

**ESTABLISHED 1934**  
**NEW ZEALAND PERMANENT FORCE OLD COMRADES**  
**ASSOCIATION (INC)**

**Secretary.(John Rout)**  
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**Web Site - riv.co.nz/rnza/**

## NEWSLETTER No. 113

**MARCH 2002**

**ROUTINE ORDERS**

### **SUBSCRIPTIONS:**

Subscriptions for 2002 are now due. Honorary and Life members are not required to pay a subscription. Lady Associates pay \$5, all other members pay \$10 per year. All members are eligible for election as Life Members on reaching the age of 80. **If you have reached the age of 80 please notify the secretary as records of birth dates are not held.**

**To be financial to 31 December 2002 you are required to pay \$.....**

If an amount is not shown you are financial. If paying by cheque please make the cheque payable to NZPFOCA. To save postage receipts will not be returned to members but will be held by the Treasurer for audit requirements and members inspection if required.

The production of this News Letter and other administration requirements need your subscription to exist. Most members are very good with prompt payment some not so good. Please send your subscription noted above as soon as possible. **Non payment for a period greater than three years will result in the cancellation of membership.**

### **LAST POST:**

H.Milne

Helen Parkes

24 April 2001

Three or so years ago.

### **CHANGE OF ADDRESS:**

Mrs Pat Connor

Maj D.P. Dumbleton

Gordon Weaver

Mr J.D. Bennett

Spencer Morrison

Col Tom O'Reilly

Lt Col Chris Brown

Terry Young

to: 18A Deere Avenue, ROTORUA.

to: 5-1 Heath Street MT MAUNGANUI.

to: 6/113 Cobham Drive, Hamilton East, HAMILTON.

to: Tainui Rest Home, P.O. Box 5016, NEW PLYMOUTH.

to: 70 Slaney Street, BLUFF.

to: 1 Tawa Street, Tokomaru, MANAWATU.

to: 159 Marine Parade, Seatoun, WELLINGTON 6003

to: 69 Fairclough Road, Beach Haven, North Shore, AUCKLAND.

Maj Robin Wait

to: Unit 'N', Santa Maria Retirement Village, 51 Birdwood Avenue,  
Beckenham, CHRISTCHURCH 2.

Trevor Higginson

to: 1/6 Arirang Rise, Browns bay, North Shore, AUCKLAND

R.A. Ray Hughes

to: Unit 168 - 252 Main Road, Maroochydore, Queensland,  
AUSTRALIA.

### NEW MEMBERS

A.B. (Tony) Hollows

17 Northland Street, RANFURLY

### LIFE MEMBER

Lt Col H.L. Jones on reaching the age of 80.

### RESIGNATIONS

D.J. Blair, Sheila Jennings.

### **FROM THE EDITOR**

**A Reminder to all Members.** This is your News Letter and should contain news about our members. If you have something that may be of interest please let me know. The health of members should be passed on so that others can visit or phone them.. In particular we need to know when members have passed away so that we can do our bit. Sadly we were not notified of the passing of the two members in this months last post until well after their deaths.

**Tac Sign 13.** During the period that 161 Battery 16 Field Regiment was on Active Service in Vietnam the Battery Tac Sign was 13. There was another occasion when 13 was used, 54 Anti Tank Battery Tac Sign was 13 in the Pacific during WWII. A copy of the 54<sup>th</sup> Sign and motto is shown below.



**The Museum of the Royal Artillery.** After re-location to the site of the old Arsenal on the banks of the Thames the RA Museum has been opened by The Queen. The website for the museum is [www.firepower.org.uk](http://www.firepower.org.uk) and is well worth a visit for those who have access to the Internet. Of interest to some of our members is a photograph of an Army Air Corps Auster Aircraft suspended from the ceiling of one of the halls. If I remember correctly a couple of our members tried, and failed, to suspend an Auster from the trees in the South Island bush.

