average yield, we reckon that we have a good crop.
744. What would be the average yield here? I can only judge from one year.
745. What would be the average yield this year? About 50 bushels to the acre.
746. What do you think is a payable price for maize? One shilling and nine-pence to 2s. a bushel clear.
747. What is the freight from Macksville to Sydney for maize? I have paid 1s. 6d. a bag.
748. That would be 4½d. a bushel? Yes, about that.
749. Do you consider that a high rate? Yes.
750. Do you think there is a reasonable prospect of the rates being reduced if the entrance to the river is improved? Yes; because there is not so much droghering here as there is on the Macleay.
751. What rates are charged on the Macleay? I do not know for certain. They were charging 1s. a bag; but they have reduced the rate since the opposition boat started.
752. It is quite likely that you will have an opposition boat here if the bar is improved? I see no reason why an opposition boat should not ply here during the busy season.
753. Do you think that a tramway to the Macleay Heads will serve this district? No.

Robert Quayle, first-class constable, Macksville, sworn, and examined:—

- R. Quayle.  
1 June, 1898.
754. *Chairman.*] How long have you been in this district? Four and a half years.
755. I believe you compile the local statistics every year? Yes; I do not take the whole of the Nambucca district.
756. How far would your district extend from Macksville? It extends out to the range between here and the Macleay, about 18 miles in one direction, and up Taylor's Arm about 40 or 50 miles in another direction.
757. You do not go down to the heads? No.
758. What statistics have you for your district? In my district there are 161 homesteads of 1 acre or more, in the Bowra district 151 homesteads, and in the Nambucca Head district about twenty-five homesteads. The population of Macksville is 1,100, of Bowra 1,078, and of Nambucca Heads about 400.
759. Do these three places comprise the whole district? Yes.
760. How many public schools are there here? In the Macksville district there are four public schools.
761. Is there a Court of Petty Sessions held here? Yes.
762. Where is the nearest District Court held? The District Court is held in Bellingen and at Kempsey. Those places are about equally distant from here.
763. What do you think of the future of the district? The population of the district has increased a good deal since I came here.
764. Has that been simply the natural increase, or has it been brought about by the influx of people? A good many fresh people have come here.
765. What are the circumstances of the people generally? As a rule they are getting into fair circumstances now.
766. Has it come under your notice that many of the farmers have had to abandon their holdings? No. I believe that a great many of the farms are mortgaged, but the farmers have not had to abandon their homes.
767. Do you consider that the district as a whole is in a worse state than the other districts on the North Coast? No.
768. Have you seen any striking evidence of poverty here? Yes; but not lately. During flood time blankets have had to be given out.
769. But a flood causes an unusual state of things? Yes. There is no such poverty in the district now.
770. How long is it since the last flood? I think about three years.
771. Do floods affect this portion of the river? Not much. They affect the upper part of the river more.
772. And the residents on the river flats? Yes.
773. Have you any reason to believe that the district is not a prosperous one? No; it is a prosperous one.
774. Do you think there is still a large area of Crown land which might be profitably occupied? Yes. At the head of Taylor's Creek there is a great deal of good land, and I understand that a large part of it has been surveyed.
775. Most of the available good land is up there? Yes.
776. A large part of this district is locked up in forest reserves? Yes.
777. Is the timber business a large one? Yes.
778. Do you issue timber licenses? Yes.
779. Has their number increased or decreased? It remains about the same. People take out licenses at the Nambucca Heads as well as here.
780. Here you are not immediately in the timber district, as they are at Nambucca Heads and at Bowraville? The timber goes from this place to the Nambucca Heads to be sawn up.



781. I suppose it is brought here from some distance up the river? Yes.
782. The timber industry is rather a progressive one? No; it is going back.
783. To what do you attribute the falling off? I cannot say; but good timber is getting scarce. One mill was removed to the Bellinger. I suppose they thought that they would be in a better timbered country there.
784. Do the timber reserves show any signs of giving out? They have to go further back for timber now, but still there is plenty of it.
785. They have used the timber most easily got, and now they have to go back into rougher country? Yes; but there is plenty of timber if they like to go for it. I think there has been some misrepresentation in regard to the yields of maize per acre in this district. I heard one witness say that it was 25 bushels, but this year they are pulling fully 75 bushels to the acre, and in some cases 100 bushels.
786. Has this been an unusually good season? Yes.
787. You have had a good rainfall and no floods? Yes.
788. Would it be only in years of flood that the yield of maize would be 25 bushels to the acre? Yes.
789. I suppose there are never droughts here? There has been a drought since I have been here.
790. Do the crops ever suffer from want of rain here? Yes.
791. That would make the yields more? Yes.
792. But in a good season like the present the yield would be from 50 to 60 bushels to the acre? That would be a low average yield. I think that from 65 to 70 bushels to the acre would be about the actual yield. Every one has his barn full now. About one-fourth of the maize grown here is consumed locally in the feeding of pigs and other live stock.

R. Quayle.  
1 June, 1898.

William Woods, bootmaker and Secretary to the Macksville Progress Committee, sworn, and examined:—

793. *Chairman.*] How long have you been here? Three years and three months.
794. There are two Progress Committees here? Yes; one is called the Progress Association.
795. Has your committee met at any time to prepare evidence to place before us in regard to the proposal to improve the entrance to the river? No.
796. Have you any statistics of any kind that you would like to put before us? No.
797. Do you wish to comment upon any of the evidence that you have heard, or do you agree with what has been said? I will content myself with endorsing what has been said by the other witnesses.
798. The Progress Committee are satisfied that they have had the fullest opportunity to lay their case before us? Yes.

W. Woods.  
1 June, 1898.

[One plan.]

Impress.

34

21960

Parliamentary Standing  
Committee on Public Works.



Minutes of Evidence

Harbour Works at Naumbucca  
River.

Taken before the Sectional  
Committee

Feb. 23/6/98

1

PROPOSED HARBOUR WORKS NAMBUECA RIVER

Tuesday 31st May 1888

The sectional committee met at the Victoria Hotel, Nambucca,

at 2 p.m.

PRESENT -

Charles Alfred Lee Esq, Chairman

Henry Clarke Esq,

Frank Farnell Esq,

The Hon Charles James Roberts *C.M.G.*

The Hon William Joseph Trickett

The sectional committee proceeded to consider the proposed harbour works at Nambucca river.

David Hudson, District Engr, Macleay, Hastings and Cannon Haven districts, was then examined -

Chairman } The Nambucca river is in yr district? Yes.

H/you commenced the district before the present works were

commenced? Yes.

You initiated them? Yes.

And if carried them out to the present point? Yes.

2

*Summers*  
*Paulsen*

237 2

Will you explain to the effect that it is proposed to carry out? It is proposed to continue the existing training wall and breakwater to a point just west of the center <sup>rock</sup> on the northern side of the entrance. The wall will end about 100 ft from the rock.

6 What is the nature of the mark? We are about 1711 ft from the starting point.

7 What is the work cost so far? To the beginning of May it had cost about \$6,200. We are raising the training wall on an incline of 1 in 150. It was originally carried out 1650 ft on a level 4 ft above high water, and from that point it was to rise 900 ft on an incline of 1 in 75 which would make it 12 or 15 ft above high water at the end until it reached a height of 12 or 15 ft, when it was to continue at the level of 1200 or 1500 ft. Now we commence to rise on an incline of 1 in 150 when we are out 750 ft until we reach the same elevation as before, and then the wall is to be continued at level.

8 Why is the height of the wall to be raised? In order to raise it came up since the effect has been in the district. It is to be raised because of a washaway.

9 How much was washed away? From about 500 ft out to about 1500 ft out. There were breaks all along the portion, caused by the action of a south east gale.

10 Is it anticipated that when the wall is raised it will be able to resist such a <sup>sea</sup> ~~storm~~? Yes

3

Small stone is put into the work at 5s a ton and large stone we pay 3s 6d a ton. The small stone is put on top of the breakwater, as a rule.

11 Does the sea in a South east gale break over the breakwater at its original level? We had seas quite as high as it when it was damaged but not during such high tides.

12 The damage took place during a very heavy tide? Yes.

13 When the height of the wall is increased will you be secure from effects of weather? I think so.

14 What will be the cost of increasing the height of the wall? It will take abt £3,000 to fill it in. It will strengthen and consolidate the work.

15 The whole of the work that has been done has been carried out under contract at the prices you mentioned? Yes.

16 Do they include the quarrying of the stone and placing it into position? Yes.

17 Now, regarding the north west training bank? It is part of the present proposal.

18 Is it intended to be made of stone of the same weight as the breakwater? No; of smaller stone.

19 What height is it to be kept? 4ft above high water.

20 Will the training wall be subject to the range of the sea? Very

has

little. T cannot compare as far as to what I have heard.

21

What is the object of this draining wall? To drain the water down to the seawater.

Richard Stewart

What is the next work? The Stewart Island training bank.

What will be the length of the wall? 964 00 ft altogether.

It will cost

22

It will cost? £13,492:10 s. This wall will only be

raised to high water level.

25

What will the other seawater cost? £27,875.

26

Now if the bank across Warrell Crk? It will be 300 ft

length.

27

Then there is the cutting in Warrell Crk to the main river?

£3,140.

Yes; it will cost £319 0

28

Then there is the stone facing on the Eastern side of the

river? Yes.

£1,033:10

29

It will cost ~~£1,033:10~~ £1,033 10? Yes.

30

Then there is the stone facing of the sides of the cutting.

This comprises the whole of the works referred to above? Yes.

31

What result do you expect from the design set us?

We expect to get a continuous service of water down along the walls on the bank.

32

Is it intended to direct down the wall water in a flood

water, or is it? Yes. We hope to meet every contingency.



21960

Stewart  
Pellicie  
43

6

close

t wall.

Are the rocks in the fair way? No, they are ~~not~~ along

44

a

Will there be sufficient depth of water on the bar when

the works are finished to enable the trade of the river to be carried on satisfactorily? Yes.

45

In your opinion could any part of this work be left over

for a time? I hardly think so. Part of the Stewart Island bank will be the only part of the work that might be left over, and it ~~would~~ would break the continuity of the work.

46

Would you get the same result, so far as the passage and the

bar are concerned, if you omitted any part of the design? I think not.

47

Do you think that the whole of these works are necessary to

obtain the end desired? Yes.

48

Suppose it became necessary to reduce the cost, what

part of the work could in your opinion be left undone? Part of the Stewart Island training bank.

49

proposed

Do you attach importance to the proposed cutting the

Macrell Creek into the main river? Yes; this is one of the chief parts of the work.

50

Would you carry it out under any circumstances? Yes.

51

Has deep water followed along the training wall as it has

gone out? Yes. For some time the channel left the wall and went out in

7



the  
a northerly directn but now it is keepg along a wall, and the bar  
is gradually making north.

52  
What is the direction the bar ~~crossing~~ now? Abt S E.

53  
Are you going to give a straight opening, simply by making  
one wall? I think so. Originally the channel used to follow round  
the rocks on the north side of the entrance, but the south spit used to  
come up so far that it made ~~crossing~~ very difficult.

54  
I suppose at a press time the worst seas come in the S E, so  
the sand piles up on the south side of the entrance? Yes.

55  
If we only make the northern training wall and breakwater  
will not the entrance always be exposed to the south east gales? To a  
certain extent, but we expect that the scour caused by the river water  
and the tide will keep a channel.

56  
You do not wish it to be understood that one wall will  
make as good a job as two would make? No.

57  
But it will give a sufficient depth of water to  
enable the boats to ~~now~~ come here to enter with safety? Yes.

58  
It is only intended to improve the entrance to the river  
and not part of the river immediately inside the entrance; nothing is to be  
done to the upper river? No.

59  
If the proposed work <sup>is</sup> ~~was~~ carried out will the entry be

50  
Q Is it further expense to remove the blocks you spoke of? It will be a very slight expense.

*Relative  
Shank  
60*

But some of those blocks will have to be removed? There are pinnacles here and there which will have to be removed.

Do you know how this work is to be carried out?  
A No. I have received no instructions on the subject. My present instructions are to continue the existing contract.

62  
Q The contractor has all his gear and appliances on the spot, and can supply the stone at a minimum cost? Yes.

63  
Q The stone required for the New Training Wall and the Stewart Island Training Bank <sup>and</sup> will have to be quarried? Yes; but if the rock we can use small stone which is now <sup>unless</sup> ~~useless~~ to us.

64  
Q Have you sufficient stone for the work at the quarry you are now using? I think so, if the work is hand.

65  
Q Have you sufficient heavy stone to complete the northern breakwater? I think so.

66  
Q What is about the weight of the blocks you are putting in there? Some of the stones weigh about 1 ton.

67  
Q Is that the minimum weight? No.

68  
Q Do you use smaller stone in between these large blocks?  
Yes.

69  
Q If the training walls were carried on simultaneously with the breakwater all the small stone and spoil could be used? Yes.

70  
Q That would reduce the cost of the work? Yes.

9

71 Suppose the masonry work was to be continued by contract while day labor was used for the work, would there not be a conflict? Yes could not put both parties <sup>into</sup> the quarry.

72 Is the quarry Govt property? Yes.

73 Has it been leased to a contractor? No; no one simply on <sup>the</sup> river - right to be there.

74 Can the Govt take what stones they like? Yes.

75 And the contract is terminable at a month's notice?

I do not think so. I think it is to be an annual money voted as an expenditure and available if the work is about £13,000.

76 If the proposed works are recommended it will be a matter to be decided afterwards whether they <sup>shall</sup> be carried out by day labor or by contract? Yes.

77 When Warrell Ck is diverted and the training walls constructed, will the work have any influence upon the flood waters in the higher parts of the river? No.

78 These works will not be detrimental to the low lands on the river banks higher up? Yes.

79 They are more likely to prove beneficial to them by giving a quicker getaway for the water? Yes.

80 Do you consider the Narbonne a rather bad entrance? It has been.

81 How does it compare with other river entrances on the

Shank  
Ellis 83

best? As a rule it is the best in my district.

Are you satisfied that the work already done has improved it?

Yes

Inasmuch as the Dept. has been able to give great relief by

£6,000 £7,000

the expenditure between £6,000 and £7,000 it does not like to know why

such an enormous sum as £70,000 should be expended to bring about

£70,000  
further

a comparatively small improvement? We have always had great trouble in

keeping the channel open just in front of the wharf here. It is not

long since it was <sup>all</sup> dredged.

84

Do you not think it would be wiser to continue to

maintain breakwater to its terminable point, and to await the effect

of the carrying out of the works? It is the present intention.

85

If the object desired is attained by the construction of the

breakwater, there will be <sup>no</sup> necessity for other works? For other works

are necessary to enable steamers to get up to the clearance.

