On Thursday, 31st July, 1902, an explosion occurred in the Mt. Kembla Colliery which resulted in the loss of the lives of 96 men; 94 of whom were at work; the other deaths being that of Major Henry Osborne McCabe, a former manager of Mt. Keira Colliery, and William McMurray, a deputy at Mt. Kembla Colliery, not on shift, while endeavouring to rescue the entrapped men.

As the Fiftieth Anniversary of the disaster would fall on Thursday, 31st July, 1952, it was suggested that the Society should commemorate the occasion in some suitable manner.

The Society's Council decided to hold a simple service at the Memorial in the Rest Park, Globe and Burelli Streets, Wollongong, and to this end sought the collaboration of the Council of the City of Greater Wollongong, which was readily given.

One of our members, Mr. Gordon Sellers, M.I.M.E., District Mining Engineer of the Southern District, Joint Coal Board, offered to address the Society on the technical aspects of the disaster. This offer was gratefully accepted and Council agreed to call a special meeting on the evening of the 31st July for the presentation of Mr. Sellers' address.

The churches of the district were also invited to make a special reference to the disaster in their services on either of the Sundays, 27th July or 3rd August, 1952.

The commemoration received wide respectful interest by the community and acknowledgment is hereby made of the assistance of all citizens and organisations taking part.

Details of the various ceremonies were as follows:

Sunday Afternoon, 27th July, 1952:

A service was held at the Soldiers' and Miners' Memorial Church of England, Mt. Kembla. The service was conducted by the Rector (Rev. K. W. Campbell), the special preacher being Ven. Archdeacon H. G. S. Bogbie, of St. Michael's, Wollongong. The Archdeacon was deputising for the Archbishop of Sydney, Most Rev. Dr. H. W. K. Mowll, who was prevented from attending at the last moment.

The little church was crowded, amongst those present being Messrs. H. Simpson and J. Benjamin, survivors of this disaster. Members of the P.A.F. Society attended in regalia.
The President (Mr. J. S. G. Worland) and a member of the Council (Mr. W. S. Musgrave) represented the Society. Radio 2WL, Wollongong, recorded and broadcast the service on Sunday morning, 3rd August.

Thursday Afternoon, 31st July, 1952:


Unfortunately driving rain fell throughout the afternoon, necessitating a move to the adjoining Rest Room of the C.W.A., which was very kindly made available. Undoubtedly but for the rain the attendance would have been at least doubled.

The Mayor (Ald. J. J. Kelly) presided and after briefly speaking on the reason for the gathering introduced our President, who spoke on behalf of the Society.

Mr. Worland said "We are assembled here today in this quiet oasis in a busy city to 'summon up remembrance of the past' and to mark the Fiftieth Anniversary of a very tragic occasion. We of the Illawarra Historical Society believe it is good to pause, once in a while, and reflect on the affairs and occasions of the past. We believe that in looking backwards, now and then, we are better able to march forward on the often troubled road of life."

He told how business in Wollongong was just resuming after lunch and of how at the Court House, mine managers and miners' union officials were attending a sitting of the Industrial Court.

"Suddenly a booming roar as of distant artillery is heard from the vicinity of Mount Kembla and the sight of smoke issuing from the tunnels on the mountain side and news by telegraph soon confirmed the dreadful news.

"Major H. O. McCabe, who had intended returning to Sydney in the afternoon train, wired his wife that he would not be up until the next day. That tomorrow never came.

"Major McCabe had had experience in the Bulli disaster of 15 years before and he quickly joined the rescuers.

"The work of rescue, the story of acts of heroism are subjects which need more time than I have available and the harrowing scenes at the shattered mine entrances are still matters of poignant memory.

"The wave of sympathy which swept throughout the immediate district, throughout the State, indeed throughout the newly-formed Commonwealth, and the ready response to appeals for money and material help, were wonderful.

"The far-reaching effect of this explosion on the conduct of mining was something that tended to assuage the sorrow of its occurrence."
Mr. Worland said death that afternoon came in many disguises. There was a violent explosion which shattered men's bodies and then others were wooed to their deaths by the insidious effects of after-damp.