**Gunner's Day Dinner, Papakura RSA.** Invitations for this years dinner, on Sunday 26 May, will shortly be sent out by Jeff Waters. If you have attended the dinner in the past you should get an invitation. If you do not get an invitation or haven't attended before and would like to, Jeff can be contacted at 09 296 2457, or you can let me know and I will pass on requests to Jeff. In the past these dinners have been a huge success, come along and lets make this one the best of the best.

See the **STOP PRESS** page 6 re a Gunner's Day Luncheon in Tauranga.

**TARGET ADJUSTMENT USING TWO LEGGED COMMUNICATIONS****By John Rout**

During the period of Indonesian Confrontation in 1965 1 Royal New Zealand Infantry Regiment (1RNZIR) was sent on Active Service to Sarawak in Malaysian Borneo to carry out Border Protection Operations on the border with Indonesian Kalimantan. A Company's base for the operations was at Lubok Antu a small village on the banks of the Batang Ai River 6 or 7 thousand meters from the border. In this base camp there was a single 105mm L5 Pack Howitzer manned by Malaysian Gunners. During daylight hours local traders were free to travel back and forth over the border and they were used extensively to gather intelligence on Indonesian activities over the border. Information came to light that Indonesian Soldiers had taken over and were living in a local Longhouse that was just within the range of the 105 Howitzer and plans were made to try to hit the building with gunfire. Maps on the Sarawak side of the border were accurate but over the border information had to be obtained from Air Photo's. A grid reference to the Longhouse was worked out and the gun fired a single round. The next day a trader was sent over the border to find out where the round landed and the day after that he arrived back with a diagram showing where the round landed. Based on this information adjustments to the gun data were made and another round was fired. This procedure continued for some time and although some rounds were reported to have landed closer to the Target it was never hit. Two days between adjusting rounds at a target must be a record of some sort. There was a later report that a mad Army Air Corp pilot had dropped a Marker Flare onto the roof of the Longhouse setting it on fire.

**CAN YOU HELP**

**The New Zealand Armed Forces Memorial Project** is progressing very well. This is the project the aim of which is to record the names of every person who has served in the NZ Armed Forces. Information is still required on grave sites, where they are and photo's if possible. The organisers are also looking for volunteers to keep an eye on local papers for obituaries/news articles on service men and women. If you would like to help you can Email [nzafmp@xtra.co.nz](mailto:nzafmp@xtra.co.nz) or write to PO Box 2284 Dunedin South. If you would like to see the work that has been accomplished to date the Web site is [www.nullus-anxietas.com/nzafmp/](http://www.nullus-anxietas.com/nzafmp/)

**FROM AND ABOUT MEMBERS**

**John Masters.** Congratulations to John who was made an Officer of the New Zealand Order of Merit (ONZM) in the New Years Honours. John's award was for services to returned services personnel and the community. In a recent communication John mentioned that he had been busy raising money for the Rannardale War Veterans Home \$1,130,000 had been raised and \$40,000 was needed to make the home debt free, he was sure they would reach the target..

**Spencer Morrison.** Spencer is our most southerly member and you will note that he has decided to move a couple of miles further south from Greenhills to Bluff. Spencer has recently been in contact with Morrie Chittock, Jim Horn and Graeme Henderson. He also attended Graeme's 70<sup>th</sup> birthday. The Southland gunners association is still going strong, 25 members turned up to celebrate St Barbaras Day and Spencer informs that Gunner's Day normally has a bigger turn out. There was some talk of disbanding the Association but they have decided, like old soldiers, to let it fade away. On a recent trip to Stewart Island the secretary met up with Spencer at the Bluff Ferry Terminal. He is looking well and is pleased to be back in Bluff where he has some very deep roots. In January 1924 James Spencer, a Waterloo veteran, was the first European to settle on the Southern mainland. He had seen the need to set up a supply depot for whaling ships that were being attracted to Bluff Harbour.



Ray Cousineau is our only member residing outside New Zealand and Australia. Ray sent us a Xmas Card from Canada with best wishes to all Comrades. A foot of snow had just fallen in his home town of Clearwater and he was not overly pleased about that. He hoped we would enjoy our summer.