86

Could not a channel be kept clear by means of a dredge?

Yes, but she is to be used up the river to let the barges come down.

The Eureka goes up to <sup>also</sup> Maxville nearly every trip. I have seen her

there several times lately.

87

Could not the waterway be kept open by putting in an

inexpensive training wall? I do not know. We have always got trouble with

the

88

The original design for improving this place was prepared by

//

Sir John B. de ? We have built up his design very nearly.

89 It will appear to be to a certain extent that inside works will be experimental ? Yes, the inside works.

90 There can be no doubt about the outside works because of the experience that has been gained in regard to similar works in other places ? Yes. The only experiment will be in connection with openings in the <sup>walls</sup> walls.

91 How will it be to make only a north breakwater and the N.W. training wall as a start ? We shall have to make part of the Stewart Island training bank to guide the water ~~to~~ to the N.W. training bank. We have trouble now at the foot of Stewart Island. It is sitting up there again, altho it is not long since the place was dredged.

92 You will not have the same trouble even when these walls have been carried out to a certain extent ? Wherever a wall is made the channel generally hangs to it.

93 Do you expect the N.W. training wall to cut away the sand deposit ? Yes, but we shall also probably use the dredge there, and pump the sand over the back of the wall.

94 What depth of water do you get immediately outside the bar ? I cannot say.

95 Does it shoal gradually there ? Yes : I think the water there is very deep.

96 What is the set of the current there ? It is northerly.

97 Will the sand be spilled sufficiently far out if it is to be swept around the point ? Yes.



protected.

104

*without*

Do you not think it with a southern training wall and  
breakwater there will always be trouble at this entrance? I think not.

8

When the water comes down the N W training wall strikes  
the northern breakwater do you not think it will bound off from it? I  
do not think so.

9

You think that the current will hug the wall right along?  
It has always been our experience.

10

Were you a party to the design of this scheme? No. I  
merely carry out the work in accordance with instructions forwarded to me.

11

Is it a work that can be carried out by day labor?  
In 3 works which are being carried out by day labor; and those which  
are being carried out by contract. Day labor works entail an ~~an~~  
*amount*  
imbursement both to the officers in charge of them.

12

You keep open the end of the N W training wall to serve  
existing interests? Yes.

13

Do you think that the inner portion will gradually silt up?  
I think so.

14

Are the prices stated by Mr. Dacey based upon current  
prices? Yes, for those and other works.

15

His prices are not likely to be exceeded? So far as I  
can see they are rather over-estimated.

14

*John Eichmann*  
*John Eichmann*

21960

John Eichmann, seaman proprietor, and stevedore

Nambucca Heads, sworn and examined:—

116  
October  
1888

Mr. Trickett } How long have you <sup>resided</sup> been here? 16 yrs in

17  
30  
23 or 24 yrs.

How long have you been on the coast? About

18

During that period you frequently came to the Nambucca

heads in command of sailing vessels? Yes.

19

Therefore you have a thorough knowledge of the district and of the various channels which take place at the entrance? Yes. I have seen the entrance at all times.

20

What was the condition of the entrance when you used to come here first? The bar was something as it is now, but it was never very bad. There used to be good water, the ~~bar~~ passage was generally narrow. Generally there were 6 or 9 ft of water on the bar.

21

It was before any work was done at all? The works in the straightened channel. When we came in before we used to have to follow round by the rocks on the north side. Sometimes the south <sup>side</sup> ~~side~~ work <sup>is</sup> so far north that you could not get out at all. I have had vessels in here for 5 and 6 weeks at a time, and then they could only get out in ballast.

22

And sometimes vessels have been unable to get in? It very seldom happened. If the wind was favorable we could generally get in.

23

How did you get ~~the~~ <sup>the</sup> ballast out? Hauled out or hauled out.

15



124

In those days there were no tugs to assist you? No.

125

You have watched the progress of the departmental works? Yes.

126

What do you think their effect has been? I think that they have done a great deal of good, and that they will do more good when the walls are a little further out.

127

What good has they done so far? So far the deep water has followed right along the wall, and I think that if the wall goes out a little further the entrance will be still more improved.

128

There is a bit of a bend in the wall. Is I understand is necessary because of the rocky nature of the bottom? There ~~was~~ is a rock which used to be a beach on it, and caused this to <sup>lead</sup> vessels to go. By carrying the wall out in the way to which you refer they are getting 7 or 8 ft of water. If they had gone out straight they <sup>had</sup> ~~would~~ <sup>have</sup> ~~only~~ ~~been~~ ~~able~~ ~~to~~ ~~pass~~ ~~it~~.

129

You think they have gone out in the right way? Yes. It is better to <sup>the</sup> have a channel out in deep water.

130

What depth of water did you see on the bar in the olden times? The depth varied from 7 ft to 9 ft and ~~was~~ <sup>was</sup> 10 ft, and sometimes it was more. After a flood it was perhaps 11 or 12 ft.

131

Has the work that has been done improved the channel? It did not do so until lately. A spit used to form in front of the wall, but now the channel is running out straighter, and I think that when we get the wall out a little further there will be a straight channel.

132

You think that the scour will be stronger, and that the bar

*Simpson  
Chick*

21960

will be moved further out ? I think so.

133

Do you think that the channel will go out in a straight line or is it likely to make a turn as it does at the Macleay ? It may turn if there is no southern wall to stop it, but I do not think that it will. If there is a wall on the south side it would help going out straight.

34

To construct a breakwater on the southern side would mean an enormous expenditure. Therefore I should like to know from you whether you think that the northern breakwater will make the entrance sufficiently good for the class of vessels that are likely to trade here in some years to come ? It is a hard question to answer. I think that the tide will follow the wall. Before it got out so far as it is now the channel went right over to the south, but as the wall was extended the deep water followed it out.

35

Mr Darley told us that if the modified scheme were carried out there would always be a depth of 8 or 9 ft at low tide. Do you think there will be that depth if only the northern breakwater is constructed ? If the water of the river is confined as it is proposed to confine it we must have a better scour and a deeper channel.

36

There are openings left at each end of the N.W. training wall. Do you think that will affect the scour very much ? I do not think so, but I am afraid that it will block us up.

17

137

You are not raising any difficulty? No.

38

Look

You like at the general aspect? Yes.

When the work is carried out will it still be necessary to keep a dredge here? I do not think so. I do not see what good

it can do. I think the scour will always keep the channel open.

40

The sand banks now existing in the channel will have to be

removed by the dredge? Yes.

41

When they are once removed and the training wall constructed do you think they will be likely to ~~form~~ <sup>form</sup> again? I do not

think so. I think that the current is sure to keep the channel open.

42

Is 8 or 9 ft of water a sufficient depth to provide

500

for the trade of this river? Yes. It will allow a vessel of 500 tons to

100

come here and such vessels will be likely to come - I think yes

to come.

43

What vessel trades here now? The Euroka, but the Rosedale

300

has come here. The Rosedale is about 300 tons gross, and the Euroka

is nearly as big but she is differently constructed, and does not

draw so much water.

44

Can the Rosedale come here at all times? Yes. She used

to come regularly but it has got very bad and she went away. She

draws abt 7ft 2 to 7ft 6.

45

It is proposed to divert the waters of Warrell into the

main river. Do you think that it will be an advantage & an increase in

scour? It ought to be. At the present time there are half a doz

18

Wickie  
Patchard

21960

different channels none of them of any depth.

44

Now you never have a good channel? There are so many  
springs of water that none of the channels is of any depth. <sup>If all the</sup> ~~All the~~  
water came down one channel we should get a better scour and a greater  
depth.

47

How far do the steamers go up the river? The Enoka goes to  
Macksville, 3 or 4 miles by water. She could go up 15 or 16 miles, but  
there is nothing to do there.

48

Is the trade of the ~~river~~ river taken by the steamers direct  
from Macksville? Yes, through Andersons being cargoes down from Bowma-  
ville, Taylors Crk, Warrell Crk, and other places.

49

When once you get into the river you have a sufficient  
depth of water for all purposes? Yes, I dare say there is a depth  
of 12ft, except on the flats near the mouth of the river.

50

After you pass the sand ~~bar~~ patch opposite Stewarts Island  
you can get up to Macksville, and still faster, without any  
difficulty? Yes.

4

5

Would it be of advantage to have a channel with a low vessel to go  
right up the river? Yes, because the loss of knock about the livestock gets  
the better. At the present time live stock is sometimes kept on board the  
months of 2 or 3 days and perhaps a week, and then it is some  
time on board the steamer, so that it wastes away and profit is lost.

152 I suppose, too, if the employment of droghda means extra rates? Yes.

53 What is the rate from the Namouca to Sydney? 9d a bag of corn, 6d a pair of fowls, and so on.

54 Is 9d a bag with about 17s 6d a ton? Yes. The back thought is £1 a ton dead weight.

55 How does it compare with the rate on the neighboring rivers? On the Macleay they pay ~~1 0d~~ 10d. a bag, on the Bellinger they pay as much as we pay, and on the Clarence they pay, I think, 1s.

56 Although the Clarence is so much further north than the Namouca yet by reason of its good entrance the rates are less than in here? Yes, and they can use bigger boats. This makes the rates cheaper.

57 What is the lowest price per bushel it pays the farmer? If they can get 2s 6d or 2s clear it pays them very well.

58 Would 2s pay them? They could live on it.

59 But it would be cutting things pretty fine? Yes.

60 You mean not? Yes, they could not grow maize if less than that. Of course, if the rates were lower it would help them a great deal.

61 Is much maize grown on this river? 35,000 or 40,000 bushels a year.

62 Pritchard  
Pittman

20

21960

There is it corn - how near to entrance? It  
commence abt 3 or 4 mls up. <sup>one</sup> The farm is only abt 2 1/2 mls in  
entrance.

63 Is a district a very good one for maize? Yes; we have some  
very good patches. There are farms here that produce 2,000 or  
3,000 bushels of maize at a time.

64 Is the land subject to floods? Most of it is. Land that is  
not subject to flood is a good one for maize growing, and it will grow  
wheat, or oats, or barley. You can't grow anything else.

65 What other industry is carried on in the district?  
Plenty of pigs and cows are raised.

66 They are sent by rail to Spain? Yes.

67 Is there any railway? Yes; we have 2 or 3 railways,  
but not big ones. Butter and cream are sent in these days.

68 Do you think if you had a permanently good  
entrance to district with railways? If we had a better entrance, and  
rates were lower, people would clear more land, and so go in more  
cattle, and pigs, and so on. At present time their produce often spoils  
on their hands. Now they sometimes take their produce and  
take it to the railway. I know 2 or 3 people who do it, because it  
had little to do with the irregularity of the state's visits. If  
some one would take the traffic in ~~the~~ poultry and eggs to be  
larger than it is now.

21

169

timber trade.

What other industry is there on the river? There is a

70

It is a large industry? Yes, but it has fallen away to

some extent because of the <sup>low</sup> water. There were five mills here once and I have seen 24 vessels lying here bound.

71

Now I suppose there is only one at a time? Sometimes

there are 2 or 3.

72

80

100

in 80 to 100 tons.

Some are 200 to 150 tons, I suppose? Some are 200

73

All the timber sent in here is sawn stuff? No, & no

sent away is sawn. Some is cedar, hemlock, and other logs, but most of the timber is

74

I understand it is said the timber <sup>is</sup> pretty well

exhausted? There is plenty of cedar, but there is some waste of

if it is useless now to log it it does not pay to draw it.

75

Where do they go for the cedar? Right to the head of the

river. They go down it 15 or 20 miles.

76

By bullock team? Yes.

77

Is not cedar logging expensive? No, & it is very cheap.

Last time I only got 13s for it. It will not pay.

78

What is the best paying timber? Hardwood - blackbutt,

gum, tallwood, mahogany, and ironbark. The navies will fetch in

more but we cannot get it, because they will not take it in

Sydney.

22

Relative Standard  
19

21960

How many people do you employ at your mill? Counting in  
drawers, fellers, and millhands, 30 or 40 men.

80

And Mr. Ellis would employ about the same number? Yes. There  
are 18 men in the mill, 12 or 13 bullock drivers, and 6 or 7  
fellers.

81

What prospect do you see of the entry being occupied  
properly? I do not suppose that the people would agree to pay  
port charges? Because there will be more trade, and people will  
have a reason for settling on the land and improving it. That is all that you can  
expect.

82

There will be an indirect return in the way of increased  
settlement and trade? Yes. The money will not all be spent in one  
year; it will take 4 years. When the entrance is improved the district  
will be opened up, and dairymen will go ahead. Sydney will be no the way  
to entry districts.

83

Do people stay in this district? Yes; people who were  
here when I came are here still.

84

It is a very fertile district? Yes, but it might be  
greatly improved.

85

It has a good climate? A nice climate.

86

You honestly believe it would be a more progressive  
place if you could regulate stock communication and producers could be  
certainly getting to market safely? Yes. If we had a regular/direct



to be as good as much more comfortable.

184

Will regular and certain communication rates be probably be

improved? Yes; there will be a great reduction.

88

Do conditions well here? They do very well. Of course

close to the sea the grass is not good, but further inland as it is

good and very easy as they are only.

89

As an old resident of the district, and as an old colonist,

you recommend ~~to~~ <sup>carrying</sup> out of these works because of their local

and general advantage? Yes.

90

It has been suggested that Bellinger, the Mambucca, and the

Nucleary districts could be served by one harbor, and that they could be

connected by means of a railway. What do you think of this suggestion?

I do not think it such an advantage as it is.

91

It will be a difficult matter to construct a right line

of railways to the Nucleary because of the hilly nature of the intervening

country? Yes.

92

I suppose you would prefer to show you the water carriage

is always the cheapest? Yes, by far.

93

If to the same rates, by charges will be added you will

be greatly handicapped? Yes. The same rates for the harbor you might

make will be about the same as they are for here, and then there will be a

great charge in addition.

94

Has the value of property increased here? Yes. When I came

here 15 years ago this was all bush, and I had to clear my way through. <sup>had</sup>

£50, £60,

T I am then h<sup>o</sup> to value, but now we h<sup>o</sup> to pay £50 or £60 and as  
much as £80 if a small allotment.

195

You a every reason to 1931 conditions of a property  
of a district ? Yes.

96

lowest

Mr Roberts } - Is it 9d a bag t lowest rate it has be

paid if raise here ? Yes, so far as I know. If t rate has be reduced  
it is only lately.

97

alt most

T secretary to t N C S S Co, in giving advice in Syany,

sd tt t rate for t Marhacca was 1s 6d a bag ? Well, it has be 1s 9d  
quite lately.

98

Are you aware tt t rate charged on t Bellinger ~~is~~

only 1s 6d ? Is it case their rate is lower than ours, unless our  
rate has be very recently reduced.