He pointed out the monument was originally planned to perpetuate the names of Major McCabe and William McMurray as rescuers who had lost their lives. The two men were found locked in each other's arms.

The memorial was first erected near the corner of Crown Street and Crown Lane and was unveiled on August 12th, 1905. It was removed to the Rest Park in late March or early April, 1937.

Then, in a silence broken only by the almost inaudible tears of some of the relatives, Mr. Worland slowly read the names of the 96 men and youths which are inscribed on the memorial.

He concluded by reading a message from the South Coast Trades and Labour Council.

A one-minute silence was observed, followed by the first verse of "Abide With Me".

Wreaths were then laid at the foot of the memorial by representatives of the following organisations: City of Greater Wollongong (the Mayor), Illawarra Historical Society (the President), Colliery Managers' Association (Mr. A. G. Ellis, President), Miners' Federation (Mr. J. Morris, National President), Mt. Kembla Deputies and Shotfirers (Mr. J. Morris), Mt. Kembla Miners' Lodge (Mr. F. Kirkwood), Southern Colliery Proprietors' Association (Mr. O. G. Vickery), South Coast Branch Australian Communist Party, and many private wreaths by relatives and friends.

This service was also recorded and broadcast by Radio 2WL on the Thursday evening.

Thursday Evening, 31st July, 1952:

The special meeting of the Society again attracted a good attendance, a count giving 101 present. Here again heavy rain militated against the attendance, but we were pleased to have with us a number of the survivors with mining, Parliamentary and Civic representatives.

Mr. Sellers' address proved of absorbing interest. (He has kindly prepared a precis, which will be found later in the "Bulletin"). At its conclusion many questions were asked and contributions to the discussion were made by Messrs. J. Price and G. Ramsay (survivors) and Mr. A. Leeper (Member) who helped with the rescue work.

Saturday Morning, 2nd August, 1952:

At St. Clement's Roman Catholic Church, Mt. Kembla, a Requiem Mass was celebrated by His Lordship, Most Rev. Thomas McCabe, Bishop of Wollongong. Rev. Fr. Deignan assisted the Bishop.

It was Bishop McCabe's first official visit to the Mt. Kembla district and here again the church was crowded, many coming from the other South Coast parishes and some that morning from Sydney.

A survivor, Mr. P. Brownlee, was present.

The Society was represented by Mr. A. R. Grenfell (Secretary) and Rev. Bro. J. P. O'Malley (Councillor).—A.P.F.
“THE MOUNT KEMBLA DISASTER”

The following precis was prepared by Mr. G. Sellers (Member) on his address to the Society, Thursday evening, 31st July, 1952:

Introduction:

1902 was the year which heralded an increase in the Southern coal trade. The industry was rapidly recovering from the recession of the nineties. Most collieries were working near full time and the more progressive were improving their positions. Port Kembla Harbour was under construction with its promise of adding further prosperity to the industry. The following table shows the collieries operating and their outputs for the year 1901:

<table>
<thead>
<tr>
<th>Colliery</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>287,036</td>
</tr>
<tr>
<td>Mt. Kembla</td>
<td>261,350</td>
</tr>
<tr>
<td>South Bulli</td>
<td>246,350</td>
</tr>
<tr>
<td>Corrimal</td>
<td>162,482</td>
</tr>
<tr>
<td>Mt. Keira</td>
<td>145,593</td>
</tr>
<tr>
<td>Mt. Pleasant</td>
<td>122,635</td>
</tr>
<tr>
<td>Bulli</td>
<td>120,184</td>
</tr>
<tr>
<td>Bellambi</td>
<td>93,128</td>
</tr>
<tr>
<td>South Clifton</td>
<td>79,191</td>
</tr>
<tr>
<td>Bulli Pass</td>
<td>12,334</td>
</tr>
<tr>
<td>Coalcliff</td>
<td>10,434</td>
</tr>
</tbody>
</table>

The figures indicate that Mt. Kembla was the second largest producer on the Southern coalfield.