By Wally Ruffell

## THE GUN

Continued from NL 112

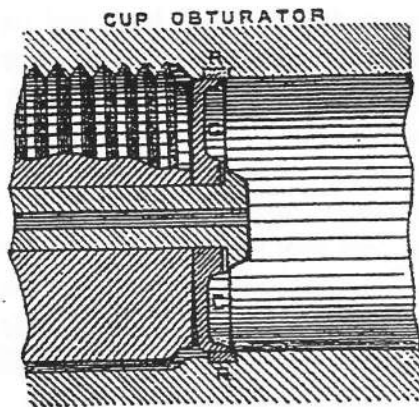


Fig. 124: Elswick cup obturator.

'C' = Steel cup.

'R' = Copper ring.

When new the system worked well; damaged cups could be easily replaced, but to replace the ring needed the services of a skilled artificer. Both cups and rings had to be kept scrupulously clean; the smallest particle of grit or dirt would start scoring. Furthermore, the cup had to be turned after each round to prevent it 'furrowing' the ring. The system was allowed to 'die out' eventually being

replaced by the de Bange shown in Fig. 125.

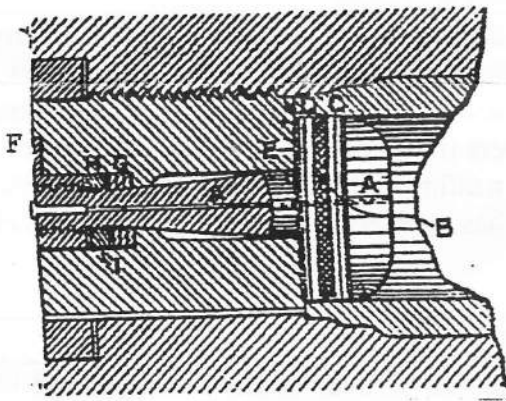


Fig. 125: Slow cone pad obturator on long or cylindrical screw.

'A' = Mushroom-headed steel spindle.

'B' = Obturator pad.

'C' and 'D' = Metal adjusting discs.

'E' = Steel adjusting discs.

'F' = Slide box.

'G' = Spring.

'H' = Nut.

'I' = Washer.

Fig. 125 shows an early breech screw with a 'slow cone' obturator adopted in 1882 for all BL guns not already in service. The term 'slow cone' refers to the shape of the assembled mushroom head and pad which together formed the frustum of a cone with an angle from three to six degrees ( $3^\circ$  in Fig. 125).

The pad 'B' was made of a mixture of asbestos and tallow or rape oil enclosed in a canvas cover shaped by hydraulic pressure. When the breech was closed the action of the screw pushed the mushroom head and the obturator into the chamber the end of which formed a seating shaped to take it.

On the gun being fired pressure of the propellant gas acting on the mushroom head squeezed the pad against the breech screw causing it to expand radially, thus effectively sealing the breech.

With the pressure removed after firing the spindle and mushroom head returned to their original positions. The breech could then be easily opened by withdrawal of the screw.

Fig. 126 shows an example of the steep-coned obturator fitted to the Welin single-motion mechanism depicted in Fig. 123. The obturator cone angle is  $26^\circ$  as against the  $3^\circ$  of the example shown in Fig. 125.

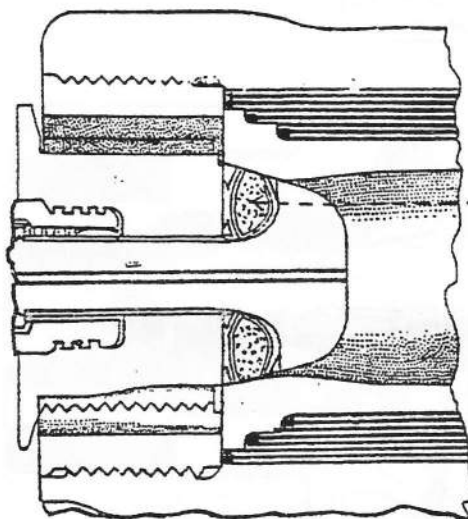


Fig. 126: Welin single-motion breech with steep-coned ( $26^\circ$ ) obturator.

