

The Medical Officer's Journal: *HMAS Sydney*, 1913 to 1922. An Australian Naval record of surgery and anaesthesia at the time of the outbreak of World War I

J. M. McDONALD*, E. M. TODD†

Sydney, New South Wales

SUMMARY

The Medical Officer's Journal of *HMAS Sydney* was a record kept by the ship's surgeon, Leonard Darby, of the conditions on the ship and the health, diseases, injuries and treatment of the sailors under his care. Records of anaesthesia and surgery indicate chloroform was mostly administered, as was ether occasionally. There was some use of intravenous and subcutaneous fluids for resuscitation. The journal also provides an eyewitness account of the *Sydney–Emden* battle on 9 November 1914 which occurred off the Cocos (Keeling) Islands and was a famous first victory for the young Australian Navy, making headlines around the world. The treatment of the many injured, mostly Germans, is described with the two Australian surgeons and the surviving German surgeon working together.

Key Words: *HMAS Sydney*, naval, medic, anaesthesia, World War I

Carefully stored and treasured at the Australian War Memorial in Canberra is the Medical Officer's Journal from *HMAS Sydney*, 1913 to 1922. This large, heavy, leather-bound book contains hand-written medical records documented by the ship's

senior surgeon, Dr Leonard Darby, covering the period of World War I. There are descriptions of the conditions on the ship and medical notes regarding the sailors' health and treatment. There are accounts of on-board surgery and anaesthesia as well as detailed descriptions of the injuries and treatment of injured Australian and German sailors during the *Sydney–Emden* battle of 1914.

HMAS Sydney was a light cruiser built in the United Kingdom and commissioned in June 1913. Darby writes proudly in the log:

The HMAS Sydney is a light four funnel protected cruiser of 5600 tons with a speed of 26 knots and a complement of 410. Her armour consists of a 2"-3" iron belt which extends around the ship in varying thicknesses to the level of the lower deck. She carries 8 six inch quick firing B.L. guns and two 21 inch submerged torpedo tubes. She has 12 boilers capable of burning coal and oil fuel and is fitted with turbine engines¹.

Darby was born in George Town, Tasmania, in 1890 and graduated from the University of Melbourne in 1912. He joined the Royal Australian Navy at the time of its inception in September 1912. He was sent to Britain for more training and spent some months in the Haslar Royal Naval Hospital at Gosport, near Portsmouth, joining the *Sydney* in Portsmouth in 1913.

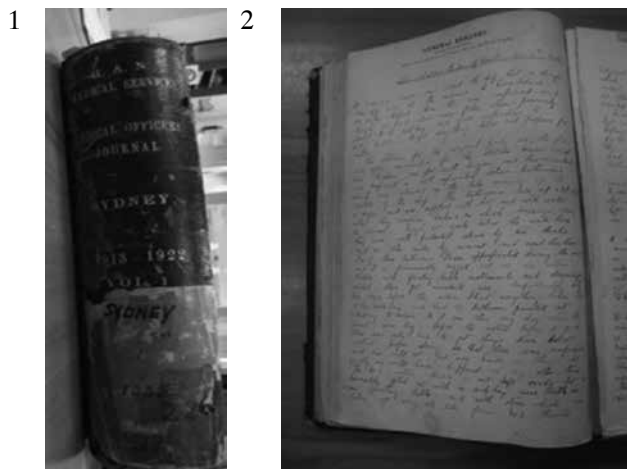


FIGURE1: Medical Officer's journal from *HMAS Sydney*.

FIGURE2: Page from the Journal.

* MB BS(Hons) FANZCA. Senior VMO in Anaesthesia, Westmead Hospital, Westmead, New South Wales

† BA(Hons I), Sydney University History Department, Sydney University, Sydney, New South Wales

Address for correspondence: janemcdonald@me.com

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FIGURE 3: *HMAS Sydney*. (Australian War Memorial P00271.002).