Mt. Kembla Colliery At The Time Of The Explosion:

The mine belonged to the Mount Kembla Coal & Oil Co. Ltd. Its surface works were, as now, situated immediately to the north of the outlier of the Illawarra Range known as Mt. Kembla, the highest peak in the Wollongong area.

The coal seam is known as the No. 1 or “Bulli” seam and is the one worked by all the collieries north of Kembla as far as Metropolitan colliery and is the one also now worked in the Burragorang Valley. The seam is the most extensive first quality vein of the N.S.W. coalfields; it outcrops as far north as Catherine Hill Bay and Glen Davis, being worked in both places.

At Mt. Kembla, the seam tapers off in thickness as it goes to the south, where it is unworkable, and in the southern part of Kembla, it is so low as to make essential that the longwall (a method of winning coal by extracting completely the coal seam by working along a long face, the roof being permitted to cave as the face advances) system of mining be adopted.

At the time of the disaster, the mine was being worked by the Bord and Pillar method (a method of working collieries whereby faces are driven in the seam so as to leave areas of coal in the form of pillars which support the roof, these pillars being later extracted), with heights of coal varying between 6ft. and 8ft. 6in. The longwall workings, where the height was 2ft. 8in., had been standing idle.

The workings covered an area of about 760 acres, of which some 270 acres had the coal completely removed and the roof allowed to cave in. The seam outcrops on the slopes of the range at some 840ft.
above high water mark and the main tunnels of the mine go in under the saddle which joins Mt. Kembla to the mainrange.

The pitch of the seam varies, as it dips at about one in 19 for the first half mile or so in a N.W. direction, and then tends to go level after that in the same direction. To the north the seam rises gently in the direction of Mt. Keira.

There were four intake tunnels through which a person could enter the mine and travel to any part of the workings and two others which were mainly out of use. The great number of entrances played an important part in saving life at the time of the disaster.

One adit tunnel only was used for haulage, i.e., the Main tunnel, and, at a point some 12 chains in, it branched on to another haulage way known as No. 1 Right, which ran in a northerly direction and to the spot which was determined as being the seat of the explosion. Off these two roadways, other subsidiary haulage ways branched at intervals.

Our interest must particularly rest with what was known as the 35 acre waste on the 4th Right Goaf (an area from which coal has been completely extracted and in which the roof has caved) where pillars had been extracted prior to the explosion and where the evidence put forward indicated the origin of the disaster.

At a point nearly one mile from the surface and along the system of main tunnels a shaft some 400ft. deep had been sunk about nine years earlier. At its foot a furnace with 69 sq. ft. area was erected. The method of ventilation relied upon the vacuum created by burning coal in this furnace with the shaft acting as a huge chimney, the intake air being drawn in the tunnel mouths and round the workings before passing over the fire. Actually the current of air totalled between 80,000 and 100,000 cu. ft. per minute, which was very good for the times. The same shaft serves the mine today, the air being drawn by a mechanical fan.

Prior to the explosion the output approximated 1250 tons per day and gave employment to 87 persons above ground, the following being underground:

Under Manager 1; Deputies 2; Miners 208; Wheelers 27; Shiftmen 15; Clippers 7. Total 260. And also one Government Inspector.

The natural conditions in the mine for the winning of coal were excellent, the seam being intersected by minor geological troubles only, except that the seam contained stone intrusions in the floor in common with the bulk of the mines working from the Bulli seam outcrop. The coal generally was naturally damp and by comparison with the other mines, particularly Metropolitan, there was very little dust. Inflammable gas had been ignited in various working places some years earlier, but the advent of the new shaft and furnace had practically removed all but a few detectable quantities of gas. The roof strata was generally good and very few falls were to be found in the open areas of the mine. Naked lights were in common use and safety lamps were used only for inspection purposes. Gunpowder was used for blasting the coal.