This is the type fitted to the screw shown in Fig. 123.

The combination of steep cone and short screw enabled the breech to be opened or closed with a single motion of the lever breech mechanism (LBM) instead of the four distinct operations detailed above.

Heavy guns intended for Navy or coast defence were axially vented as depicted

in Figs. 122 to 126.. Very early pieces e.g. BL 6-in Mk 2 simply had a tube holder attached to the vent. Attached to the rear of the vent in later marks was a slide box carrying a 'lock' the two together forming a miniature breech mechanism designed to handle 'tubes vent sealing,' introduced in 1882. Locks were designated 'electric' (E), 'percussion' (P) or 'E and PF' according to the types of tube fired.

The tubes, which resembled small arm cartridges with no bullets, were filled with fast-burning powder which when ignited sent a strong flash through the vent to ignite the propellant charge in the chamber. There were two types, one designed to be fired electrically, the other mechanically, i.e. by percussion.

On the other hand, field and siege (medium) artillery Gunners 'inherited' the 'T' friction tube as used in RML ordnance. Early field guns, e.g. BL 12-pr 6-cwt Mk 1, had no locks. Instead the end of the axial vent was shaped to take a 'T' friction tube similar to the one depicted in Fig. 77 and detail. Figs. 127 and 128 show details of the systems used.

VENT, AXIAL, "T."

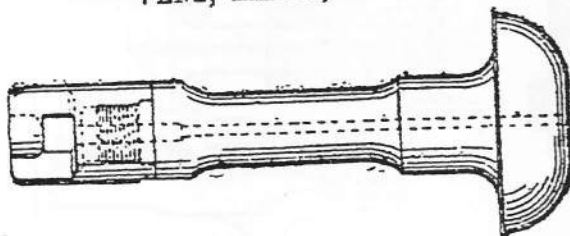


Fig. 127A: Axial vent designed for the early, i.e. Mark 1 versions of the BL 12 and 15-prs.

The mark 1 guns were fitted with four-motion breech mechanisms as shown in Fig. 128. Later marks of these guns were fitted with single motion mechanisms and steep-coned obturators but the breeches were still designed to take the 'T' friction tube.

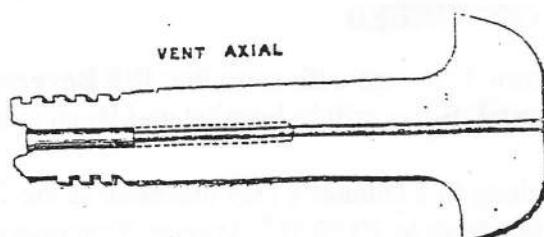


Fig. 127B: Axial vent designed for Marks 2 to 4 BL 12 and 15-prs.

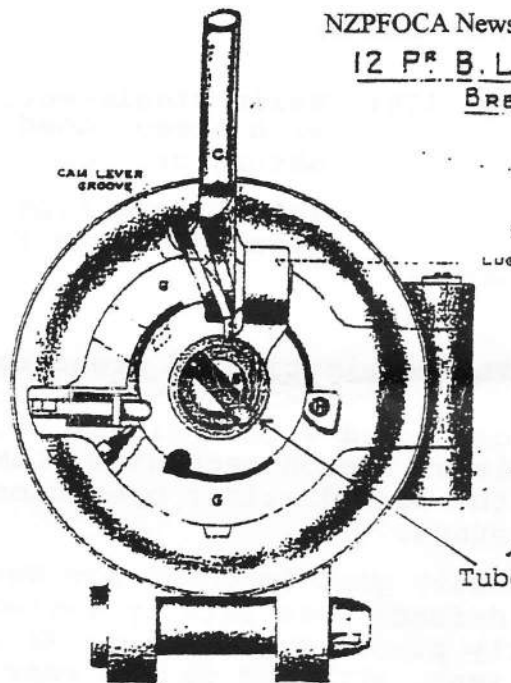
12 PR B.L. 6 CWT. MARK I.BREECH MECHANISM.