Darby records that the initial voyage to Australia from Portsmouth in 1913 was smooth and “seasickness was an unknown complaint”¹. The ship’s company was vaccinated with cowpox on the voyage, which put some sailors on the sick list. Various ailments are described, including severe eczema, syphilis, a badly injured finger, epilepsy, influenza, pneumonia, gonorrhoea, scabies and diabetes. Four operative procedures at sea are documented on the trip to Australia. Two procedures were on a 25-year-old patient for treatment of a syphilitic chancre. Initial treatment was with intramuscular mercury and sulphur ointment but he later required surgery. Darby records:

Patient was put on a table and anaesthetised with chloroform and kept under with the ether given in the open method by an executive officer. Operation lasted 15 minutes and the patient came to feeling very fit no vomiting nor distress¹.

A second operation was required two weeks later, and it was another five weeks before the sailor returned to duty.

Two other surgical procedures were documented during the trip to Albany, Australia. These were drainage of pus from an infected finger and drainage of an infected prepatellar bursa. Anaesthesia is described simply as “chloroform”. Who administered it is not mentioned and there were no apparent complications.

In another case, while still at sea in the Atlantic Ocean, a stoker developed severe thirst, dyspnoea and collapse. His urine on catheterisation was found to be full of glucose. Diabetes was diagnosed and he was given intravenous normal saline and bicarbonate through an incision into the basilic vein, but he died soon after and it is recorded that he was buried at sea.

On arrival in Australia a 37-year-old patient with “toxic pneumonia” was transferred to the Civil

Hospital at Albany but died 11 days later. Other patients taken off the ship in Australia included a patient with phthisis (tuberculosis) and another with acute rheumatism.

Over the next few months, cases of rubella, rheumatic fever, scarlet fever, syphilis and gonorrhoea were recorded.

The *Sydney* participated in the spectacular Australian Navy fleet launch on Sydney Harbour on 4 October 1913. This included a 17-gun salute from the battleship HMAS *Australia*. The centenary of this event was celebrated on Sydney Harbour on 5 October 2013.

While in port in Sydney, a sailor who had been ashore for four days developed diphtheria, which was diagnosed on return to the ship. He was quickly sent to hospital ashore before the disease could spread. It is recorded that when he returned to the ship he had cardiac complications and required digitalis.

An 18-year-old with appendicitis was sent to St Vincent's Hospital in Sydney for surgery and Dr Darby attended the operation, describing it in detail in his journal.

A 35-year-old stoker attempted suicide by cutting his throat while in port in Sydney. Darby writes:

...this rating was found in the Warrant Officers' pantry with a deep gash across the front part of his throat from side-to-side, almost down to the great vessels. He had lost a considerable amount of blood but was not in a collapsed state. Bleeding points were tied with catgut and the wound sutured with catgut and horsehair. This patient had been drinking heavily for some days¹.

There is no mention of anaesthesia. The patient was put on suicide watch and Darby comments "soon after recovery [the] patient was morose and much subdued"¹ but eventually he was returned to duties.

The following year, while at sea off the Queensland coast, a 41-year-old "Chief Stoker" developed pain in the right hypochondrium and Darby diagnosed a stone in the gall bladder. The *Sydney* docked at Gladstone and Dr Darby took the patient to Rockhampton by train, where a Dr Voss operated on him at his private hospital immediately upon arrival. Dr Darby assisted at this operation and describes much of the surgery in detail in his journal. Anaesthesia is described as ether. There was a large stone the size of a pigeon's egg removed with a spoon and a finger, and a drainage tube was left in the gallbladder. The patient remained in hospital and made a good recovery.



FIGURE 4: Group portrait of officers from the Royal Australian Navy light cruiser *HMAS Sydney*. The ship was on her way to the Atlantic after destroying the German raider *Emden* at the Cocos Islands on 9 November 1914. Identified left to right (back row): Assistant Paymaster Eric Kingsford-Smith; Engineer Lieutenant Cleon Dennis; Sub Lieutenant James M. C. Johnstone; Artificer Engineer G. A. Hutchinson; Lieutenant Basil Owen Bell-Salter; Lieutenant Frederick L. Cavaye; Lieutenant Rupert Clare Garsia; Dr Arthur Charles Robert Todd; Gunner Lieutenant Denis E Rahilly. Middle row: Dr Leonard Darby; Engineer Lieutenant Lawrence Parsons Fowler; Lieutenant Commander John F Finlayson; Captain J. C. T. Glossop; Paymaster Ernest Claude Norton; Chaplain Vivian Agincourt Little; Lieutenant Cuthbert John Pope (Navigator). Front row: Mr Alfred Moule Martin (Boatswain); Mr Edward Charles Behenna (Carpenter); Mr George B. Salter (Gunner); Mr John C. MacFarlane (Torpedo Gunner), (Australian War Memorial ENO163).