J—l

21960

*Howard  
Fulton*

William John Whittes, pilot, Nantuxet ~~Island~~ <sup>Heads</sup>, South

and examined -

199

Chairman

How long have you been here? 24 years on the island next month.

200

Mr Roberts

Prior to being appointed pilot were you in command of

vessels? Yes. I had been in command of several vessels.

Vessels being on this coast? Yes.

Did you trade to Nantuxet? Yes.

Do you have a knowledge of the state of the entrance if a  
considerable time? Yes.

Was it subject to much variation when you came here  
first? Yes, to great variation.

I suppose for a while period prior to the commencement of the  
narrow works it was not as good as it is now? Channel used  
to come in under the north head and sweep around by the rocks. The  
south spit at sometimes took right up north, and then the river  
would break out thro' the spit and make a new entrance to the south.

6 Was the channel sufficiently wide to enable vessels to go  
through w safety? Yes. <sup>We</sup> ~~It~~ <sup>through</sup> is taken vessels out at a spit day and  
night. When the channel thro' the spit was open the channel round the rocks

was shoald up .

704

Was a channel thro' a sand spit caused by a fresh  
flood waters ? No. The south spit wa work up to the north so far as  
the channel round the rocks became shoald up, and then the river wa  
cut thro' the spit to the south.

8

What depth of water did you get then ? We got various  
depths. I know there to be a depth of 10 ft and 11 ft at low  
tide, but sometimes there were only 3 or 4 ft.

9

What depth of water did you get when the channel came  
round under the north head ? From 10 ft to 12 ft at times. The channel  
was generally shallower when it went outside. Sometimes there was  
not as much as 4 ft of water in the channel <sup>thro</sup> the spit.

10

Can vessels get in there ? Yes .

11

Can you get there in at high water ? Yes .

12

Has a schooner ever been so bad at sailing vessels can not  
cut in ? Yes, often.

13

Have they ever found outside ? No, they <sup>land</sup> ~~waited~~ until  
there was an improvement .

14

What is the longest time that you <sup>know</sup> ~~waited~~ vessels to wait  
for an opportunity to come in ? A <sup>or</sup> ~~at~~ 8 days .

15

And how long is it now when they wait for an opportunity

July 5 22

27

William Walker

21960

27

to get out ? 5 wks.

216

How many years has <sup>a</sup> Star been trading here ? 14 yrs.

17

What ships have been here during its period ? Mary

Cherokee, Star, Star, Noble, Star, Star.

Star, Star, Star, Star, Star.

and Star Star.

18

Was not Star built specially for Narragansett ?

She was built specially for shallow bar entrances.

19

~~Does she have less than 1000 tons of cargo?~~

Is Star a regular trader to river ? Yes.

20

Was not Wilmington lost near here ? Yes.

21

Was it in the attempt to enter ? No, in crossing out.

22

Did she get stuck on bar ? There <sup>were 10 ft</sup> 12 ft water

over bar at a time, but she struck and it affected her steering.

23

Was it broken hard at time ? No. The channel was then

close to rocks and she struck her hull. Before the master could get

away off her she <sup>leaved</sup> struck rocks on the rocks.

24

Did she become a total wreck ? Yes.

25

Has the breakwater divided sufficiently if you

to be able to say if its effect will be beneficial ? Yes.

28

54

... ..

... ..

35

marked away

... ..

... ..

changed  
were

... ..

34

... ..

... ..

33

... ..

... ..

... ..

32

... ..

31

... ..

... ..

... ..

30

... ..

29

... ..

... ..

28

... ..

... ..

... ..

27

... ..

... ..

26

*Walker  
West*

21960

permanent.

336

Do you not think a channel will be permanent if only  
northern  
a northern barge is used? No, because it is possible that water  
may cut thro' the channel at times. I think however, that the  
barge will give excellent results. At the present time a barge  
moves away from the barge if a storm comes and comes back to it.

37

Do you not think it will be desirable to await effect  
of northern barge but doing anything else? I think  
barge is really the most important work to do.

38

It is giving a good depth of water in the channel is it  
possible? Yes.

39

You do not ~~think~~ <sup>apprehend</sup> any danger of the wall being  
away after it has been raised? No, though it may settle a bit.

40

Your principal reason <sup>for</sup> recommending the northern barge  
is so that there may be a better channel? To make a water way to  
the northern barge.

41

Do you not prefer the northern barge in the sea? No.

42

Do you think that the N.W. and the Stewart  
channel will bring out the decision soon? Yes.

30

723

Do you think it they will bring abt the same with-  
out the construction of the eastern sealing bank shown on the plans? They  
will create a scour, but not so good a scour as if the eastern  
sealing bank were <sup>made</sup> there. All the shoals shown on the map are caused, not  
by the silt coming down the river, but by the sand coming in the sea.

44

You know it is intended to turn Warrell Creek into  
a main river? Yes. I think the scheme as a whole is a good one.

45

Is there good water right up to Macksville? Yes, once  
you get above the flats. The Burka goes up to Macksville.

46

Does she go as far as Bowraville? No. She goes to  
within 5 miles of the place.

47

How do <sup>the</sup> Bowraville people get their produce away?  
They punt it down the river.

48

Where is Taylor's army? It is the name of the south branch  
of the river. It joins the main arm 1 1/2 miles above Macksville.

49

Is the land above Macksville more fertile than the land  
lower down the river? Yes; it is richer land.

50

Is there a large <sup>area</sup> of good land there? Yes.

57

How does the land compare with land on the Macleay? It  
is very good. I think the alluvial flats are equal to similar land  
on any of the other rivers on the coast.

53

Are they narrow? They are small flats.

31





33

How far up the valley do you go?

31

That is the distance from the river to the

the river

the

How many people live there?

60

about 2000 people

Does the water take any other uses?

65

It is used for irrigation

Does the water take any other uses?

64

Does the water take any other uses?

Does the water take any other uses?

66

Does the water take any other uses?

Does the water take any other uses?

68

About 2000 people

How long is it since it started?

67

and became bad

Does the water take any other uses?

Does the water take any other uses?

Does the water take any other uses?

63

and then it started to

I have people in Sydney

Does the water take any other uses?

76

*Handwritten signature*

72

Are there only 2 mills on a river at a given time?

Yes.

73

Were there ever more? <sup>be</sup> There used to be 10 or 12 mills.

74

Why is some of the mills closed? <sup>One</sup> One mill was burnt <sup>down</sup> down

and another has been shifted to a different place.

75

Does not a vastness of timber exist along the coast in the

northern coast? I believe so.

76

Does much of it go to the London market? I believe it

consists of going to London, but not direct to here.

77

Is it all dressed timber or <sup>is</sup> is it sent to England? It is

generally sawn into planks, 2 x 3, 4 x 4 blocks.

78

Is any timber sent to America? I do not know if any

timber has been sent out of the country.

79

The principal demand in England is for wood blocks? Yes.

80

Will the timber supply here last 7 years? I think it

will last 7 years, though, of course, it may well be 10 years back if it.

81

How far do they draw the timber now? 5, 6, and 7 miles

in many instances. Some people <sup>a</sup> less distance ~~to draw it.~~

82

Is the timber trade in a flourishing state? I believe

the mills have as many orders as they can cut.

783

Is less maize being grown here now than was grown a

few years ago? No, more maize is grown now.

84

They are not giving up maize growing to go into dairying?

No. The export of maize is increasing.

85

Can you tell us the value of the exports and imports of

maize? The following statement contains an account of the exports and imports

of the year 1897 and their approximate value:

85

Namabeea River Exports + Approximate Value  
August 1897

			£	s	d
Hardwood, sawn,	2,868,000 feet	@ 10% per 100	286	80	0
Cedar Rough	84,000 "	" 15% "	126	0	0
Girdles Lumber	42,000 "	" 1% cut feet	420	0	0
Shingles	104,000	" 15% per 1000	156	0	0
Palings	408,000	" 6% " 100	244	8	0
Maine	39,630 Dicks	" 10% Dick	396	3	0
Pipe	1,680	" 15% each	252	0	0
Logs	111 Coops	" 20%	22	0	0
Eggs	233 Coas	" 10%	23	3	0
Oranges	179 "	" 5% case	8	15	0
Litum	205 "	" 10% "	20	5	0
Hides	304	" 1/8 each	37	6	8
			<u>£</u>	<u>389</u>	<u>22-1-8</u>

J. P. L. L. L.

File  
Namabeea

Yam  
Dandah

To  
P. L. L. L.  
Namabeea

386

I understand there are some antimony mines here? Some  
mines were worked for 3 or 4 yrs but the price of antimony went so  
low it did not pay to continue.

84

one

Has these mines been abandoned? Most of them. A few  
others are kept on in a small way.

88

What kind of vessel is necessary to enable vessels to go up the  
river <sup>a</sup> following? All along the outside of the N.W. trailing bank and  
half way along the Stewart Island trailing bank requires dredging.

89

right

And in there you have a good depth of water ~~right~~ up to  
Marksville? Yes.

90

What depth of water is there at the entrance at the present  
time? The following statement ~~contains~~ shows the variation in  
depth from the beginning of 1893 up to May of this year:

# Nauyassee Bay

37

Sounding Low Water Spring Tides

Month	Year	Sounding	Low Water	Spring Tides	Remarks
January	1843		7	feet-	
Feb-	"		5	"	Channel Bar, worked out south
March	"		7	"	Worked back to N. Head
April	"		7	"	
May	15 10	"	5	"	Two channels one by N. Head
"	11 to 9 1	"	3	"	one along South beach
June	6 <sup>th</sup>	"	3 1/2	"	
"	15 <sup>th</sup> to 31 <sup>st</sup>	"	9	"	First deepened & straightened the Channel to the N. Head
July	"	"	9	"	
August-	"	"	9	"	
Sept-	"	"	9	"	
Oct-	"	"	8	"	
Nov-	"	"	8	"	
Dec	"	"	5	"	
	1844				
Jan	"	"	8	"	
Feb	"	"	7	"	
March	"	"	7	"	Crossing inside 5 feet-
April	"	"	7	"	
May	"	"	6	"	" " " 6 "
June	"	"	6	"	Crossing improved
July	"	"	7	"	
August-	"	"	7	"	
Sept-	"	"	7	"	
Oct	"	"	6	"	
Nov	"	"	7	"	
Dec	"	"	8	"	

~~Nambucca~~

Soundings Low Water Spring Tides

Month	Year	Soundings	Remarks
Jan	1895	8 feet	
Feb	"	7 "	
March	"	7 "	
April	"	8 "	
May	"	8 "	
June	"	8 "	
July	"	7 "	Crossing 4 feet -
Aug	1 to 18	7 "	" "
"	18 to 31	6 1/2 "	4 1/2 -
Sept	"	6 1/2 "	" "
Oct	"	7 "	5 "
Nov	"	7 "	"
Dec	"	7 1/2 "	"
1896			
Jan	"	6 "	5 "
Feb	"	5 1/2 "	" "
March	"	6 "	" "
April	"	6 "	" "
May	1 to 26	5 1/2 "	3 1/2 "
"	26 to 31	5 "	2 "
June	1 to 20	3 "	nothing more out - 1
"	21 to 31	3 "	Channel broke out - Through South 9 Nozes towed out half loaded
July	"	4 "	Channel working further South
August	"	4 1/2 "	"
Sept	"	5 "	Crossing 4
Oct	"	5 "	"
Nov	"	5 "	"
Dec	"	5 1/2 "	4 1/2



~~Notes~~

Soundings Low Water Spring Tides

Jan	1897	6 feet	Crossing 4 1/2
Feb		6	
March		5	5 1/2
April		5	Channel Working North 20 feet every 24 hours
May		5	Two Channels one by N (used) on out S.E.
June	1 to 13	4	both Channels
	14 to 30	2	one closed out during Month
July		3	
Aug	1 to 9	1 1/2	new channel broke
	10 to 31	2 1/2	out along the duct beach
Sept		3	
Oct		3 1/2	
Nov		4	Channel working S.E.
Dec		4	
1898			
Jan		5	Channel Working North
Feb		5	& following the line of the
March		4 1/2	training wall or breakwater
April		4 1/2	No crossing
May		5 1/2	& Improving

The depths are at low water Spring

Rise of Tide Spring, 3 feet to 3 feet 6  
" " " Neap 1 1/2 " " 2 " 3

*Yindley  
Mankes*

591

Do vessis come in here at night? No, but they can  
come out at night.

92

Does a star come in at night? Yes.

93

Do you regard the entrance as safer now than it ever was  
previously? It is better now than it has been for some yrs.

94

Have you ever known it to be better than it is now? Yes,  
much better. After a fresh t ~~rain~~ river used to go straight out  
occasionally.

95

Do you think that the weather in summer time is likely  
to silt up the entrance? No. I think that <sup>Scour</sup> will prevent it.

96

Do you think that the proposed modified scheme will answer  
all purposes? I think yes to some? Yes. If I

97

If it were not for the expense, would you like to see the  
mouth of the water and the eastern training wall constructed? Yes.

98

Would it make a complete job? Yes.

3,000

99

What is the population of the district? I think abt 3,000.

3000

Do you think that the importance of the district justifies  
the proposed expenditure? Yes.

*[Handwritten signature]*

David Mitchell, engineer and dredge master, Nantuxca

River, sworn and examined -

301

Mr. Clarke - How long have you been in charge of the dredge

here? Since July, 1893.

2

Were you here before that? I was here in November, 1891,

for 5 weeks.

3

Why were you removed? I went to the another man's place

elsewhere.

4

What work have you done since you have been here? We have

dredged the river from the pilot boat shed up to the Bellwood channel, and up to the main channel.

5

Has the work done by the dredge proved beneficial? Yes,

but the river requires constant dredging to keep it open. It is only a year and 9 months since we dredged the place where we are working now.

6

How do you dispose of the sand? We have been throwing

it behind the spit.

7

Does any part of it go back into the river again?

Very little of it.

8

What kind of a dredge are you working? An improved suction

pump.

9

I suppose the dredge is kept continually at work?

42

Marks  
Holloway

21960

at \_\_\_\_\_ months  
Well we were down \_\_\_\_\_ on one Ocean.

310

Dredge will make very little permanent improvement in the river? Of course the improvement done by the dredge is only temporary. The work has to be done over again continually.

11

Does the river require dredging higher up? There is good water after you get past the flat at Reubank until you get about 3 miles above Mackeville.

12

Do you think the proposed harbor works will improve the entrance? I think so. We could dig away with the channel between the New Orleans bank and the shore. From my experience it will be necessary to take the dredge there every now and then to clear it.

13

Do you think that the diversion of Warrell Creek will be an improvement? I think it will be a great improvement.

