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NEW ZEALAND PERMANENT FORCE OLD COMRADES ASSOCIATION INC  
PO BOX 33 710, TAKAPUNA, AUCKLAND 9

NEWSLETTER No 75

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A Registered Publication

LAST POST:

W.A. (Allan) Wordsworth ACA, 24 Jun 92, at Auckland (Hon. Auditor).  
1413 E.W. (Ernie) Hargreaves, 3 Jul 92, at Wellington (Life Member).  
1991 A.W. (Athol) Pegler, 4 Jul 92, at Hamilton.  
1611 H.C.J. (Harley) Penrose, 6 Jul 92, at Foxton.  
1528 Captain F.J. (Fred) Mitchell, 19 Jul 92, at Christchurch (Life Member).  
1714 J.H. (Jack) Cook, 2 Aug 92, at Auckland.

CHANGES OF ADDRESS:

W02 D.A. Collins to PO Box 14031, Kilbirnie, Wellington 3.  
P.L. McInerney to 25 Bells Rd, Linton MC, Palmerston North.  
R.H. Mitchell to 2/19 Rewiti Ave, Takapuna, Auckland 9.  
Lt Col R.J.S. Munro to 53 Thomson St, Invercargill.  
W02 A.J. Pawlowski to SRSU, Burnham MC, Burnham.  
M.W. Ruffell to 43 Valley Rd, Glenfield, Auckland 10.  
G.J. Thomas to War Veterans Home, Private Bag, Levin.  
R.M. Urquhart to Milford Mews, 1/747 High St, Lower Hutt.

NEW MEMBERS:

J50792 Lt S.L. (Shay) Bassett RNZA, c/o Officers Mess, Trentham MC,  
Private Bag 905, Upper Hutt.  
Mrs Z. (Zita) Cook, 50 Bowater Place, Manurewa (Associate Member).  
J40925 P.A. (Peter) Christian, 40 Will James Ave, Algies Bay, Warkworth.  
Lt(A) N.V. (Neil) Forbes ACA ACIS RNZNVR (Retd), 29 Northumberland Ave,  
Devonport, Auckland 9 (Honorary Member).  
1914 R.C. (Robert) Forbes, 32 Cubitt St, Blenheim.  
920200 E.L. (Ernest) MacLintock, 20 Skye St, Invercargill.  
H50239 SSgt M.A. (Sam) Samuels, 22(D) Bty, Pattie St, Petone.

COMMITTEE MEETING:

The next NZPFOCA committee meeting will be held on Saturday 10 October 92 in the main lounge, Birkenhead RSA, commencing at 1000 hrs. Non-committee members are welcome to attend.

AUCKLAND SOCIAL:

The St Barbara's day social will be held in the Birkenhead RSA main lounge on Wednesday 16 December 92 commencing 1100 hrs. Any non-Auckland members who may be in Auckland at the time are of course welcome, and lady members are especially welcome. A comprehensive luncheon menu is available at \$7. If you intend coming please ring Alf Smith on 410 4564 or Secretary on 445 3567 by Friday 11 Dec 92.

CONGRATULATIONS are due to the following additional members who have attained the age of 80 years this year, and who are now **LIFE MEMBERS**: Bill Dillon, Ivan Doak, Jerry Dunn, Ernie Hight, Charlie Pipson, Fred Prior. Life Members pay no subscriptions.

HONORARY AUDITOR:

Neil Forbes (see new members) has kindly offered to act as our auditor, vice the late Allan Wordsworth.



GUNNER:

The Association now subscribes to GUNNER, the journal of the Royal Artillery. Any member wishing to peruse the publication may do so by arrangement with Secretary.

WAIOURU REP:

Leroy Forrester has agreed to be our new Waiouru Rep. We welcome him as our latest Vice-President.

NEWS FROM AROUND AND ABOUT:

Peter Christian reports he is firmly ensconced as a journalist in Warkworth.

Bill Round, 40B Kings Ave, Matua, Tauranga, invites any Old Comrade who may be in or passing through Tauranga to visit him and his good lady, Muriel.

Jack Hickson, 2/34 Campbell Rd, Royal Oak, Auckland 6, sends regards to all Old Comrades, especially ex-14 Wing.