GOING TO WAR

HMAS Sydney was at Thursday Island when the war against Germany was announced on 4 August 1914. Australia immediately put its Navy under the control of the British Admiralty and began preparations to send forces to participate in the conflict.

A hastily assembled force, known as the Australian Naval and Military Expeditionary Force (ANAMEF) was dispatched to knock out the nodal point of the German military radio network in German New Guinea. They were to be escorted by the cruiser *Sydney* and the battlecruiser *Australia*.

The *Sydney* headed north almost immediately and met up at Palm Island with men of ANAMEF on the *SS Berrima*, a P&O passenger liner that had been hurriedly converted into a troopship. With submarines *AE1* and *AE2*, cruisers *Protector* and *Encounter*, plus a storeship, they headed north to join the *Australia*. At Port Moresby, the sailors of the ANAMEF who were to land at Herbertshöhe and disable the wireless station were transferred to *Sydney*. This included Able Seaman Billy Williams, a navy reservist from Melbourne, and Captain Brian Colden Antill Pockley, a young army doctor. Dr Pockley graduated from the University of Sydney in 1914 and was commissioned as a Captain in the army at the outbreak of the war and put on board the *Berrima*. He spent five days on *HMAS Sydney* before his expedition with the ANAMEF after volunteering to join the advance party to destroy the wireless station at Bita Paka.

In a letter home written hours before the expedition, he wrote:

As you see I am on board the Sydney at present... We are only 5° from the equator at present and it is jolly hot, especially at night as all the dead lights are closed to ensure a dark ship and consequently there is not a breath of fresh air. I have just come out of the ships surgery, It was 95° 35°C there...

...I have had a great time on board the Sydney and nothing much to do. Also one is fed much better and more appetizingly than on the troopship and I like the society better....

...I must turn in, as I believe we are all going to be hauled out at 2 a.m.

Much love to you all,

Brian²

On 7 September the *Sydney* arrived at Herbertshöhe. Two days later the party of 25 were landed at Kabakaul in the early hours and went to disable the wireless station at Bita Paka—the colony's contact with the powerful German East Asia Cruiser Squadron, commanded by the infamous Vice Admiral Maximilian von Spee. Both Williams and Pockley were injured by gunshots in the process. Captain Pockley was shot as he tried to assist the wounded, having selflessly given away his red-cross brassard to a stretcher-bearer. He was left without the protective signal that identified he was a non-combatant and was hit by a sniper's bullet. The severely injured Williams and Pockley were taken back to *SS Berrima* where they died that afternoon. These two men were the first Australian casualties of the war.

Darby, a fellow medical officer, must have been affected by Pockley's death; however, there are no references to the event in the Medical Officer's Journal.

Darby has notes about treating a sailor with severe tuberculous pneumonia who is transferred to the hospital ship *Grantala* in Simsonhafen (Rabaul). There is also a sailor with a fractured olecranon and another with a paralysed arm after sleeping with it awkwardly placed behind him. Another had severe eczema and very swollen feet and ankles, made worse by the tropical heat. A 22-year-old stoker was admitted to sickbay with severe back pain and spinal deformity thought to be tuberculous sacroiliac disease. He was sent to St Vincent's Hospital on return to Sydney.

Newly recruited Dr Arthur Charles Robert Todd joined the *Sydney* the day before it departed from Sydney to Albany. Todd was born in Sydney in 1890 and graduated from the University of Sydney in 1914 in the same class as Brian Pockley. He volunteered for the Royal Australian Navy two weeks after the outbreak of war.

On 26 October the *Sydney* departed from the port of Sydney. An expeditionary force of 20,000 men known as the First Australian Imperial Force had been raised for service overseas and, under great secrecy, a flotilla taking these men was departing from Albany, Western Australia. The *Sydney* had returned to Australian waters to join the escort. After some delays the flotilla departed on 1 November 1914. These troops were the men who would be used to defend the Suez Canal and later to land on the Gallipoli peninsula.