14

Will the dredge be required after the proposed works are carried out? No doubt there will be less dredge to do, but the river will probably silt in places after freshets.

15

Will it be possible to pump sand over the back of the dyke and thus to strengthen the dyke? Yes, it will be a good way of disposing of the sand.

16

The breakwater already constructed has had a good effect upon the entrance? Yes, but of course the scheme is incomplete yet.

43

317 Do you think if the walls on the northern side of the river  
 would be sufficient? No, doubt the improvement would be greater if the walls on  
 the south side of the river were made, but I think it would be well to  
 complete the walls on the north side of the river first.

18 The <sup>work</sup> Chairman } You think upon the work of the drainage is purely  
 temporary, to keep open a channel to enable steam to get round  
 at the back of Stewart Island? No, near the mouth our work is purely  
 temporary, but further up the river, where we are being through a bank of  
 shingle, it has stood very well.

19 You are working now in a comparatively narrow <sup>piece</sup> ~~piece~~ of  
 water, but you have not close indurated sand to deal with? No.

20 Consequently your work is perpetually <sup>all</sup> filling up? Yes, to a  
 large extent. A lot of the sand comes in from the sea.

21 Does not the sand work all along the southern spit when  
 incoming tide? Sometimes it does, but at other times it seems to  
 run away from the spit.

22 Does the tide take a direct course, or does it go in to  
 the northern shore over towards the sand spit and back again? In some  
 places.

23 Were you working here before the harbor works were commenced  
 ? Yes.

24 In your opinion have they greatly improved the entrance? I  
 think so. I have seen vessels bar bound here for weeks at a time. Now

44

*Relleway*  
*Yonville*

21960

It is a rare thing if there to be bar bound if more than a week or  
3 days.

525

W such an exposed southern shore a bar must of necessity  
shift very much. Has the tendency of the northern backwater to  
straighten a bar? Until it commenced to bend it did. The water  
seems to strike off from the bend.

56

Is not one of the greatest difficulties in connection with bar  
entences the shifting character of the bar? Yes.

57

If any ~~HH~~ scheme could be adopted to keep the bar in one  
position and to deepen the water on it, it would effect an improvement?  
Yes.

58

The northern backwater has been ~~made~~ designed to drag the  
scour right round within a few feet of rocky cliff. It will drag the  
bar considerably to the north of its present position. This being so, do  
you think that there is any danger of <sup>the</sup> southern sand spit working north  
across the channel? I should not think so.

59

I suppose the scour would prevent it? Yes.

60

And the sand will be spilled out over the bar into the outer  
current and carried away north? I think so.

61

Do you think that the backwater will go out sufficiently  
far to spill the sand into deep water? It seems to go out far  
enough.

62

The intention of the N.W. training wall is to assist the scour,  
and thus by natural means to make a channel wide enough if ordinary

45

vessels. If the result is obtained the dredge will not be required to be  
down towards the mouth? Yes.

333

Do you think it extremely <sup>probable</sup> ~~likely~~ that a scow  
will be set up at the extreme end of the N.W. training wall right round  
to the extreme end of the northern breakwater? Yes.

334

If the work of the dredge were confined to that part of the  
river which passes Stewart Island there would then be uninterrupted  
navigation right into the river? Yes.

335

I suppose that the cutting through the bed of shingle near  
Stewart Island will not take very long? It will take about 12 months.  
There are a few feet of sand, and then a bed of shingle.

336

If the pieces were dredged, any vessel could cross the bar  
and go up the river? Yes. So far as the pieces of shingle,  
but about the far end of Stewart Island there is sand.

337

You are getting close to deep water again there? Yes.  
We will see in about 10 feet of water I think ✓

338

I believe that there is a lot of dissatisfaction here  
about the state of the bar? Yes.

10  
18

339

I suppose there are plenty of complaints because of the  
difficulty of navigating the river? Yes, but the upper part of the river  
is not so bad at the present time. There used to be great complaints  
about the flats up above, but we have a small dredge at work up there

Yonke  
Bourham  
340

21960

Do you know anything that could be added to or taken from the design to improve it? No, I do not.

41 Have you seen the harbor works carried out at any of the other rivers? Yes, at the Clarence and at the Bellinger. The wall at the ~~Clarence~~ <sup>Bellinger</sup> has had a good effect.

42 And the training walls at the Clarence have had a pronounced success? Yes.

43 Do you know any reasons why these walls and not be equally successful? No.

44 At the present time the bar is very bad? Yes.

45 And at times the people are subject to get inconvenience in getting produce away and in bringing goods here? Yes.

46 I suppose the only way to help them is to improve the bar? I do not see how else you could help them.

47 There is some talk about making a <sup>railway</sup> connection between this and other rivers, but I suppose there is nothing in the proposal? I do not see <sup>how</sup> any carriage is to compete with water carriage.

—

47



William Brang, bee farmer, Lower Nambucca, sworn and

examined -

548  
 Mr Farrell - How long have you been a resident of the Nambucca

? Abt 12 yrs.

49  
 50  
 What is the size of your holding? ~~12~~ 40 acres.

How much of it is under cultivation? I have only abt 4 acres

ploughed, and I suppose I have 12 acres partially cleared. The trees have been  
 felled and a crop has been put in with the <sup>hoe</sup> hoe.

51  
 Where do you ship your produce? At the Nambucca. <sup>an</sup>

52  
 Have you been put to any inconvenience by reason of the bad

state of the entrance? Yes. The steves do not run regularly, so it is a  
 great trouble to send anything away. It is sometimes a matter of weeks  
 to get your stuff away. You have to keep your ears perpetually open  
 for the whistle of the tugger.

53  
 How things be improved by the carrying out of the harbor works

? There has certainly been an improvement.

54  
 Have you noticed any improvement in the harbor since the breakwater  
 was carried out? I cannot say that I have, but I think that there will be

an improvement when all the walls are carried out. There is always deep  
 water alongside the heaps of ballast that are thrown out by sailing

vessels  
 vessels.

48

Bohane  
Thorp

21960

355

If better facilities were given for getting produce to market

would you put more land under cultivation? I would put all the land I could under cultivation. The lower <sup>N</sup>Amhucca is more suited for dairies than for corn growing. We have only about 13 inches of soil, but on the upper part of the river the soil is very deep.

56

Are you engaged in mixed farming? Yes.

57

Do you grow maize to any extent? No. I do not suppose

if I had the place well worked I could grow more than 10 acres.

58

Is there plenty of land still available for settlement in the

district? Yes. If you look at the map you will find that there is only a fringe of land along the bank taken up at the present time.

59

Is the country suitable for dairies and mixed farming? Yes,

and especially the lower part of the river. Up as far as Macksville the country is more suited for dairies than for corn growing, while higher up again it is best suited for corn.

60

Have you heard of other people complaining of the inconvenience of the

present steam service? Yes, ever since I have been here. I have seen 21 vessels lying here unable to get out. Vessels can generally get in because they are bumped over by the seas.

61

What effect has the floods on the bar? There has always been

a good bar after a flood. I heard that there was 22ft of water  
at bar after a flood.

362 Do you think that a proposed departmental expenditure is  
justifiable, considering the importance of the district? I think so.

63 Do you think that if the works are carried out more  
land will be put under cultivation, and that the trade of the district will  
increase? I think so.

64 Are the people about here industrious? Yes, as a rule  
the farmers here.

65 Channel - Which would be the best way to give relief to the  
district, to open a port or to build a railway to Macleay? To open the  
port.

66 What is the greatest want in crops and produce communication with  
the market, as I suppose is Sydney? Yes.

67 It does not follow that you require either larger  
vessels or vessels to trade more frequently - what you require is a  
regular service? Yes.

68 If the port is improved to enable you to get it you will  
not advantage you want? Yes. I sent corn away in April last upon which  
I paid 1s for a bag of freight, whereas I heard that corn was taken in  
at Macleay for <sup>10<sup>d</sup></sup> a bag.

69 Do you think that if the port were improved it would lead to the  
development of the district? Yes. All round me there are farms lying  
50

Shank's King  
idle because of bad state of entrance.  
70

50

21960

idle because of bad state of entrance.

Will larger areas be brought under cultivation if the

entrance is improved? Yes. Since these works were started three

circumstances in enhanced operations here.

71

I suppose the land is good enough, but very heavily timbered.

? Yes. It is disheartening work to clear it.

72

I suppose people are turning their heads to things

because they can get a return without expending so much in clearing?

Partly.

73

Mr Roberts - You devote most of your attention to bee raising

? A good deal of it, but I intend to do in more I realize going. I

intend to cultivate abt 14 acres. About 20 but 4 of my 4 acres

are swampy.

74

Do you find bee raising profitable? Yes. It was more

profitable at first, but too many have gone into it, and the prices are

coming down.

75

Is there a good export of honey in this district

? No, except what I hear very little has gone away. I hear 15

cases away - 12 lbs to a case.

76

Do you get a satisfactory price? I don't get as much as

3 1/2d a lb if my honey.

50 1/2

377

Is the market frequently glutted? Yes. From about November it is best to hold back.

78

Are you sending as much away now as you did at first? I am increasing my output every year.

79

Are you the only bee farmer on the river? No, and the man has started.

80

Do you supply much money locally? Yes, but the price is so small it hardly pays to, so would not money.

81

Do you do in poultry and pigs? Yes, but not very much.

82

How long on your present holding? No. I have been engaged in the mills for some time.

WAL  
2076/98

[Handwritten signature]

21960

6  
~~Hookney  
Pulchard~~

52

Tuesday 1st June 1898

The sectional committee met at the Star Hotel, Macksville, at

2.30 p.m.

PRESENT -

Charles Alfred Lee Esq., Chairman

Henry Clarke Esq.

Frank Farnell Esq.

The Hon Charles James Roberts *CR*

The Hon William Joseph Treckett



The sectional committee further considered the proposed harbor works at the Washburn river.

*Bolton*

Thomas Bolton, President, Macksville Progress

Association, Macksville, were read and examined -

383

Chairman: How long have you resided here? ~~Over 30 years~~

Over 30 years.

574

Mr Farnell: I understand that you have considerable knowledge

of the lands and resources of the Washburn district, and of the difficulties

and inconvenience caused by the bad nature of the river? Yes.

85

Will you describe to the committee the difficulties which you

have to contend with in the harbor works now commenced? In answer you

52

... entrance was an altogether different place than what it is now. The  
 mouth spit / used to overlap on a level with the main road. Now  
 it has all disappeared. The spit in front of the mill was 5 or 6 ft  
 high, and narrow / used to grow on it. The channel in Warren's creek  
 used to be a good point, but it channel is now blocked  
 up. In my opinion the channel is not as good as it was in 10 or 15  
 years. Then they used to shoot vessels over the bar, bringing <sup>them</sup> up  
 to anchor on the spit. Now they cannot do it. They could not be able to do  
 it / 10 years. In 10 or 15 years a channel was made, but very deep.

386

In those days the channel was almost straight? It did not  
 round the rocks. Because there was a <sup>reef</sup> ~~bar~~ of rocks there a turning  
 wall is now, and the channel was between it and the spit. A great deal of  
 sand it used to be there has come away.

87

Has it come away since the harbor <sup>works</sup> ~~works~~ have been in pro-  
 gress? No.

88

Its disappearance is not owing to them? No; it is due  
 to the floods, and to the heavy seas.

89

What depth of water <sup>had</sup> ~~was~~ you before the harbor works were  
 commenced? The depth was very. Sometimes we had 5 ft at low water.

90

Will it be a sufficient depth for the boats trading here now?  
 Hardly.

91

That will come in at high water? Yes. Part of the difficulty  
 entering is overcome now by the employment of the tug boat. I do know vessels

Richard  
Willson

21960

to the inside of river ... 10 wks at a time. I have seen 23

boats bar bound here at a time.

392

steamers

I suppose it is not so much difficulty in getting out  
as it is in getting in? No.

93

sailing

I suppose it is not so much difficulty in getting out  
as it is in getting in? No.

up so far as you had to make a very sharp turn to get out. I will

have called a cutter to get out the spit away. It shows that when a scheme

is completed it must be good. The channel will never be any good to

spk o until we get a flood which will wash it piece out.

94

the

... the ... bar bound since  
... ? No.

95

Is the size of a district equal to or greater than it  
was at that time? At that time the trade of the district was very little,

and consisted principally of the export of cedar and other timber. Since

then Taylor's act has been passed up, a piece which I believe will greatly

advance. Land is being cleared all round the district, and they

are doing in it maize growing and dairies. The bulk of the drivers instead

of driving logs are going into farming, and are clearing land, so that every

year our exports are increasing. Our exports this year will amount to

nearly as much more as ~~the~~ <sup>our</sup> exports of last year.

96

What was the population of the district when you first  
settled here? There were a few people living at Berra in the country

scattered. There was a settlement at Macksville, and another one at ...

574



and a collection at Congarini. I marked out a road as it now going  
to the Clydeck.

397

The population be increased since then? There is a larger  
population in this district now than there is in the Ballinger, but  
it is more scattered. The Ballinger is only one big valley, though a  
very fertile valley, while here the good land lies in various  
spots. There are settlements 25 miles above Bora, and a long way up  
the river.

98

What has induced <sup>d</sup> people to come here? There was some  
fear to the up. They know it a year or so <sup>fit</sup> in the  
river, and it was about all you could say for the  
people there.

99

Do you think settlement will be greater if there be an  
a better bar? Yes decidedly.

100

Has the work already carried on had a beneficial effect upon  
the country? Yes decidedly. As I will be made a deep channel be  
filled it out.

101

If you had any reason to believe that other opening walls  
will prove less beneficial? Yes, most decidedly.

102

You are opposed to the construction of other opening  
walls? Yes.

103

Do you think that the diversion of the waters of the  
into a main arm will be a great benefit to the country?  
Yes.

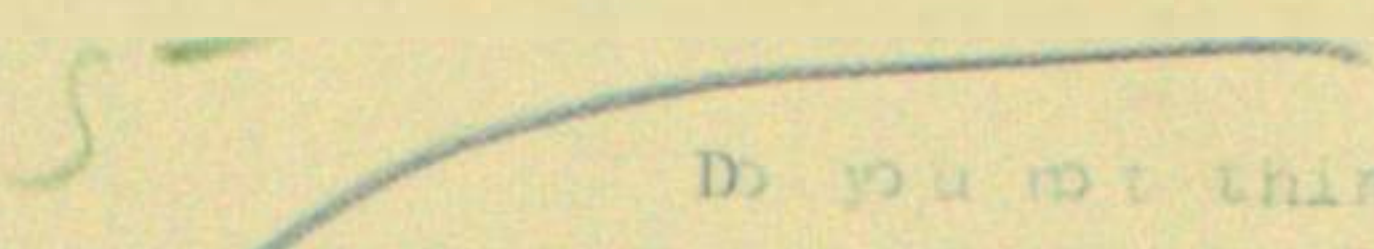
55

Millon  
Thornston

21960

404

I understand if you do not approve of the proposal but the  
idea? Not altogether. There is a flat at the upper end of Stewart Island,  
and until the flat is cut through the water cannot get into a narrow  
channel to wash the bar out.