The Explosion:

July 31st, 1902, was a fine winter's day with little or no wind. In Wollongong the Industrial Court was sitting concerning a dispute between the miners and colliery proprietors of the district and
the court was attended by most of the miners' leaders, colliery managers and their representatives.

About 2 p.m., eye witnesses observed large quantities of smoke and flame emerge from the Main Haulage and Main Travelling Tunnels of the mine. The smoke and flame was accompanied by the terrific report of an explosion. Some of the smoke was immediately drawn back into the mine by the back draft caused by the air cooling, i.e., after the force had expended itself.

Eye-Witnesses' Accounts:

William Stafford, an old retired miner, who lived just above the Main tunnels, was working in his garden when he heard a great report and on looking up he saw a great red tongue of flame fully 40ft. long. He also saw pieces of iron and torn wood which made a terrible noise flying through the air.

Harry Ramsay, a farmer who lived adjacent to Stafford, was right above the old furnace when he saw a snaky red flame, a cloud of black smoke and dust shoot out of No. 1 old furnace shaft.

Paddy Brownlee, the check weighman, was sitting in the weigh-cabin. The force of the explosion knocked him and Wilson, the Company's weighman, to the floor. Flame passed into the weighcabin, which was largely wrecked, and burnt both men.

At Kembla village the shock was terrific, as if thousands of pounds of dynamite had been set off. The very earth itself trembled violently, houses, windows, doors and furniture vibrated sharply and crockery shook as if to fall. Men and women were almost thrown off their feet. An eye-witness to whom the writer spoke described a large train of smoke with the blast, after which there was an eerie silence during which roosters crowed and dogs howled. The silence was quickly followed by a frantic rush to the mine by the relatives of those men inside.

The blast was loudly heard at Wollongong and telephone messages quickly informed the town of the disaster. At the Court House the sitting was immediately adjourned and all present, led by Mr. A. Rogers, the Mine Manager, set out for the mine. Wollongong was soon almost deserted as every means of transport was availed of to reach the scene of disaster.

A terrible scene awaited those who came to the mine. All buildings, including office, engine house, boiler house, had been blown into an unrecognisable mass. The entrance to the main tunnel was completely blocked by a fall of earth and stone. In the wreckage three men were trapped, including F. P. Purcell, an engine driver, who crawled out uninjured. The other two were mutilated beyond aid.

Stories of Survivors and Rescuers:

David Evans, a man of 52 years' mining experience, 16 years a deputy in Kembla and day deputy in the section where the explosion occurred. (Dungey the other day deputy was killed in the explosion). Evans was on the pillars on the left side of No. 6 (James' Heading) and did not feel or hear anything. Was informed by Mat Frost that something was wrong in No. 1. Evans made towards No. 1 and quickly reached the return from that district, where he found smoke coming from No. 1. He then went towards the air shaft and opened separation doors to short circuit the smoke to the upcast shaft and so
prevent it circulating around the mine. He then gathered around
him about 50 men and led 70 of them out by old workings. The
course he took was through old longwall workings where the men
had to crawl frequently and it took them three hours to get out by
the travelling road near the manager's house. They were saved by
a small current of air which was circulated around the old longwall
faces to keep them clear. Some 17 or 18 men who were originally
with the party stayed at the shaft and all later died. On reaching
the surface he joined a rescue party led by Dr. Robertson and did
not return outside until between one and two o'clock the next morn-
ing. He went in again on the Friday, but this time to recover some
of the victims.