At this time, a German ship, the *Emden*, had remained in South East Asia and was acting as a

commerce raider. During a two-month period, this cruiser captured or sank 25 civilian vessels and destroyed two Allied warships. The ship and its captain, Karl von Müller, had become legendary. Australia was very concerned about the vulnerability of their troopships to the threat of the *Emden*.

In early November, von Müller decided to attack the communications station at Direction Island in the Cocos Islands to hamper Allied communications.

The Medical Officer's Journal has no entries after leaving Sydney until 9 November, where "At 7:30am rumour went around the ship that a strange warship was at the entrance to the Cocos Islands"¹. The *Sydney* was sent to investigate and arrived within two hours and engaged in battle with the *Emden*. The *Sydney* was the larger and faster of the two ships and overpowered the *Emden*, with captain Karl von Müller running his ship aground on North Keeling Island at 11:15 am.

Darby and Todd were soon overwhelmed by having to manage the sudden arrival of many injured sailors at their quarters. They had two stoker bathrooms below decks set up as emergency operating theatres.

Darby writes:

The Emden soon hit us and within 5 to 10 minutes the first wounded man was brought below to me by members of an unengaged gun's crew.

The first man was Meldrum O.S.R.A.N. He was in the after control room when two shells entered it and he sustained a fractured Rt leg and 13 other wounds. He was in great agony so I gave morphia and ordered Mullins S.B.S. to attend to the wounds and quickly apply a splint for by this time a constant stream of wounded men requiring urgent attention were being brought down to the theatres. The second case was Sharp A.B. shot through the chest and bleeding freely, with the apex of the heart beating through a gaping hole in the chest, a loud inrush of air into the chest and air hunger being marked. Pads were rapidly applied to the wounds with tight bandages and a large dose of morphia was given.

Before this case was attended to Gascoigne A.B. R.A.N. was brought down. He had various shell wounds in the right leg thigh and buttock and his right eye had been pierced at the same time by a small fragment of shell.

Lynch P.O. R.N. and Bell A.B. R.A.N. were carried below immediately after having both been struck down by a bursting shell at an unengaged gun. These two men were very badly wounded and

the former was in terrible agony. He had been shot through the abdomen, the fragment emerging in the R lumbar region leaving 6 inches of omentum hanging out of a hole near the Rt kidney. In addition the patient was burnt from head to foot. Bell was shot through the base of the heart and soon died. I hurriedly administered large doses of morphia and attended to first dressings.

Meantime two more men Horne A.B. R.A.N. and Williamson O.S. R.A.N. had been brought down and all available space near no 1 theatre was taken.

Whilst these men were being attended to I received a message from the Captain to send for a wounded man on the upper bridge... We were now clear round no 1 theatre so I went aft to see the wounded in the ward room on my way passing Surgeon Todd's station. He had all this time been equally busy and had been handicapped by the fact that on four occasions his S.B.A. had fainted...

...The wounded man (from the upper bridge) was Hoy A.B. R.A.N., he was working the range finder on the fore bridge when it was struck by a shell which did not explode. His left leg had been shot away at its junction with the body and was a horrible sight. He had lost a tremendous amount of blood and was almost dead on arrival below. I sent for surgeon Todd and got the patient's clothes cut away rapidly and had him placed on the operating table. We then administered 1 pint of normal saline subcutaneously and started to trim up the stump. After making a few cuts in cleaning away the ragged ends the patient died...