Do you not think if a natural scour will be created if  
the training walls are constructed? If you confine the water you must  
increase the scour.

12  
11  
13  
6

It is proposed to divert the water of Wapiti creek into  
the main arm. Do you not think it will bring about the desired result  
quickly?

I understand if you advocate the dredging of the river; but do  
it not be better to create a scour which will have the same effect? I  
had to use to dig a training wall in Blackwood point at the upper  
end of the island until you had reached a point there. The channel at the  
upper end of the island was closed because a vessel threw out some  
boards of ballast there. The flat waste collector was at the channel  
may be opened up again. I do not see what use the training walls can be  
utilized upon the channel. According to the surveyor there are 11186  
feet of water in the river above the flat.

8

Suppose the engineers say if the proposed works will give a  
good scour and make a channel will you not rely on their judgment?

56

I admit that the water will not be raised, but I say that the first must be dredged first.

409

Suppose the channel is created by a spur called by the name of Carroll-Crk? That I speak of will not be dredged thro.

10

It is a sand flat? Yes. There will not be a great deal of sand for where the dredge left off. Then if a wall is raised it can be made.

11

If they construct a spring wall and dredge it piece, opposite the sand behind the wall, will it satisfy you? Certainly, because it will make the channel permanent. I want the channel opened first. ~~There was never a channel~~ There was never a channel on the island until a few years.

12

What steamer trade have you? The principal steamer is the Emma.

13

What draught has she? About 4 1/2 or 5 ft.

14

Does she supply the wants of the trade of the district? Not always. I doubt if she will be able to take all the grain away this season. If she runs constantly, I shall like to see her and other vessels out of consideration.

15

But she is not the eq of the district is she? Well, she is only a new boat. We want a Reasonable and other boats of this size.

16

Your case of complaint is not a good one.

57

*Information  
Lettis*

... you can not ...  
... it will be ...

417

... after ...  
... boats ...

18

... three quarters ...  
... mouth of ...

19

... shallow ...

20

... Certainly ...

58

21

Do you have any idea as to what the trade of the district will be in 1914? I don't know the details.

22  
annually

40,000 bags many

Do you think 40,000 bags of wheat are sent away

annually? I cannot say. This year will be an exceptional year.

23

Do you have any idea as to how many acres are cultivated?

maize etc.

24

Do you have any idea as to the average size of a holding here?

No.

25

Are you satisfied that a good part is given to <sup>farmers</sup> the public?

preparing to put more land under cultivation? They are doing so every year. It is very difficult and expensive to clear. It is not like the alluvial scrub land of the Darling and the Macleay.

26

If we give better facilities for exporting produce do

you think more land will be put under cultivation? Yes.

27

Do you think that the improvement of a bar will lead to a

reduction of freight? It will lead to perishable goods, such as pigs, etc. to be sent to Sydney. Pigs to leave here but are only sent to Sydney.

28

What is your opinion as to the permanency of the timber

trade? There is a great deal of timber here, yet but a course is being taken to go further afield each year.

29

Still there is sufficient timber to last for many

years? Yes. By a time the timber will be gone.

59

Callio  
Gould

21960

30

... they will be able to fall back on a young tree growing up.

... trees it were saplings when I came here and they are two or three feet through.

430

You think there is room for development of timber

industry possibly.

31

Can you give us an idea as to whether a railway industry promises to expand? It is only in the infancy yet, but everyone here is going to be doing. All the talk is about it.

31

Is it land suitable for grass? There are thousands of acres that will be taken up for dairying if a proper outlet is provided.

33

Where is this land? All over the place. There are parts of it that are suitable for a bit here and there but taken up and we keep a few families. It is all good grazing land.

37

Do all the lands you speak of come within the influence of proposed works possibly.

35

It produces for those lands as well as to any other part than the Waikato? No. There is also plenty of good land further out that produces when will I think eventually come this way instead of going to the railway.

36

Do you know of an alternative proposal to construct a railway from the Waikato to the Mackay roads? No.

37

Suppose that  
was given to you and I Mr. Islay entrance was made navigable

60

Will the people of the Yukon...? Yes, certainly... of Mackenzie and you improve.

438

The...? Decidedly not. It is a... miles

... beach there will be in a river.

39

Chairman - Will such a...? Yes, certainly

...? Decidedly not.

40

Mr. F. ... } You think it is... is a... outlet

to this district? Yes.

41

And you think it is...? Yes, certainly

it is required by the people of the district? If the flats are opened up to

... will wash the... channel out

... any... wall, besides... there now. I have been in

and one of these bar harbors since 1849. I came up to Mackenzie in the

1849 and there is now... there was then a sand flat

... water in.

42

If you noticed any material difference in the depth of

water in the main river since you were here? No, it has always been

about the same.

43

I understand the river is navigable for many miles? Yes,

the Espeka can go up 5 miles above Mackerville.

44

Will it be a convenience to the people if they could go up

still further? No. The people there will always <sup>have</sup> to bring their

produce down to the wharves. I believe at Mackerville will be the

best place to navigate all time.

61

*Journal*  
*Pollution*

21960

Do you know of <sup>any</sup> other way whereby <sup>convenience</sup> the

people of the district may be met than the improvement of the river entrance

? There is no other way as I can see.

46

Mr Roberts - Where is the best maize growing land on the

mainland? The best alluvial land is at Bawa and on Taylor's Arms.

There is also good land on Warrell creek.

47

Are there many farmers on Warrell creek? There is more

land to be taken up there.

48

Is all the best land taken up? Yes, and in some places

lack

land has been taken up. Nearly all the water for irrigation has been taken up.

49

Is the land you speak of within easy distance of the river

wharf? It is 15 or 16 miles from the wharf to the first settlement up the creek.

For the last 9 miles of its course the creek passes through sand.

50

Do the growers go up Warrell creek to get maize?

Occasionally, when there is a local supply.

51

There is no difficulty in getting the growers up? Not

during

the spring tides. I have not heard of any difficulty being met with since

the creek was deepened at the island crossing.

52

What freight do you pay to send a bag of maize to

Swinsay? I think 1s 6d a bag.

53

Does it include nothing? Yes, but it is 1s 6d a bag

whether you put your maize on board a steamer at the wharf or on board

62





1. Where at Bowra.

44

How far does the timber go to collect masts? For 20 miles

heads to Bowra is a distance of abt 2 Rls. Bowra is a head of navigation

for droghers. Walsh's wharf is the head of navigation on Taylor's Arm.

55

Does the drogher bring down any timber? No. There are

proper log points for it.

56

Where is most of the timber obtained for the sawmills?

57

From all parts of the river, from Warrell Creek, from Taylor's

Arm, and on the main arm, right up as far as Bowra.

58

Is the timber on Taylor's Arm or beyond Bowra superior

to that down near the coast? It depends upon the class of timber

you want.

59

What are the <sup>principal</sup> ~~best~~ timbers you send from here? ~~Tall~~

Tallow wood, blackbutt, <sup>flashed</sup> gum, and Iron bark. A

great number of girders and piles are sent away from here.

60

Does the timber on the Wambucca compare favourably

with that on the <sup>on the coast</sup> M C Rivers? I do not think that the timber of any

other river on the coast will beat it.

61

Are there many farms higher up ~~the~~ <sup>the</sup> River than

Bowra? <sup>the farms is</sup> A greater number of ~~farms~~ <sup>farms</sup> are above Bowra. ~~his masts in order to put it on board the drogher, has to cart~~

63

62

*Relative  
Jimpson*

What is the longest distance that the farmer has to cart

his maize in order to put it on the ~~road~~ drogher? I cannot

tell you, I have ~~not~~ seen <sup>teams</sup> ~~teams~~ at Tailors Arms that

have come down 18 or 20 miles or even more.

63

Is the river so shallow that they cannot use it?

Well, at times there is only one drogher and she is not

able to attend to all the farms. The maize has been lying

in the barns until the people <sup>have had</sup> ~~have~~ to bring it right <sup>down</sup> to Mack-

sville to get it away.

64

How much time does a farmer lose in bringing his

maize 20 miles? They generally employ the services of bullock

drivers. I don't know what they pay per bag to have it brought

down.

65

Do you work on the river yourself? Yes.

66

Where is it situated? Just where you cross the

valley.

67

How many acres have you? ~~198~~ 198.

68

How many <sup>acres</sup> ~~acres~~ do you cultivate? This year I

have put about 12 acres under maize; the rest of the land is

under grass, more or less.

69

Have you noticed any changes in the river?

64

I h done a little at it. I intend to go in for it properly, and

I h spent <sup>£40</sup> upon a separator.

470 Do you think t<sup>t</sup> dairy-g will be ~~a~~ a success

in this district? It <sup>has to be</sup> ~~is~~ proved yet, but I think t<sup>t</sup> it will.

We want a better outlet for our produce. I h been send-

cream to Kempsey.

71 How far is t<sup>t</sup> <sup>from</sup> ~~to~~ 32 miles ~~to~~ Wauksville.

72 Do you send it to Kempsey to catch the Wauksley River

boat? I have taken it over to the Wauksley ~~at~~ bridge, and a

steam launch has ~~been~~ <sup>there</sup> ~~been~~ ~~at~~ ~~the~~ ~~place~~.

73 What is the freight for cream to Sydney? I h never

sent cream to Sydney.

74 Are you able to dispose o<sup>o</sup> yr cream at Kempsey? Yes,  
to Foley Bros factory there.

75 Pm what distance do t people send their produce

to Sydney by way of <sup>the</sup> Nambucca, do t people hal<sup>l</sup> f way to the

Wauksley use t Nambucca, or do they use t Wauksley? Well, it

depends upon t rates to some extent. You can go to Kempsey

through Clybucca. If you want to get to t entrance you have

to go to Jerseyville. You can go to Stewart's Pt in abt 9 mls,

but t road goes round about 16 miles.

76 Do you send your cream to Kempsey reglrly? No, <sup>to</sup> ~~to~~

*Simpson  
Hornby*

cattle & all gone dry, and I am not dairying at the present time.  
The reason why I have not cultivated much land is that the land is  
too expensive to clear. It costs between \$25 and \$30 per acre  
to clear, and it is not tip top land then.

477

If you held your present farm all the time you have ~~been on~~ *been on*

at Mambucca. *Yes.*

78

How much of the land do you hold that you cleared? *9*

120

Suppose I have cleared 120 or 130 acres. As fast as I have

earned money *by* contract *ing* and in other ways I have spent it in  
improving my land.

14  
129

Is there any demand for land in this district? you  
see people looking for land almost every day.

Has the demand for land increased since the improvement of  
the river entrance has been in contemplation? The demand for  
land is increasing more or less every year.

80

Is there any good land open for selection at the present  
time? Not land that is handy to the river. All the river front-  
ages have been taken up.

81

But if you go far enough up the river you can get  
plenty of land? You can get *land* in patches all over the place.

82

Cannot you get water frontages some distee beyond t head of navigatn? You get frontages to creeks and gullies.

land

83

but the ld is good? You get t best ld up among t

creeks .

84

Is t farm; ld here equal to similar ld on t

Macleay? You may get a good patch of scrub land equal to t ld on any part of t Macleay, but t Macleay ld is altogethr different fr the Nambucca ld. on t ~~Macleay~~ Macleay t ld is alluvial, and after t third year you can plough it. t timber

is scrub timber, and after a second fire it all <sup>appears</sup> disappears.

Here, however, after fellg t trees we h to draw t logs <sup>getter,</sup> out them up, burn them, and dig out t stumps. You cant get rid of

hard wood timber easily. I h know n places on t Macleay

where they h dug trenches and put t trees in and ploughed

over them.

85

~~You h~~ How does this river compare with t Bell-

inger? It is not nearly so good as the Bellingner. T Bellingner

is one of t best rivers on t coast It would be diffic-

ult to find better land than there is on the Bellingner.

86

How long have you been on t Nambucca? I selected

here in 1868.

67

21960

*Handwritten:* Hornby  
P/159 E. Frater

Why h you remained here instead of going to the Macleay or w<sup>the</sup>

Bellinger? I h seen three floods on t Macleay over t river

bank in twelve mos beside s minor freshes. I came over

heres a ship builder.

*88*

How long did you keep on ship building? Not long,

then I went in for contracting, and put my nose to t grind-

stone to keep things going.

*89*

How long is it since you settled down at Macks-  
ville? I put in two years here. Then I went to t Bellinger  
for five years, and when I came back I stayed here. I went to

*there*

t Bellinger because ~~was~~ was no work here at t time.

*90*

You h done fairly well I hpe since you have been ~~in~~

here? Yes.

If I had sold out when the land boom was on ~~it~~ I  
shd h done very well. I cd h sold then for £2000, but I  
doubt if I could get £500 now, although I have put up a  
house on t ld wh is worth nearly t money.

*91*

When was t last flood on t Nambucca? Well, t flood  
here is more like a spring tide. I h seen tides almost as  
high as floods. I h seen a very high flood, but at tt time ~~the~~  
there was only a narrow entrance, and a high sea running, so tt

*68*

t water could~~not~~ get out, but after tt t spit was swept away,  
and ever since t bar has been comg further in. I consider tt  
now t bar is an inner bar, not an outer bar.

492  
When did you h t last flood of any imptce? From ~~sea~~  
~~seven~~ to ten years ago. At Bowra the water might rise thirty  
or thirty five feet, but down here a flood is only like a rise  
caused by a big spring tide. We are so near t entrance tt t  
water gets away quickly.

93  
what is t effect of <sup>a</sup>flood upon t land here? Does it  
fertilise t ld? On t Macleay a flood leaves a deposit, ~~but~~  
down here t water doesnot go over t land at all.

94  
So tt here you simply lose by a flood; you gain  
no advtge fr it? Yes. <sup>Up</sup> about Bowra a flood will wash one  
point of ld away and make up for <sup>it</sup> loss on t other s<sup>ide</sup> per-  
haps. The same thing happens on t Bellinger.

95  
You are Vice Presdt o t local progres ctee? Yes.  
H t ms o t ctee considrd t proposl to improve t  
entrnce to t river. Is there unanimity among them on t questn?  
They are unanimous tt it is <sup>necessary</sup> ~~necessary~~ to open t river.