Pat McInerney has been posted from Waiouru to 1 Medical Support Team Linton Camp.

Phil Calvert, 7 Wandeen Place, St Ives Chase, NSW 2075, reports: "Had another clean sheet from my specialist a couple of months back so have been in remission - for the second time - for 3½ years now and just keep hoping for the best. Have been made an Honorary Member of the Artillery Centre Officers Mess so am now able to keep a close watch on current trends in the RAA. The Artillery Centre is located at North Head and comprises the School of Artillery and the Directorate of RAA. My younger son Mark joined the Army Reserve - Territorial - Commando Regiment. About 160 started his training course - 13 graduated about 10 months later. Mark topped the course - a gratifying result as he was the only schoolboy on the list."

Rex Hudson, our Canterbury <sup>Rep</sup> Reports the ceremony of the unveiling of plaques placed on the Bridge of Remembrance to commemorate service in Korea, Malaysia, and Vietnam was well-attended. The Mayor, Vicki Buck, officiated. She was a one-time anti-Vietnam war protester, but spoke very well. Those days are not remembered with such bitterness now. Those who served there are now recognised by the public, a far cry from the reception the Battery received when it was welcomed home in Auckland. Colin Ryan was there, apparently fully recovered from his second by-pass operation. John Masters spoke on behalf of the veterans and presented Christchurch City with a commemorative book listing those who gave their lives in those conflicts.

Doug Dumbleton, 140A Valley Rd, Mt Maunganui, writes that over the last four years he has been busy supporting the profession of surgery in a succession of repairs, replacements and additions, including the insertion of a heart pacemaker, but is now coping successfully. He says if someone should form a hypochondriac's association he will be pleased to be patron!

Our Wellington Rep, Jack Baigent, has recently had a tough time in hospital, and at time of writing is recuperating in the Levin War Veterans Home, Private Bag, LEVIN. We look forward to seeing you back on the active list, Jack.

Jim Gilberd, 54 Tom Parker Ave, Napier, writes that the Napier RSA



is keen to obtain an artillery piece for display at the club rooms, preferably a 6-pr, i.e. the anti-tank version. Any members able to assist please contact Jim or Secretary.

A company called First Hand Films is making a documentary on 9 Heavy Regt for TV NZ which will be shown later this year, probably on TV1. The company is keen to locate films which have been made about the Regiment, and/or films made on New Zealand fortified areas generally. Anyone who can assist please contact Miss Peta Carey collect on 09/358 1818 (business) or 09/473 1836 (home).

Jerry Dunn, 12 Analese St, Sunnybank Hills, Brisbane 4109, wishes to be remembered to all Old Comrades who know him. He writes extolling the mild winters plus other advantages of life in Oz - but not the disadvantages of double government, i.e. state and federal, with their accompanying red tape.

Des O'Connor, Terry Transom, and your Secretary spent a very interesting week 17-21 August working on the Army Memorial Museum's collection of photographs, for which purpose the Museum arranged rations and quarters at the WOs and Sgts Mess. And to all those ex-soldiers who dodged service in Waiouru it wasn't much colder than Auckland - and the air was certainly cleaner and more bracing!

#### GUNNERS AND HORSES

Continued from Newsletter 74

By Jim Gilbert

Arthur Stratton's story continues:

New Zealand was really a poor country and could not afford the expense of this World War, so every opportunity was taken to save money. In November 1917 we came back to vet and re-organise. The D.A.C. stopped in a bare paddock on muddy ground, and here we made our horse lines - strong posts dug into the ground with ropes between them to tie our horses to. The horses were fed and limbers lined up. Then quite casually the order was given to dismiss. There were no buildings or huts in sight, and this in the middle of winter. We were old soldiers - too old to stand for this, so after a short time an officer managed to locate some tents, how we made ourselves comfortable for the rest of the winter is another story, but back to our poverty. Now on a battlefield after it has been fought over, churned up into mud, the ground is littered with equipment - mostly damaged - so men were sent out to retrieve it. I do not know what was done with this junk but retrieve it we did.

During the two years I was with the D.A.C. in France I met many horses and mules. I remember the mules but the horses I hardly remember. The mules were real characters, they are strong, tough, agile and easy to ride, fast walkers and would eat anything and alert to what was going on.