...Cease fire sounded at 11:15 am after we had been working two solid hours in a very confined atmosphere and a temperature of 110 degrees. The strain had been tremendous and Mullins who had done wonderfully well with me started off to faint but a drink of brandy saved him and I was very glad of a similar drink at the time. Our clothes were saturated with blood and perspiration and altogether it had been a terrific two hours of high tension... The wardroom now contained 11 cases and most of them were restless and groaning in agony. The initial dose of morphia, in no case less than ½ gr had been of slight value and I have good reason to suppose that the solution in the ampoules supplied had deteriorated. Fresh doses of morphia were administered and iced water, soda water and brandy to various cases as thought fit... Our constant attention was now taken up by two cases Lynch and Sharp. Normal Saline

was administered in the first case subcutaneously because no vein could be found and in the second case into the median basilica by means of a needle through the skin. Wounds were redressed and all methods of reducing shock tried. Lynch was hopeless from the first and died two hours after being wounded going through much pain. Sharp somewhat improved after the saline but air hunger was pronounced and he complained of constriction around the chest and tried to tear off his bandages. There was oozing of blood from his wounds and his pulse was very weak...¹

Meanwhile, Captain Glossop took the *Sydney* steaming after the *Buresk*, a collier accompanying the *Emden*, but discovered it was scuttled and sinking. It went searching for other ships and did not return to Direction Island until the next day. The German landing party of 50 sent to disable the wireless station had witnessed the battle and had escaped to sea on a schooner.

Many German sailors from the stricken *Emden* were lying wounded and dying.

The telegraph station doctor, Dr Ollerhead, was bought aboard the *Sydney* to help with the wounded. Dr Darby records:

Later in the day we organized theatre staff from the volunteers... They helped clear up, held basins and receptacles and got things one required and generally did remarkably useful work with composure that was astonishing since they were present at many bloody operations and gazed upon some awful sights to which none of them had been previously accustomed. Surgeon Todd acted ably as anaesthetist and Dr Ollerhead assisted me with the operations.

The first case we took was Sharp. He had a restless night and from his dyspnea, and the oozing of blood, plus dullness on percussion, it seemed that there was much blood in his pleural cavity. His colour was bad, likewise his pulse. Chloroform was administered. Examination showed that a fragment of shell the size of a sixpence had entered his chest in the right axilla and had tracked downwards and forwards to the left through the pleural cavities finally emerging through a large ragged hole just below the apex of the heart. In fact soon after the injury the apex of the heart could be seen emerging with each thrust. Probably the lungs were penetrated but there was no haemoptysis. A piece of the 6th rib had been carried away leaving a gaping wound and a large swish of air occurred with respiration. The

*wound was enlarged, a piece of rib removed, and a search was made for bleeding points, but they were inaccessible, and the search could not be prolonged owing to the patients condition so I swabbed out the blood from the left pleural cavity and a considerable amount of gauze was packed in and a tight binder and pad applied. The patient was removed to the only bed left in the sickbay and saline administered subcutaneously. The patient rallied considerably but later on haemorrhage recurred and he died two or three hours after the operation... By this time we had returned to the *Emden* which was flying distress signals and arrangements had now to be made for the receipt of about 80 German wounded. All available stretchers hammocks and cots were sent to the *Emden* with a party under Dr Ollerhead who did not return until the last patient left the *Emden* some 5 hours later... Of necessity the work done now was only immediate and temporary until the cases could be sorted out and put under anaesthesia in a clear theatre. From 35 to 40 of the cases were serious ("heavy") the rest being more or less slightly wounded and these latter were able to help themselves somewhat and wait. The condition of many was pitiable. Some had legs shattered and just hanging on, others had shattered forearms, others were burnt from head to foot others and had large pieces of flesh torn out of limbs and body. One man was deaf and dumb several were stone deaf in addition to other injuries. The worst sight was a poor fellow who had his face literally blown away. His right eye, nose and most of both cheeks were missing. His mouth and lips were unrecognisable. In addition the wound was stinking and foul with copious discharge. The case was so bad that I had no hesitation in giving a large dose of morphia immediately and after cleaning the wound as well as possible a large dressing was applied and he was removed to the fresh air on deck. The odour was appalling and it was some time before the sick bay was clear of it. The patient lingered for 4 to 6 hours afterwards in spite of repeated liberal doses of morphia... Naturally the German Surgeon, Dr Luther, had been very much shaken. His assistant Surgeon was less fortunate, when they were badly struck fire broke out above him where upon he went up and was blown overboard and slightly wounded. He managed to get ashore and during the night he lay helpless and exhausted dying of thirst along with a few others who had also got ashore. After much persuasion he got a sailor to bring him some salt water of which he drank a large quantity and straightaway became raving and died¹.*

The German surgeon Dr Luther, Dr Ollerhead and the two Australian surgeons worked together for 40 hours operating on the injured:

The first German case taken was a patient whose Rt leg had been almost severed just above the ankle. The German Surgeon assisted by Dr Ollerhead with Surg Todd as the anaesthetist amputated the leg successfully in the middle third. The case did very well...