Matthew Frost, a wheelers' overman, which job he carried out
on behalf of his father, who held a contract for drawing the coal.
Frost was closely associated with Evans and his statements covering
the early actions show clearly how much the survivors owed to
Evans, as according to Frost, Evans' coolness did much to quieten
the men they met. Frost went with Evans towards No. 1 district.
He assisted Evans to open the doors near the shaft which short cir-
cuited the smoke and gas into the upcast shaft. When the explosion
occurred Frost was in the 7th Right of the shaft district and he felt
a great pressure of wind coming round the rope road. He heard no
noise, but he noticed that the wind came against the normal air
course and that it travelled the same in both the front and back
headings. He did not notice any bad smell until about 15 minutes
after the explosion. When he met the smoke it was hot. By arrange-
ment with Evans, Frost stayed on for about 40 minutes after Evans
took his party away. Evans instructed him to stop men from passing
that point, gather them up and take them out the way Evans was
going, as only Frost and Evans knew the way. A number refused to
be guided by the instructions and were overcome. Frost and one Rid-
ley endeavoured to drag some of the unconscious to the fresh air, but
they were not very successful and they stayed until the first rescue
party, led by Adam Frost, reached them. By this time the main
heading from daylight was clear of gas. Matthew Frost then went
to daylight and immediately joined another rescue party, returning
to the entrance about one or two o'clock the next day and later went
in again on recovery work.

Adam Frost, an overseer of wheelers, was at the 2nd Right
tommy dod in the 1st Right when a great blast of wind blew his
light out. The wind came up the 2nd Right. Frost went in the
direction of the Main haulage, but after 200 yards he met smoke,
dust and heated air. The air was travelling its proper course and he
returned to the tommy dodds, where he met a number of men whom
he took out by Purcell's daylight heading. He then went down to-
wards the main entrance of the mine and to the shaft district. He
assisted several men and noted that quite a few who were on the
way out were affected by gas. He met his brother Matthew and
worked getting out the unconscious and the dead from No. 6 Right
and before he reached the surface at about 8 p.m. he had helped to
assist all those who were alive out of that district. Later he went
into No. 1 Right.

John Morrison was night deputy in No. 1 Right. He had been
working at the mine for 15 years and had been deputy some nine
weeks only. At the explosion he was at home, as was McMurray,
who resided with him. He and McMurray were amongst the first
rescuers to enter the mine and it was Morrison and Charlie Biggers
who first made contact with Mat Frost at No. 6 Right and they, together with Ridley, rescued men in No. 6. He came out of the mine between eight and nine p.m. and then went with 10 others into No. 1 the party reaching the surface at 3 a.m.

Edward Meurant, a miner, was working with Frances Stewart. They continued to work on their place No. 19 bord until 4 p.m., two hours after the explosion. They did not notice anything unusual until they reached the main heading.

The most important part of the rescue operations was carried out by those within the mine, together with those who reached it within the first two hours of the explosions. A large number of persons performed wonderful service in the rescue operations and very many brave deeds are recorded, but it is impossible to mention them all in this precis.

**Coroner's Inquest:**

On 1st August, 1902, Charles Russell, solicitor of Wollongong and Coroner, commenced an enquiry which lasted **22 sitting days** and ended on 12th September. The enquiry concerned the deaths of William Meurant and William Nelson. There were 28 witnesses and after hearing evidence and visiting the mine the following verdict was brought forward by the jury:

"That William Meurant and W. Nelson died at Mt. Kembla Colliery from carbon monoxide poisoning produced by an explosion of firedamp ignited by naked lights in use in the mine and accelerated by a series of coal dust explosions starting at a point in or about No. 1 level back heading and extending in a westerly direction to the small Goaf marked 11 perches on the mine plan."

**The Commission — Appointed 6th November, 1902:**

Charles Murray, President (District Court Judge)
Daniel Robertson, Commissioner (Mgr., Metropolitan Colliery)
David Ritchie, Commissioner (Miners' General Secretary).

**Scope of Enquiry:**

1. Cause of explosion;
2. Treatment of coal dust;
3. General management of collieries;
4. Ventilation.
5. Prevention of accumulation of dangerous gases;
6. Use of safety lamps;
7. Use of explosives.

Accepted as evidence the statements taken at the Coroner's inquest.

The Commissioners, after carrying out numerous inspections and sittings finally signed their report 20th May, 1903.

The Commission found that a fall in the 35 acre Goaf drove an inflammable mixture of firedamp down the 4th Right rope road, where it was met by a naked light which caused the explosion.

J. S. G. Worland, President.
A. H. Grenfell, Hon. Secretary,
18 Rawlinson Avenue,
Wollongong.

Telephone: B 2818