96  
Do you regard t proposl o t dept w satisfaction,  
or are there any sugestns wh yr ctee wd like to offer f our

*Walter  
Siddle*

our considratn ,? I do not know o any.

497

What are t principl disabilities under wht residents on t river laor. If you got an improvd entrance will ~~it~~ <sup>be</sup> ~~all~~ <sup>will</sup> you require? We want regulr comunicatn so ~~th~~ we may get our things to market at any time we send them down.

98

What you suffer in now is t uncertnty o steamr comuniCatn? Yes. Pigs, fowls, eggs, all deteriorate in transit. When they get to Sydney perhaps they fetch hardly any-thing.

99

How often does it happen ~~to~~ you lose in this way. Are you put to constant inconvenience and loss? Well, there ~~is~~ is always inconVence more or less. If a veal makes a good trip t produce gets into Sydney in good order; but if there is any delay perishble articles suffer. Pigs in particular fall away

500

Do you expect a reductn in rates if t harbor improvments are carried out? I think ~~it~~ if we get a proper entrance there will be an oppositn compy and we shd then not h to ~~kn~~ <sup>with out</sup> knuckle down to t N C Co f everything. Oppositn is t life o trade. O course vessls cant run f nothg; stars in parlar.

Do you regard t charges wh you h to pay now as exces<sup>ive</sup>? I do not know ~~tt~~ t compy cd do t work f less at t presnt

70



time; but if t place is opened up and t charges continue as high as they are now I shd consider them very unreasonable.

502  
How does a rate of 1s 6d a bag of maize compare w t rate paid on t railway? On t railway I believe t maize is taken away if 1s a bag.

3  
Wd t residents of this river be satisfied if they/cd get their maize taken away if 1s a bag? They h to be satisfied to get it away at all. For pigs we pay 5s each large and small.

4  
Is t rate of pigs higher than t rates on t other rivers? I do not know what t rate of pigs is on t other rivers. I h also hd to pay 4s 6d a head of feed, and to meet other ~~charges~~ charges in Sydney.

5  
Is all yr produce sent to Sydney as a rule? We h no other market. All t steamers going here trade to Sydney

6  
Are there not any local buyers? There may be a local buyer of maize, but he is ~~not~~ under t same inconvenience as t shipper. I do not suppose tt he gets his money until t return come back, unless t maize is taken to pay a debt.

7  
Is any quantity of butter produced in t district? No; butter productn is in its infancy here. It is only last yr tt

me started.

71

~~Little Grants~~

72

we started.

Is it fair to say that the present year will show an increase in the production of maize, timber, eggs, poultry, pigs, and so on, as compared with previous years? Well, I would not say that there will be an increase in the timber production. One mill has been removed to the Bellinger, and there are only 2 mills now, <sup>has been</sup> whereas previously there were 4. One of the mills is burnt down. A large quantity of farm produce will be sent away.

9 Do you think that the exports of this year will exceed the exports of last year? The export of maize this year will be one half as much more as the exports of last year. In regard to my own crop I am positive that it will be doubled.

10 Why is that? The land has got into better working order, and we have had a better season than usual.

11 In round figures the export of last year <sup>as</sup> shown by the ships manifests was 40,000 bags. Do you think that the exports this year will be 80,000 bags? No; it will be 60,000 bags.

12 That is an increase of 50%? Yes.

13 What is about the average yield of maize per acre? It depends upon the season. This year I am taking 60 bushels to the acre.

72

off one patch; last yr I did not get more than 20. On t average I ~~shd~~ shd think tt t yield <sup>last</sup> ~~last~~ yr was about 20 bushels to t acre. This yr I believe it will be twice as much.

5/4  
But take one yr w another? I think t yield wd be abt 25 bushels to t acre, all thro t district.

15  
What is t net/ return per bushel? It depends upon t price obtained in Sydney.

16  
What did you get last yr? I got 2s per bushel f what I sent away, and I had to pay 1s 6d a bag freight - 4d a bushel.

17  
So tt your net/ return wd be abt 1s 6d a bushel?

18  
Yes.

How many acres o maize do you think a man wd h to cultivate to keep himself and his family alive? On t Macleay a man can just manage to live on 25 or 30 acres o good land.

19  
But here he wd want 40 or 50 acres? Yes, and then it wd not pay f t labr put into it.

20  
Tt being so what is to make this district productive? F clearing o t land, and t putting o it under cultivatn

21  
Under cultivatn f what? F maize, and t using o it f dairys.

22  
But you say tt it does not pay to clear t land? If

*Frank's list*

a man had 40 acres of ground he wd h to employ labr to work it, and by t time he had paid wages he wd h very little out of his crop.

533

Then what is to make t district prosperous? Well, t land must be cleared, as in other districts.

221

But it wd not appear fm yr statemt tt if a man clears land he goes to t bad? Well, a man wd not h to employ labr all t time; but besides tt there is t expense of t crop and t expense of sendg it to market

35

What will make things better in this district? Get more land cleared and ~~get~~ more pple on t land. I will get 60 and 70 bushels to t acre this yr, while last yr I only got 20 bushels.

36

When t land is thoroly cleared and workd up it wil give a better return? ~~Well~~ <sup>When</sup> t ld is thoroly workd up you will get as much off an acre as is obtained on t Macleay and in any other places.

37

You say tt to clear t ld costs £25 an acre? Pm tt to £30.

38

What does it fetch per acre? There is no sale of land. You might be able to give it away for £2 or £3 <sup>an acre</sup> ~~per~~ course t ld must go up agn in price.

74

529  
 An I to undrstand tt w proper cultivatn a payble  
 yrly crop will be obtaind ? Yes. T crop improv~~s~~ every yr. You  
 must undrstand tt I am speakg o t land down here, not o t land  
 up above Bowra where there is aluvial soil.

30  
 It wd appear to be o no use f a man to come here  
 unless he hd some capitol to start w ? I dont think a man shd  
 go on to land unless he hs capitol to start w.

31  
 What wa s t poplatn o Macksville when you came here ?

There were only abt 3 families here then.

32  
 You do not know t poplatn now ? No.

33  
 Has t town grown to a considrbrle size ? Yes. It hs  
 improvd in some respects, while in othr respects it hs gone  
 back, like othr places on t coast.

34  
 Do you considr tt t farmers in this district are  
 now in a sound firanci positn ? Until you come to sound them  
 you think tt ~~they~~ <sup>they</sup> are, but when you find out all abt them you  
 discover tt most o them are in t hands o t banks.

35  
 Do you mean w lrge ents to their credit ? No. I

75

Frank Willson

I mean ~~tt~~ ~~they~~ ~~h~~ ~~all~~ ~~mortgaged~~ ~~their~~ ~~land~~  
to t banks.

1

536

Mr Trickett } I suppose tt is becuse o t entrance being  
had ?No ; it is owing to t fact tt when t ld ~~was~~<sup>born</sup> was on they  
mortgagd wht land they hd to buy more ld. I h known pple on t  
Bellngt and on t Macleay owing first cls land who mortgagd  
it, and then lost everythg.

37

Then earth hungt has bn t cause o t presnt s tate o  
afairs ?Yes.

38

A desire f more ld and an ever-estimtg o t ~~land~~  
capabilities o t land ?Yes. They h bn carryg on too high a game.  
T times were good, and pple thought tt they wd never change, ~~but~~  
they ~~may~~ h changd.

39

~~the~~ Corn fetchd a better price then ~~if~~ than now ?  
In my time corn came up to 8s a bushl, ~~for~~ a bushl o corn to a  
bottle o rum. I h seen corn sold at 7s 6d a bushl at t barn  
door, ~~but~~ next seasn I got only 1s 6d a bushl in Sydney, and  
paid 1s 6d a bushl in freight. You will see tt I h hd ups and  
downs.

52/0

No you regard 25 a bushel as abt t lowest price tt a grower can aford to get ? It is abt t minimum *price.*

41

If a man caunt get more he hd better ~~leave~~ *leave* raise growg alone ? Yes .

42

Chairman } Land tt wd cost \$40 an acre to clear  
wd be covrd w heavy timbr ? Yes .

43

Wd not tt heavy timbr be valub le ? You caunt get rid o it *most* o it is pipey or knotty .

44

But wd not a lrge quanty o it be saleble ? No. I *have* hd splendid trees on my land, but t mill will not tke them. T timbr I spk o is grey gum, wh is equal to ironbark.

*[Handwritten signature]*

*[Handwritten mark]*

7  
William  
Fisher  
78

21960

Edward Hitchins, Auctioneer, Warrell Creek and

Warrakville, sworn and examined -

545

Chairman] - How long h you bn in t district ? Abt ~~14~~

14 years

46

H you a general knowldge o it ? Yes.

47

Mr Clarke] - You know wht has bn done at t entrance  
o t river and wht it is proposd to do there ? Yes.

48

Do you think tt if t departmentl scheme is carred  
out it will be beneficl to t public ? Yes.

49

Do you think tt t best means o developg t district  
is to make t entrance to t river navigable ? It is all we want.

50

It has bn suggestd tt a ry might be mde to t Macleay?  
Tt wd be too expensive I think.

51

You are o opinion tt wter carriage is always cheaper  
than ld carriage ? Yes.

52

What do you think o t resources o t district ? They  
are vry lrge. T productn o t district can be increased by  
openg up t river. There is any quanty o land here f selectn  
and f purchase. All tt is wantd is people.

53

But if prices are as lowas they are describd to be

78



by a previous witness do you think it wd be profitable f pple to come and take up land here and clear it ? I think th Mr Bolton's evidence as to t cost o clearg ld is too high. I considr it fm £10 to £15 an acre will be t cost o clearg.

*252*  
Chairman] - Do you refer to ld simlr to tt referrd

to by Mr Bolton ? Well, anywhere abt t saltwater t ld is more easily cleared than it is down towards t mouth o t river. You h only to put a match to t softwood entry and it will all burn away. Up further t ld is all covrd w soft wood, and you only get abt 8 or 9 <sup>a</sup> hardwood trees to t acre. Down t river o course t timber is all hardwood. *(B)*

*253*  
Mr Clarke] - So tt t statemt o t previous witness wd

only aply to t land on wh he himself resides ? To t swampy ld, and to t ld on t lower parts o t river where t timber will not burn well. You might h a fire ~~in three months~~ <sup>at times</sup> f three months and it wd not burn *the timber off.*

*57*  
O course in dealg w any timber you must fell it first ? Yes. We *pay* fm £1 to £1 10s an acre f fellg timber, and then if it is softwood most o it will burn away .

*83*  
I suppose in many cases corn is plantd among t timber w a hoe ? Yes, in t first yr. Then you cut up t timber, pull it together, and burn it .

558

*Mr. J. J. Gannell*

After the land is fit for maize grows or dairys?

Yes. There is a little stumps to be done, but as the years go on the softwood timber all rots, and the stumps disappear.

59

You cannot sell the hardwood timber to the mills? ~~Not~~

No - the timber it grows on the alluvial flats, because it is too far up the river, and the timber is not what the mills require. You have to go to the ridges of timber that suits the mills.

60

Do you think that the trade of the port is improved since the harbor works were commenced? Yes, considerably. The only drawback to the district is the bad state of the river. I could induce people to come here if there were facilities for getting produce away. Our resources are very large, but we require better means of communication with the market.

61

What are the resources of the district? Maize grows, dairys, timber getting, poultry, and pig raising.

62

Mr. Farnell } Fruit grows? ~~Yes~~ There is not much

fruit grows, but oranges will grow well here. You can get splendid self sown oranges in the scrubs.

63

Mr. Clarke } Pig raising is very profitable? Yes.

Are the pigs generally sent alive to Sydney? Yes.

568  
Is any bacon made here? No. People sometimes drive their pigs over to the valley to get them away quickly.

66  
To the factory there? No, to ship them to Sydney.

67  
Is there any bacon factory on the valley? No.

68  
After you get away from the coast is the land on the river generally good? Yes, it is as good as any land in the colony. The alluvial flats are small, but they are very rich.

69  
Do they extend any distance from the water? Not any great distance; not beyond 30 or 40 chains generally.

70  
Is the higher land good for dairying if cleared? It is what we call first class forest land. It is good for maize growing for 6 or 7 years.

71  
It is not nearly <sup>as good as</sup> the alluvial flats? Certainly not. You cannot tire out the alluvial flats.

72  
Is much grazing done here? Not a great deal; the country is not open enough.

73  
I suppose it will be some time before the dairying industry becomes of very much importance? No. I consider that the industry has made great strides during the last 2 years. I started about a year ago with one small hand separator, and now there are 30 or 40 separators in the district, including 3 steam separators.

21960

Janette  
Pellway

82

574

Do you make butter here? No. We send away our cream to Macleay and to Sydney - to Foley Bros and to Denham Bros on Macleay.

75

But is there not a risk of losing your cream if you send it to Sydney, because of delays in shipment? Yes. People here take the risk. Some cart their cream to Macleay, and send it from there to Sydney.

76

I suppose in the future the cream will be made into butter locally? I think it will not be long before we make butter, if we get good communication with Sydney.

77

Butter will deteriorate if kept a long time on the star unless it is placed in refrigerating or cooling chambers? Yes.

78

Do the vessels trading here have refrigerating chambers? I do not think so.

79

If the entrance to the river were improved vessels of a larger size might come here, and you might get competition which would lower the rates of freight? Yes. Once the steamers can get inside the river they can steam up to the wharf.

80

Do you consider that the demand for a bag is too high a rate of value in the present state of the bar? Yes. Of course there is not sufficient trade on the river at the present time to employ ~~two~~ 2 steamers.

82

581 It requires a considerable amt of capital to go in for dairyng? Yes. If pple own land of their own the vendors of cows will give them accomodatn.

52 Do you think that dairyng will be successful? very successfl.

53 But I suppose that on the whole mixed farming wd be better? Yes. The flats here are too rich to put under grass, so that there will always be maize growing and pig raising.

54 In the dairyng industry the returns are made monthly? You do not have to wait a long time for your money, as in the case of the maize growing industry? Yes.

55 It is a great consideration? Yes. There are many risks connected with maize growing which are not connected with dairyng. In many instances it is a hundred to one that you never get a crop.

56 How many acres would it take to keep a cow here? I think that in some places we could put three or four cows on to one acre. In <sup>a</sup> back paddock here there are five acres which will keep 20 cows for 12 months.

57 It must be very rich alluvial land? It is rich grass land. It is surprising how much stock it will carry.

21960

2558  
Warrell  
Action

Take everything into consideration you think it is carrying

out of the proposed works would be of considerable benefit to the whole district? Certainly.

89

I suppose it will be the salvation of the district? Yes.

Once we can get the star to come up here we shall get competition.