Mostly we fed our animals together at the horse-lines, we each had two feed bags, with some chaff and oats in them and would wait behind our two animals for the signal to feed up.

The animals, always starving, tried to twist around to see the coming feed. They bumped into their neighbours and then their hoofs started to fly, and into this turmoil we had to go to put the feed bags on their heads.



## SALUTE TO MY MULE

On the Passchendaele front we were at times called out at night to pack ammunition to the batteries and other diversions. I was returning one dark night along the other side of a sunken road, when it (mule) came to a halt, the road was blocked and in no time there were hundreds of men and animals waiting. The word came that our engineer who knew way would lead us through the wilderness. For us it was a case of follow the leader. We had gone only a short distance when the chap in front of me stopped - his horse had fallen into a shell hole. I helped him to get it out and he asked me to take the lead as the chap he was following had disappeared into the night. He was English and had no idea where to go. Well, neither did I, so I left it to my mule as long as we headed away from the front line where we could see the occasional flares. I do not know what the mob behind me were thinking, but to my great relief we eventually came to a road I recognised.

I remember saying rude things to a Sergeant newly arrived from New Zealand, who was trying to make a number of us who were packing ammunition to the guns, to keep together and all arrive at the danger spots together and be slaughtered. Evidently in New Zealand their training methods had not changed. I learned that when leading your te along where Fritz can see you, then you look at the spots where his shells have landed and you do not 'dally' near such spots.

What I had not fully realised about these dead animals strewn along the tracks was that some officer or Sergeant had made his Drivers keep together, parade style, so their ignorance had them all slaughtered. I am sure they were not from New Zealand for our chaps would not stand for that, but could understand it happening to any British unit, as they were trained never to question an officer's order.

My first trip taking ammunition to our guns was when infantry were attacking at Fleurs and our artillery was in support. The horse teams consisted of four or six horses with two or three drivers depending on the state of roads or tracks. A Gunner sits on the limber which holds the ammunition and he loads it into the limbers at the loading place (dump) and unloads it at the guns. This was my first job as I was not a driver yet.

Concluded.

## THE GUN

By Wally Ruffell.

### Introduction

Probably no single thing has more profoundly influenced the history of nations and the affairs of men over the last 600 years than the gun.

Much has been written about the wars fought during that period and of the important part played by the artillery. While regimental and campaign histories extol the exploits of the Gunners involved, they say comparatively little about the nature, origin, and development of the guns they served. This paper will briefly attempt to redress the balance.



## CHAPTER 1

### Gunpowder

Without a propellant the gun could not have been born, so we must first look at the story of gunpowder, the sole propellant in use up to the 19th century.

From ancient times throughout the known world men had used incendiary mixtures for warlike purposes. They were well-acquainted with saltpetre (potassium nitrate), the most potent of the three ingredients of gunpowder, its effect when burned with charcoal and sulphur, the other two, as well as with other substances. That someone would eventually chance upon a mixture which exploded when ignited was inevitable.

However, while mixtures using the crude saltpetre dug from the ground or scraped from the walls of cellars by the ancients can be made to burn quite fiercely, they cannot be made to explode. To make an explosive mixture the saltpetre must first be refined.

The earliest known reference to the refining of saltpetre appears in an Arabian text dated 1240. Therefore it is extremely unlikely gunpowder was discovered prior to that year.

Among the many claiming to have discovered it are the Chinese, Hindus, Greeks, Arabs, Germans and English. Within the well-recorded histories of the first four there is no written evidence which would satisfy a historian that any of them discovered or used gunpowder before it came into use in Europe. If one of their people had discovered it some writer doubtless would have mentioned the fact.

For over 500 years military historians attributed both the discovery of gunpowder and the invention of the gun to one Berthold Schwarz (Black Berthold), a German monk so-called because he dabbled in the 'black art' of alchemy. They based their beliefs on an entry allegedly made under the year 1313 in the records of the city of Ghent, but a study carried out in 1923 by Sir Charles Oman revealed the entry was a marginal note, not a contemporary entry, inserted not in 1313 but in 1393, by which time guns were in general use throughout Europe. The entry was therefore declared invalid.