Fig. 128A

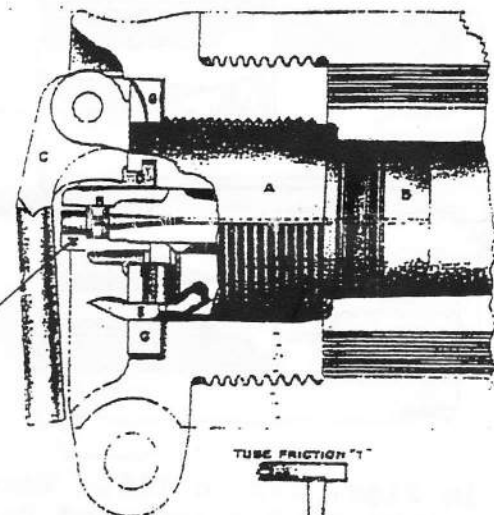


Fig. 128B.

Early four-motion BL mechanism with slow-coned obturator.

- |                         |                  |
|-------------------------|------------------|
| A Breech screw.         | F Obturator      |
| B Vent axial 'T'        | G Carrier        |
| C Cam lever (LBM)       | H Stop bolt      |
| D Collar actuating tube | I Clip retaining |
| E Catch vent axial      |                  |

In Fig. 128B the gun has just fired. Lifting 'C' to the position shown in Fig. 128A unlocks the breech and frees the empty tube which can be removed by hand. Opening of the breech is completed by turning 'C' part of a turn anti-clockwise to disengage the screw threads, pulling it to the rear to clear the screw from the breech, and swinging the screw clear on the carrier 'G.' Fig. 122 shows a heavier breech constructed on the same principle.

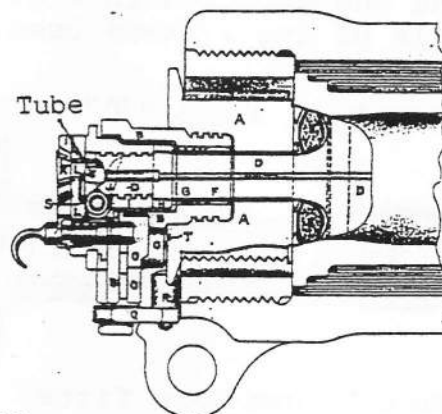
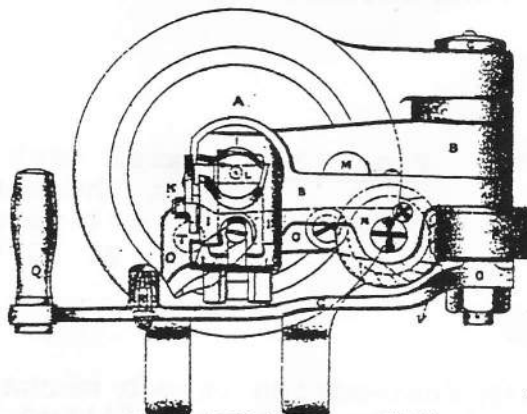


Fig. 129.

Single motion mechanism with steep-coned obturator in BL 12 and 15-prs Marks 2 to 4. The 'T' friction tube is still used in conjunction with a slide box (I), a block retaining tube (L), and a safety shutter (K).

**TO BE CONTINUED**

**STOP PRESS.** Matt Crawley has checked in from Tauranga with news that **Bill Beverage** and **Hugh Gibson** have had spells in Tauranga Hospital. Bill is still in hospital and Hugh is out, now in the Sunningdale Veterans home in Hamilton.

Matt has also invited all Gunners and partners along to a Gunner's Day luncheon at the Tauranga RSA at midday on Sunday 26 May. Please contact Matt at 2/159 16<sup>th</sup> Avenue, Tauranga or Ph: 07 577 0502. Tauranga RSA has some Welfare units available at \$50 per night plus \$10 for each additional person. Book direct with the RSA office Ph: 07 578 9654.