90

Most of the farms <sup>are</sup> in the hands of the banks now will require to get clear before they can do much? The banks have given them splendid terms, and some of them will get their land back. The banks have given them as much as 10 years in some cases.

91

So that things are coming to a normal condition again?

Yes.

92

Is there anything you would like to add? I should like to say that when I came here there were only 2 families at Taylors Arm, and now there are about 100. Out at Warrell Creek the population has increased 200%. The Unky Creek and the Allomara creek people take all their maize now to theacleay Heads, which is several miles further than to the head of Warrell Creek.

93

Do you think that the population of the district will continue to increase? Yes. I sold a farm a couple of days ago to some <sup>who</sup>acleay people who wanted land. The farm contained 660 acres.

84

594 What is the price of fair average alluvial land here? We can get £10 an acre of the alluvial land fronting the river.

95 The back land would not be so valuable? No. Not in proportion. I am speaking of improved land.

96 Chairman } Is unimproved land saleable? There is very little unimproved land unless it is land available for selection.

97 Mr Clarke } What is the value of the land which is not improved. Could you put any value upon it? Not unless I saw it

myself.

98 I suppose unimproved land here would not average much more than £1 an acre? No, <sup>it</sup> would not be worth much more than that. In some parts the trees have been cut and have grown up again.

99 Do you think that the population and the production of the district are likely to increase <sup>by</sup> 50% within the next few years? Yes.

They are both increasing very fast.

600 Mr Trickett } With regard to <sup>land</sup> land transactions, do you find that the people here stick to their holdings well? Yes, as long as they can. Of course the banks have weeded out a few of them.

Can the struggling hardworking farmer get along here? Yes. Some years ago we had a repetition of floods, and that crippled all the farmers, but they are getting on to their legs again now.

William  
Harker

602

I thought that the floods did no good here? Of course  
down on this part of the river the floods ~~do no good to the land~~ did do  
up, where  
not go over the land, but, higher ~~xxxxxxxxxx~~ there are alluvial  
flats, the land is flooded. ~~There is~~ Maize <sup>is</sup> grown 40 miles up Taylor  
Arm.

5

<sup>Has</sup>  
the maize to be brought down to the star by teamsters  
? it <sup>has</sup> to be brought to the head of navigation. Of course it takes  
a very small rise in the river to flood the flats there. Down here,  
however, the water does not come over the banks.

0

We have been told by a government officer that it is intended  
to throw open about 5000 acres of land at the head of Taylor's Arm for  
selection. Do you think that land will be taken up for farming purposes?

Yes.

In what areas? From 40 miles upwards. It is very rich land,  
like the Orara land. The land must all be taken up. All that is wanted  
is facilities for getting maize away.

6

We have been told that there are 253,500 acres of unalienated  
land in this district. Do you think that if increased facilities for  
getting produce away are given that land will be taken up? Yes.

86



Do you think that there is no doubt about that? Yes. I know how the production of the district has increased lately. Last year we sent away over 40,000 bags of maize. This year the export will be 50% more.

I suppose a large quantity of the maize is consumed locally by pigs and other live stock? Yes, and a large quantity of the maize that is grown on the Unky and Allgenera creeks now goes to the Wesley Heads.

Have any of the banking companies an office on the river now?  
? No.

I suppose at the present time the payment for produce is very often <sup>in</sup> returned stores of goods as in many cases it is.

Where are your bank centres? The Bank Co has a branch at Sellingen and the A J S Bank has a branch at Wampy.

Mr Roberts - You differ from Mr Bolton as to the cost of clearing land. Do you differ from him upon any other point? Yes. I think he said that the Euroka took all the produce from here, but I should like to point out that there are several large vessels which come here for timber. The timber is not sent away by steam at all.

Do other steamers come here besides the Euroka? Yes; the Billy Barlow and the Tilbury also come here.

21960

Franklin  
Gould

614

Do the sailing vessels all come up to Macksville? Not

now.

15  
16

Does the Kuroka come to Macksville? Occasionally.

Is she the only steamer that can come here? The Pelican comes

here, and tranships to the Burrawong at the Macleay.

17

Do small steamers meet the Burrawong at the Macleay? Yes,

or meet a steamer at Port Macquarie.

18

Do you think the future of the district is sufficiently

good to warrant the proposed expenditure at the mouth of the river?

Considering that so much money has been thrown away in other parts

of the colony I believe that we are entitled to even a larger expenditure

than is proposed. These works will have to be carried out, and the

sooner they are carried out the sooner the district will improve.

19

Would you regard the construction of these works as throwing

away money? No, I consider that it would be a good expenditure

because it would help to settle people on the soil.

20

Mr Clarke - ] And it would keep them here? Yes.

21

Do you think that 25 bushels an acre is a fair average

yield of maize? No, I think that the average yield of maize in the dis-

trict is from 30 to 60 bushels.

22

Chairman - ] Is it taking one year or another? It is pro-

vided that there are no floods.

88

623

But take a period of 10 yrs? For the last 10 yrs the average yield has not perhaps been more than 25 bushels, but for the last 5 yrs the average yield has been from 30 to 40 bushels. On some land you get over 100 bushels.

524

How is the land held, under ordinary conditions, or is any quantity of it special area land? I think the Unkyall land is <sup>all</sup> special area land.

25

Has any quantity of land been taken up here under the special area system? Yes.

56

At what price? At I think 30s an acre.

7  
1

What is about the average yield of a freehold in the district? I should think about 100a.

28

Are there any holdings of 640a? Very few.

29

It is because the land is so expensive to clear? Yes, and to get 640a you have to go right back to the mountains in some places. All the frontages are taken up.

30

It is estimated that within the area contained by a line midway between the Wambucca and the Sellinger, by a line midway between the Wambucca and the Macleay, and by the dividing range, there were at the end of last year 27,600a of freehold

89

land and over 10,000a o privately leasd ld. This year there were 5450acres o land under maize. Do you think tt t area I h describd is capble o treble<sup>g</sup> its present output ? I hardly think it wd<sup>a</sup> t<sup>k</sup>ble it, but I believe tt you cd double it.

68/

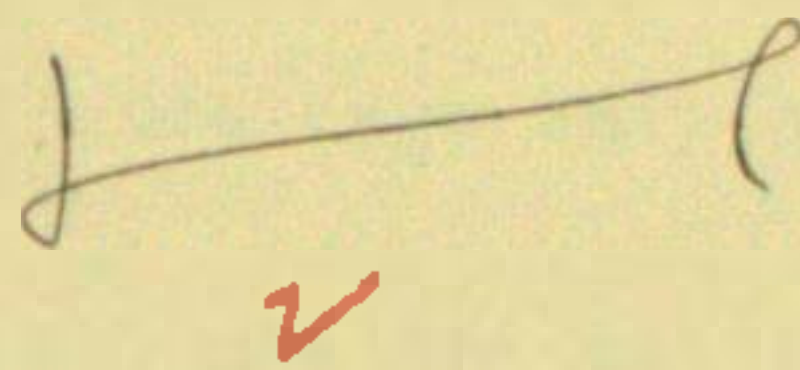
Wd all t entry I h describd be within t influence<sup>v</sup>

o t wambucca river if t entrnce were made good ? Yes .

82

Wd t whole o this area contribute to t trade o t

river ? Certly .



21960

8

*Yavelle  
Gilton*

91

Angus McKay, storekeeper, Mackaville, sworn and

examined -

633

Chairman-How long have you resided here? P abt 15 yrs

34

Mr Crickett - I suppose you have watched the progress of the

district very closely. Do you regard this as a progressive district? O late yrs it has been very progressive

35

Will you tell us what its development has been since you came here? When I came here only one small sailing vessel used to trade to the river and she did not take away more than 50 bags of maize a month or abt 3000 bags a year. Now however there are abt 40,000 bags of maize sent away each yr. I think that abt 3000 pigs go from the district now. Last yr abt 10,000 bags of maize went to the Macleay from the Unkyi and from Warrell Creek

36

In your opinion the district has improved year by year?

Yes

37

Like other districts it has had its ups and downs?

Yes

38

Why did the place fall behind so much a little while ago? T had state of the bar two yrs ago made it fall behind. Last yr we were 8 months without any communication across the bar and

91

maize was lying rotting all along the banks

639  
Was it after the completion of the harbor works? A swell altered the channel and sent the sand everywhere leaving no permanent entrance. Since it has gone further out however the channel has improved wonderfully

40  
How does the district stand in regard to floods?  
It does not suffer so much as the Macleay and other districts in floods. Floods go over the maize but the houses and cattle are secure

41  
Do you look upon this as a fairly sound district?  
It is going to be a very sound district

42  
You have done fairly well in business here? Yes,  
There is not so much credit asked for now as was asked for 2 years ago

43  
Steam communication is getting better? Yes

44  
We hear that the output of the district is likely to be more extensive next year than it has been in the past? Yes

45  
Why do you think that it will be so? 25 years ago I do not think we exported 20,000 bags of maize. This year I am certain that we shall export 60,000 bags of maize. The increase in our export is due to the larger area of land that has been cleared and cultivated

21960

Willow  
Railway

93

46 How do you get yr goods up fr Sydney ? By t M C Co  
boat and t drogher

47 What is t quantity o goods brought to t Lambucca by  
t steamers in a yr ? Ant 20 tons a week

48 It wd be generl goods - groceries, ironmongery,  
and articles f household use and consumptn ? Yes. O course tt  
is not countg t stores wh are brought up by sailg vessels f  
t saw mills

49 What wd be t value o those goods ? I cd scarcely  
say. I supose a £100 worth o goods wd be brought here every wk

50 So tt t imports o t district wd be worth £52,000  
a yr ? Yes

51 How many storekeepers are there here ? We h 4 stores

52 Are they all doing pretty well ? I think so

53 Is there any other way in wh goods can be brought to  
Macksville than by star ? When t bar is bad we get our stores  
fr t Wa leay

54 Is much brought fr t wacleay R. Wd t goods brought  
tt way be worth £2000 or £3000 a yr ? I think so. Cream eggs  
and fowls go to t wacleay very often when t bar here is bad

93

655

Does t town o Macksville serve as a centre o a lrg district ? Yes, there is a small town up t river abt t size o Macksville where there ~~is about~~ <sup>are</sup> 4 stores

56

Do t goods f these stores go up t river ? Yes

57

Do you hear many inquiries f ld in t district ?

Yes. There is alwys someone wanting land. There h bn two or three lookg f land this week

58

For dairyg purposes ? Yes

59

It looks as if dairyg wd be a large business in t future here ? Yes. I h two steam creameries workg, one here and one at Rowraville

60

H you any cattle ? No. I only buy t milk

61

Where do you send t cream ? We usd to send it to t Macleay but this month I am churning it myself

62

Do you find tt butter makg pays ? Yes

63

Are t creameries wh you h started profitable ? Yes they are doing very well

64

How many are there in t neighbhd ? One more besides my own, tt is wt counting t hand separators

65

Is dairyg a lrg industry here ? They are getting what companies they can here and going into it as much as possible.

94



~~Kellwood~~  
Walker

21960

95

They only started dairyg here abt 2 yrs ago.

666

What is t rate o freight inwards ? Abt 30s a ton

67

How does tt rate compare w t rates on t other rivers ? T rate to t wacley is 21 a ton f generl goods and 12s 6d f heavy goods - salt, flour, sugar.

68

Therefore you are handi appd to some extent ? Yes

69

Is tt because o t entrance ? Yes. No parcel is carried

f less than 1s 6d

70

W an imprevd entrance do you think you wd h lower rates ? Yes. I h seen t ship people myself and I h asked if they wd not charge lower rates. They told me tt as soon as we get a better bar they wd reduce t rates as they hd an reduced on other rivers

71

T reductn o t rates wd be o gre t advtge to t pple here in giving them lger profits ? Yes. T ship people say "wake t bar good and we will tke your stuff away at lower rates" At t presnt time t vessels h to go out only half leadd

72

Do you agree w t evidece o previous witnesses ? I do not agree w what Mr Belton sd as to t price o clearg ld here and as to t value o land. I do not think he understnds anythg abt farmg. Pple who are usd to clearg ld can clear it much

95

more easily than he supposes.

64

What do you think ld f farming purposes is worth, and what does it cost to clear f maize growg ? T maize growg ld is feldd f 30s an acre and t timbr is cleared away very quickly

74

Tt land is higher up than t navigable part o t river ? Yes. T timbr on tt entry is easly burnt off

75

Do t pple who deal w you keep their engage t s pretty ell ? Yes. T pple on t ld here are in a very good positn Only very short credits are askd f. A few yrs ago however we usd to stand to t pple f 12 mos. Now there is none o tt

76

Are there many abandond holdgs in t district ? There are a good many old abandond holdgs, but no one hs left t district during t last few yrs. Pple are continually coming into t district because it is lookd up n as a pd one

77

You think tt this is a progresve district and tt lately it hs bn progresve at a more rapid rate than formerly ? Yes

78

You think tt what hs given it an extra start is t imprevat in t means o comunicatn ? Yes. We ask f nothg more

than a good bar. If t proposd works are carried out this district will be secd to none on t coast.

96

9  
~~Walker~~  
~~Roberts~~

William Ezold, Storekeeper, Macksville, sworn

and examined -

679

Chairman - How long have you been here? 5 years.

50

Mr Roberts - How many stores are there at Macksville

at the present time? Four.

81

Were there three other stores here when you arrived?

No. There were only <sup>two</sup> here then.

82

Do you regard the increase in the number of stores as a

~~good~~ proof of the improvement of the district? It should be considered a proof of its improvement.

83

Has your business increased since you came into the

district. Is the trade <sup>of</sup> the district expanding? As there are <sup>four</sup> stores here and <sup>each</sup> is doing about the same amount of trade as I have done there must be an improvement in the district.

84

Are you doing as well now as when there were fewer

stores? Yes.

85

Do you get all your goods from Sydney? Yes.

86

Do they all come up the river? Yes.

89

Are they brought by steamer or by sailing vessel? By a steamer.

88

Do you know what quantity of general merchandise is

imported weekly

has been imported during the last few years? No.

689 The last witness told us that about 20 tons of general merchandise is imported weekly? I consider that 30 or 40 tons of general merchandise must be imported each week.

90 What would be about the value of the goods coming here weekly? I could hardly say.

91 What would be about the value of the goods you purchase in 12 months? About £2000.

92 Do the other stores in Macksville do about the same business as you do? I could not say.

93 How many stores are there in the district altogether? In addition to those at Macksville there are, I think, 4 at Bewra.

94 And how many down at the heads? I think 3.

95 And how many at other places? There are a few people who import goods and sell them, but they do not keep stores.

96 Well, suppose there are 12 stores or their equivalent in the district altogether and each does the same business as you, the value of the imports of the river must be about £24,000 <sup>per annum</sup> per annum? Yes.