Extensive research produced not one scrap of evidence that Schwarz ever existed. He is now seen as a legendary figure, rather like Robin Hood - or perhaps Friar Tuck!

It is thought the entry, made in a foreign hand, may have been made by a German scribe anxious to credit his countrymen with both discovery and invention.

In the early years of this century attention focussed upon the work of Roger Bacon (1214-94). After graduating MA at Oxford he lectured for some years in Paris but in 1247 returned to Oxford where he later became a Franciscan Friar.

Bacon was an intellectual giant, ages ahead of his time. At Oxford he concentrated on mathematics and scientific investigation on which subjects he wrote several learned treatises. In one of these, written about 1249, appears a chapter which had puzzled readers for centuries, but which in 1904 was found by Lt Col H.W.L. Hime RA (1840-1929), to be an anagram or cipher for the preparation of gunpowder. Bacon not only named the ingredients and the proportions then used, i.e. saltpetre seven parts, charcoal five, sulphur five, but also described the explosive properties of the mixture. He gave no indication it could be employed as a propellant.

Bacon's reason for the anagram is not hard to find. In 1233 Pope Gregory IX had founded the Inquisition, an organisation designed to ensure the faithful adhered to official religious doctrine - by torture and death if necessary. Its hierarchy frowned upon scientific study almost as much as they did the 'black arts' of magic and witchcraft.



In the anagram Bacon had said the explosive effects of gunpowder resembled thunder and lightning. To say as much in plain language - and so tell the world - would have condemned him in the eyes of the Church as being in league with the devil, the penalty for which was to be burnt at the stake. Brother Roger had already been in trouble with his superiors over his scientific teachings; no doubt he did not wish to 'push his luck!'

Note that Bacon did not claim that he himself discovered gunpowder; he merely recorded its composition and described its explosive properties. There is a belief - but no proof - that he obtained the recipe from Arabian sources, possibly the same which described the refining of saltpetre mentioned above. Until further evidence comes to light, whoever actually discovered gunpowder will remain a mystery.

### The Original Powder

Early makers simply pounded quantities of the three ingredients into powder and mixed them according to their own particular recipes. No finite method of proving the product existed; quality was judged by the loudness of the bang it made!

Such a method of 'proof' seems funny to us today, but it was not quite so funny 500 years ago; 14th century Gunners were well aware of the effect of the sound of guns on an uninitiated enemy. They frightened not only the horses but also the ignorant and superstitious soldiery who saw guns as instruments of the devil - and Gunners as his henchmen!

Known as 'serpentine' (in allusion to an early type of ordnance), or 'meal' early gunpowder possessed several faults; firstly, jolting during transport caused the ingredients to separate, the heaviest ending up on the bottom of the barrel, the lightest at the top. The ingredients were therefore often carried separately and mixed on the gun position, creating in the process a highly explosive dust easily ignited by spark or friction.

Serpentine also absorbed moisture from the air to a degree which greatly reduced its efficiency, or in bad cases rendered it useless.

Loading presented more problems. To load, the Gunner simply filled a ladle with powder - hoping to put the same amount into it each time - inserted it into the gun, turned it over, then withdrew it, probably spilling some of its contents along the way. His assistant then rammed wad and shot. Now if these were rammed too hard, the powder was compressed, thus slowing the rate of burning. On the other hand if wad etc were rammed lightly the powder burned faster. Obviously any consistency in the shooting was purely a matter of luck!

Fouling, i.e. the residue consisting of unburnt or partially burnt powder was excessive, and made loading difficult. It was one of the reasons for the windage of a quarter inch (6.35mm) allowed in all natures of early British ordnance.

### Improvements to Powder

Old-time Gunners were well aware of serpentine's faults. As time went on they tried to improve its quality by varying the proportions of saltpetre, charcoal, and sulphur, and by adding other substances, e.g. camphor, sal ammoniac, gum, etc, without much success.

The most important break-through came in 1429 when 'corning' was first carried out in France. Briefly the process consisted of moistening the mixture, pressing the paste so formed into 'cakes,' drying them, then breaking them up into smaller particles called 'grains.' Various moistening agents were tried, including wine, vinegar, and urine. Monks' urine was said to be the best, with bishops' the 'creme de la creme!'

To be continued.