We now gave our attention more fully to our own men and after dinner started on Meldrum O.S. This boy had over thirteen separate shell wounds most of them very severe..... It took Dr Ollerhead and myself, working hard, two solid hours to complete the case. Dr Todd gave the anaesthetic (chloroform) which the patient stood very well...

After doing the operation mentioned above the German surgeon became more of a hindrance than a help. During the evening he broke four of our syringes without successfully giving a hypodermic injection and he was sent to take a rest which he badly needed. Next morning he had improved considerably and he was able to take the place of Dr Ollerhead when the latter returned to Cocos Island¹.

On the way to Ceylon many of the injured were transferred to the auxillary ship *Empress of Russia*. It was another five days before the injured men were able to be unloaded in Colombo. The *Emden* lost 143 men who were killed in action or died of wounds. The *Sydney* lost four men.

Darby wrote:

It would be very difficult to imagine a more trying set of circumstances for the medical staff of a cruiser and an action where so many wounded would be rescued. Had the "Emden" sunk before she reached the beach our work would have at least halved itself as many wounded must have drowned. Thus we had an abnormal list in the enemy ship added to our own list of wounded. The ship was overcrowded and most unsuitable at any time as a hospital ship, we were delayed 48 hours round the scene of action and we were 4 days steaming at 18 knots from the nearest hospital¹.

The stores documented as used during the period are listed in detail and include 2 lb of chloroform, 60 ¼ grain tablets of morphia and 12 ampoules of morphia.

Before departure from Colombo, Darby had the decks scrubbed down, bedding replaced and every space sprayed with disinfectant.

For the next 18 months the *Sydney* carried out patrol duties between the islands of the West Indies and along the east coast of North America.

After months of illness, Surgeon Todd was invalided off the ship with suspected tuberculosis in 1916. In September 1916, the *Sydney* was transferred to the North Sea for patrol duties.

She was present at the surrender of the German High Seas Fleet on 21 November 1918 at the end of the war and returned to Australia on 19 July 1919.

After the war, *Sydney* carried out routine duties until paid off and decommissioned in 1928. She was broken up the following year. Her mast is standing in Sydney Harbour at Bradleys Head, a prominent memorial to sailors killed in the line of duty or lost at sea. In Hyde Park, a cannon from the *Emden* sits as a memorial to the *Sydney-Emden* battle adjacent to the ANZAC Memorial.

Dr Leonard Darby

Dr Leonard Darby remained on the *Sydney* until 1918, when he was appointed to *HMAS Penguin*, the naval hospital in Sydney. He became Surgeon Commander in 1922, Director of Medical Services Australia from 1927 to 1932, and in 1934 the Principal Medical Officer for Ships and Naval Establishments. In 1939 he was awarded Commander of the Order of the British Empire. He retired in 1946 and died in Queensland in 1980.

Dr Arthur Charles Robert Todd

Dr Arthur Charles Robert Todd was invalided off the *Sydney* on 10 June 1916 due to ill health and suspected tuberculosis. He was placed on the retired list in 1917 and died in Morgan, South Australia, in 1927 aged 37 years after a decade of ill health.

CONCLUSION

The Medical Officer's Journal on the *Sydney* was intended to be an official record of medical procedures and a documentation of diseases, facilities and supplies on board one of Australia's newest battleships. This journal also provides us, a century on, with an eyewitness account of a young nation encountering its first naval battle in a war of unprecedented scale. It demonstrates the commitment and dedication of our early medical servicemen.

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REFERENCES

1. Medical Officers Journal *Sydney* 1913-1922. Volume 1. Australian War Memorial. Ref AWM239 226.
2. Pockley, letters, MLMSS 1092, as cited in Carlton, Mike "First Victory-1914: HMAS Sydney's hunt for the German Raider Emden." William Heineman, Sydney, 2013.