98

21960

697 *Phudis*  
*Boonere*

Is yr business confined to Macksville ? No.

98 How far do you send goods ? Right up Taylor's Arm for 30mls to Unky~~l~~ and to Allgemera .

99 Do you send any goods to Bowra ? No .

100 Do you send any goods to places between here and t heads ? No. I cannt compete w people lower down t river .

Pple on t river h their goods delivrd by t dredgr \* free ? Yes .

1 I suppose your goods are landd at t govt whf here ? Yes .

2 When you send goods up t river I suppose you h to pay t cost edreging ? No. My goods are taken round t district in a waggonette .

3 Is tt t cheapst way o reachg yr cust ems ? There is no othr way in wh to reach them .

4 What freight do you pay to bring goods fm Sydney ? F heavy goods - sugar, flour, &c - £1 per ton ; t small goods come to £4 or £5 a ton .

5 But you h never paid as much as £5 a ton on goods ? I pay t rate f small cases. I am charged f every packge brought to t whf. I can get a parcel o drapery sent up by post f 8d or 9d, but if it comes by star I h to pay 1s 6d .

*20*  
*16*

*99*

704  
 Is not the rate of some merchandise 30s a ton? Of course, <sup>for</sup> big boxes you ~~must~~ may have to pay only about 30s a ton, but for small boxes of groceries and other goods you pay much more. On the average, I pay 23 a ton.

8 How do the rates charged on this river compare with rates charged on other rivers on the North coast? I think on the

Malaya they only pay half as much as I pay. I cannot say whether they pay as much for small goods as I have to pay. ~~they pay as much~~

9 Is the district in a fairly prosperous state? It promises to be much better than it has been for several years past.

10 You have good opportunities for judging, because of your transactions with settlers here? Yes.

11 Do you buy much produce from the farmers? I buy produce conditionally.

12 Do you ship it away from them? Yes. Last year I bought some corn, but I did not get it away because the company did not come for it. In the meanwhile the market dropped, and my customers were greatly annoyed because they lost by the arrangement.

<sup>at the coast</sup>  
 The N. C. Company monopolize the trade on the river, and they do what they like.

13 Is there not a regular weekly steamer? No.

100

714 Is t steam communicatn altogether irregulr ?Yes.

Just lately t atmr hs bn a little more regulr. I told t compy  
 tt I was very glad abt it, but they informd me tt when t  
 maize trade ~~was~~ comenced again on t Macleay they might not be  
 so regulr.

15 Do you lose much thro being unable to get perish-  
 able goods to market ?Yes.

16 You receive consignments o eggs, fowls, and so on  
 fm t farmers ?Yes. I take them in exchange f goods.

17 Is this business satisfactory to both parties ?Yes,  
 but t diffy is to get things to Sydney. There is always some-  
 thing short. I h sent citrons and oranges away . In some  
 cases instead of gettg a return f what I h sent I h got a  
 bill f excess freight.

18 Do you regard t rates charged by t compy <sup>as</sup> too high?

Yes , much too high. They lowered them 50% when t farmers  
 league was establishd / tt was f small cases o eggs, fowls, ad  
 and so on, nominally; but actually t rates h not bn lowered  
 at all. It is very desirable tt we shd h competition. Without it  
 it is impossible to carry on business in this district.

719 - Are we to regard the district as fairly prosperous?

Yes, but the storekeepers have to suffer. I think they are the only ones who suffer.

20 - Is it because of the irregular steam<sup>n</sup> communication? We have

to compete with the Macleay prices, and we have to pay high freights and make losses of all kinds because of the irregular steam communication.

21 - Notwithstanding all these drawbacks do you think there is a good future for the district? I should like to see steamer competition here. The company has promised if the bar is made good to run more regularly.

—



21960

10

~~103  
103  
103~~

Frederick Netley, general Storekeeper, Macksville

sworn and examined -

72  
23

Chairman] - How long h you bn here ? 9 mos .

Where were you living bef you came here ? On t

Macleay.

24

How long ? All my life, except 2 yrs .

25

H you a general knowledge o this and t Macleay dis-

trict ? I do not know this district as well as I know t Macleay

district, because I was not acquainted w it bef I came to Macks

-ville.

26

Mr Farnell ] - H you seen t works in progrs at t entrance

to t river ? I h seen them fm t boat whn comg up t river .

27

You <sup>had</sup> no knowledge o t state ~~at t state~~ o t entrance

bef these works were comened ? Only fm hearAsay .

28

What do you think o t future o t district ? I con-

clude I h come to w regard to this district is it in a few

yrs w improvd navigatn and better communicatn w t Sydney

market it will make leaps and strides, and become one o t

principl dairys districts in t coly. I consider tt this will be

a good dairys district, because so much o t <sup>land</sup> ld here is not

subject to floods and cattle can alwys find pasture upon it,

while there is suffict aluvial land to enable a certn amt o

103

agricul<sup>ture</sup> to be carried on. W<sup>th</sup> agricul<sup>ture</sup> there always goes pig raising.  
~~and~~ This is also a splendid district f poultry

799  
 Do you think th<sup>at</sup> mixd <sup>can</sup> farming ~~could~~ be profitably ~~carried~~

carried on here providg th<sup>at</sup> th<sup>e</sup> bad state o<sup>f</sup> th<sup>e</sup> entrance is improvd

? Yes. This wd then be a very prosperous district.

30  
 Do th<sup>e</sup> natural grasses grow well here after th<sup>e</sup> timber has bn removd? Yes. On a good deal o<sup>f</sup> th<sup>e</sup> land th<sup>e</sup> natural grass<sup>s</sup> grow well aftr th<sup>e</sup> timber has bn removd.

31  
 Do you think there is any doubt as to th<sup>e</sup> capacity o<sup>f</sup> th<sup>e</sup> land to grow suffict fodder f cattle? None at all. I believe th<sup>at</sup> there is land in abundance to grow fodder f cattle.

32  
 Do you know any farmers who h<sup>ave</sup> bn growg lucerne or makg ensilage? I know th<sup>at</sup> lucerne has bn grown. One man told me th<sup>at</sup> he cut his lucerne ten times in one season. I h<sup>ave</sup> seen lucerne here th<sup>at</sup> wd compare favrbly w<sup>th</sup> th<sup>e</sup> lucerne grown on th<sup>e</sup> Hunter. I h<sup>ave</sup> seen wheat and good grass growg on ridges 50ft high, and grows to th<sup>e</sup> very top o<sup>f</sup> them.

33  
 Are you much in communicatn w<sup>th</sup> th<sup>e</sup> farmers here? A grt deal. I travel thro<sup>ugh</sup> th<sup>e</sup> district in my van.

34  
 Do you purchase things fr<sup>om</sup> them? Yes. I take almost

*Johnnie Smith*

anything in exchange for goods.

785  
96

Do you consign this produce to Sydney? Yes.

Since you have been here have you suffered inconvenience because of

the irregular steam service? Yes, I have suffered considerable inconvenience

and less than it, though I understand that the trouble was greater

before I came here. Perishable articles do not get to the market soon

enough. Fowls ~~are~~ <sup>have</sup> here healthy and in good condition, but

on reaching Sydney many of them have been dead or unsaleable. Eggs have been

a month in getting to the Sydney market.

37

You have no doubt as to the reasonableness of the supposition

that more land will be put under cultivation if greater facilities

are afforded for getting produce away? I have not the least doubt

that a very much larger area of land will be put under cultivation or

cleared of grass if we are given better means of communication with the

market.

38

Can you tell us what is a fair price to pay for the

clearing of land here, and to make <sup>of</sup> it fit for cultivation? Of course

there are two kinds of agricultural <sup>land</sup> land on the Macbucca. I do not

know much about the land just here, but I should think that very little

over £10 an acre would be sufficient to clear the land higher up the

river, that is, the alluvial flats. I have seen the scrubs fall and

burnt off and a splendid crop <sup>obtained</sup> ~~was~~ in t one season. O course  
 it is covrd w soft~~er~~ timber. 4

739  
 £10 an acre wd e course include grubbg , stumpg ,  
 and burng. <sup>Would</sup> 30s an acre be too much to pay f fellg alone ?

I cd not say. I h not seen any e these flats in their original  
 state. I h only seen them after t timber <sup>has</sup> bn felled .

40  
 In t Richmond district t timber after being f felled  
 is alwd to decay. I understnd tt tt wd not happen here ? No.

41  
 T ground is cleared here by burng off t timber ? A  
 certn amt e grubbg is done. It is not done in t first year, and  
 when it is done t stumps h pretty well decayed.

42  
 What is a fair average yield in t wacley district,  
 ? Between 40 and 50 bushels to t acre. If we get 50 bushels ~~at a~~  
 as an average yield we <sup>c</sup>aken tt we h a good crop.

43  
 What wd be t average yield here ? I can only judge  
 fr one yr.

44  
 What wd be t average yield this yr ? Abt 50 bushels to  
 t acre .

45  
 What do you think is <sup>a</sup> payable price f maize ? Is 9d  
 to 2s a bushl clear.

46  
 What is t freight fr wacleville to Sydney f maize ?

Smith  
Muller

I h paid is 6d a bag .

747

It wd be 4d a bushl ?Yes, abt tt.

48

Do you consider tt a high rate ?Yes .

49

Do you think there is a reasonable prospect o t rates being reduced if t entrance to t river is improved ?Yes, because

there is not <sup>so</sup> much dredging here as there is on t Macleay .

50

What rates are charged on t Macleay ?I do not know

of certn.They were charging a shilling a bag, but they h reduced t rate since t oppositn boat started .

51

It is quite likely tt you will h an oppositn boat here if t bar is improved ? I see no reason why an oppositn boat shd not ply here during t busy season .

52

Do you think tt a tramway to t Macleay heads will serve this district ?No.

H—b

Robert Quayle, First class constable, Macksville

sworn and examined -

753

Chairman - How long have you been in this district? 24 1/2 years.

54

I believe you compile the local ~~statistics~~ statistics

every year? Yes. I do not take the whole of the Wambucca district.

55

How far would your district extend from Macksville? It

extends out to the range between here and the Macleay, about 16 miles

in one direction, and up Taylor's Arm about 40 or 45 miles in

another direction.

56

You do not go down to the heads? No.

57

What statistics have you for your ~~own~~ district? In

my district there are 161 homesteads of 1 acre or more, <sup>in</sup> in the

Sowra district 151 homesteads, and in the Wambucca Hd district

about 25 homesteads. The population of Macksville is 1100, of Sowra 1078,

and of Wambucca Hd about 400.

58

Do these three places comprise the whole district?

Yes.

59

How many public schools are there here? In the

Macksville district there are 4 public schools.

60

Is there a court of Petty Sessions held here? Yes.

Where is the nearest district court held? The district court is held in Bellingham and at Kempsey. These places are about equally distant from here.

62 What do you think of the future of the district? The population of the district has increased a good deal since I came here.

63 Has it been simply the natural increase, or has it been brought about by the influx of people? A good many fresh people have come here.

64 What are the circumstances of the people generally? As a rule they are getting into better circumstances now.

65 Has it come under your notice that many of the farmers have had to abandon their holdings? No. I believe that a great many of the farms are mortgaged, but the farmers have not had to abandon their homes.

66 Do you consider that the district as a whole is in a worse state than the other districts on the North Coast? No.

67 Have you seen any striking evidence of poverty here? Yes, but not lately. During flood time blankets have had to be given out.

68 But a flood causes an unusual state of things? Yes. There is no such poverty in the district now.

69 How long is it since the last flood? I think about 3 years.

770

Do floods affect this portion of the river? Not much. They affect the upper part of the river more.

71

And the residents on the river flats? Yes.

72

Is there any reason to believe that the district is not a prosperous one? No; it is a prosperous one.

73  
land

Do you think there is still a large area of crown land which might be profitably occupied? Yes. At <sup>the</sup> Head of Taylors Creek there is a great deal of good land, and I understand that a large part of it has been surveyed.

74

Most of the available good land is up there? Yes.

75

A large part of this district is locked up in forest reserves? Yes.

76

Is the timber business a large one? Yes.

77

Do you issue timber licenses? Yes.

78

Has their number increased or decreased? It remains about the same. People take out licenses at the Wambucca heads as well as here.

79

Here you are not immediately in the timber district, as they are at Wambucca Heads and at Newrville? The timber goes from this place to the Wambucca heads to be sawn up.



I suppose it is brt here fr some distce up t river ?

Yes.

81 T timber industry is rather a progressive one ? No ; it is going back .

82 To what do you attribute t fallg off ? I cant say, but good timber is gettg scarce. One mill was removed to t sellingr. I suppose they thought tt they wd be in a better timberd entry there.

83 Do t timber reserves show any signs o giving out? They h to go further back f timber now, but still there is plenty o it .

84 They h used t timber most easily get, and now they h to go back into rough <sup>country</sup> ~~country~~ ? Yes, but there is plenty o timber if they like to go f it. I think there hs bn some mis-rep-n in regard to t yields o maize per acre in this district. I heard one witness say tt it was 25 bushls, but this yr they are pullg fully 75 bushls to t acre, and in some cases 100 bushls.

85 Has this bn an unusually good season ? Yes.

86 You h hd a good rainfall and no floods ? Yes.

87 Wd it be only in yrs o flood tt t yield o maize wd be 25 bushls to t acre ? Yes.

21960

788 I suppose there are never droughts here? There has been a drought since I have been here.

89 Do the crops ever suffer from want of rain here? Yes.

90 It would make the yields more? Yes.

91 But in a good season like the present the yield would

be from 50 to 60 bushels to the acre? It would be a low average yield.

I think that from 65 to 70 bushels to the acre would be about the actual

yield. Everyone has his barn full now. About one fourth of the maize

grown ~~here~~ here is consumed locally in the feeding of pigs and

other livestock.

—

12

William Woods, Bootmaker and Secretary to t

Wackaville Progress Ctee, sworn and examined -

792

Chairman } How long h you bn here ? 3 yrs and  
3 mos

93

There are 2 progress ctees here ? Yes. One is called t

Progress Association

94

Has your ctee met at any time to <sup>e</sup>prepare evidence to  
place bef us in regard to t proposal to improve t entrance to t  
river ? No.

95

Do you any statistics of any kind, t t you wd like  
to put bef us ? No.

96

Do you wish to comment upon any of t evidence t t you  
h heard, or do you agree w what has bn sd ?

97

I will content myself w endorsing what has bn sd by t  
other witnesses.

97

T progress ctee are satisfd t t they h hd t fullist  
opprty to lay their case bef us ? Yes.

AR  
21/6/98

End of the Mambucca R vidence.

113