

THE MARTINI-ENFIELD RIFLE IN WESTERN AUSTRALIA

PART I

The Western Australian Pattern Martini-Enfield

George B. Trotter*

ABSTRACT

Three distinct groups of .303 inch Martini-Enfield rifles are located and described. They are identified as being fitted with a nose cap which allows the fixing of the Pattern 1888 Sword Bayonet, rather than the usual Pattern 1895 Socket Bayonet. They are thought to be unique among Martini-Enfield variants issued in Australia. The rifles are tentatively named as follows. Group one, M-E Mark I Modified, W.A. Pattern, Group two, M-E Mark II Modified, W.A. Pattern and Group three, Unofficial Conversion M-E Mark I, Modified, W.A. Pattern.

INTRODUCTION

The Martini-Henry rifle, after trials began in 1871, became the principal arm of the British Army from 1874-1889. It was a large, robust breech loading single shot rifle taking a .450 inch black powder cartridge. The Martini-Henry was made in six Marks.¹ The first three, Mk I (1871-76), Mk II (1877-79) and Mk III (1879-89), were issued in the Australian colonies. Due to experimentation and improvements in ammunition, a new "small bore" cartridge of .303 inch was perfected in 1888 and adopted for use in the new Lee-Metford bolt action magazine repeating rifle approved for issue to the British Army in that year. This new cartridge still utilized black powder as the propellant. At this time a new bayonet was also approved, it was for the new Lee-Metford rifle and was designated the Pattern 1888 sword bayonet.

British arms establishments immediately geared up for the production of this new arm and ammunition. It was soon found that it would be advantageous to convert the single shot Martini-Henry to use the same cartridge as the new magazine rifle also, as it would be some time before sufficient quantities of the new magazine rifles could be produced to entirely re-equip the Army. These conversions would be produced in sufficient numbers to arm the British colonies and territories overseas and the various volunteer units at home, until they too could be issued with the new arm.

The first conversions of Martini-Henrys to the new cartridge were the Mk V (one only) and Mk VI in 1889, which in 1891, following British Military nomenclature practice, were designated the Martini-Metford Mk I and II. (The body of the rifle was designed by F. von Martini and the barrel for the new .303 inch cartridge was designed by W.E. Metford, hence the name Martini-Metford).

¹ Temple, B.A. and Skennerton, I.D. "Treatise on the British Military Martini", Vol 1 (1983) Vol 2 (1989). Privately Published, Qld. These volumes are recommended as an exhaustive reference on the history of the Martini rifles. Please refer to them for technical details and dates of rifles mentioned in the introduction. Reference is made to these volumes again in this paper.

* History Department, Western Australian Museum, Francis Street, Perth, Western Australia 6000

The Martini-Metford Mk I was fitted with a two piece nose cap/bayonet boss designed by John Rigby. This nose cap was identical to the new Lee-Metford magazine rifle nose cap and took the new Pattern 1888 sword bayonet thereby providing a cheaper standby arm that utilized the standard British service cartridge and bayonet. It was at this time, 1891-92, that a new smokeless propellant, cordite, was developed, and the new .303 inch cartridge was immediately adapted to utilize the new product, necessitating a change in the sighting of the rifle. Western Australia in 1893 ordered a quantity of arms similar to the Martini-Metfords Mark I, but the W.A. order stipulated sighting for black powder. Because of minor changes specified by the W.A. Government and the fact that these rifles were new-made rather than conversions they were designated Martini-Metford Rifle Mk I Modified (W.A. Pattern).

Soon after the advent of the cordite propellant it was discovered that the higher pressures and hotter gases quickly eroded the throat of the cartridge chamber, which rendered the barrel inaccurate and shortened barrel life. To remedy this problem, a new improved rifling was designed in 1895 at the Royal Small Arms Factory (RSAF) at Enfield. Subsequently, the new conversions of Martinis to utilise the .303 inch cordite cartridge were fitted with Enfield barrels and were designated Martini-Enfields Mk I and II in rifle form and Mk I, II and III in carbine form. It is the Martini-Enfield Rifles Mk I and II, modified for W.A. which are the subject of this study.

Abbreviations which may be found in the text are as follows:

M-E = Martini-Enfield; M-H = Martini-Henry; Mk = Mark; ML-E = Magazine Lee-Enfield; Pat. '88 = Pattern 1888; RSAF = Royal Small Arms Factories.

NOTE: The various firearms described in this paper belong to private collections in Western Australia and the eastern states except for one M-E Mk I, (W.A.1043D), which is from the W.A. Army Museum collection, item 082.90

THE .303 MARTINI-ENFIELD RIFLE MARKS I & II SEALED PATTERN

The Royal Small Arms Factory (RSAF) at Enfield, following established practice, would, once a rifle had been developed, tested and determined to be capable of fulfilling the purpose to which it was intended to be put, was "sealed". That is, the perfected prototype was literally labelled and sealed with red sealing wax and kept in the Pattern Room at Enfield as the pattern to govern all subsequent production of that arm. The Martini-Enfield Rifles Mk I (M-E I) and Mk II (M-E II)

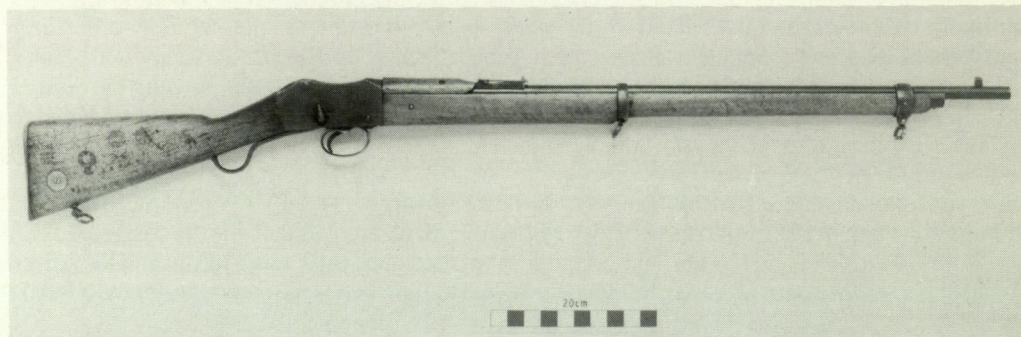


Figure 1 Sealed Pattern .303 inch Martini-Enfield Rifle Mark II. Except for the differences noted in the introduction, this is essentially the same rifle as the Mark I. It is illustrated to show the nose cap, the major difference between the Sealed Pattern and the Modified W.A. Pattern (Figure 3) (Photo D. Elford, W.A.M.)

(Figure 1) were sealed in this way. The salient features of these two arms which were converted from the Martini-Henry Rifle Mk III (M-H III) and Mk II (M-H II) respectively are as follows, and indicate the changes made to the original M-H II and M-H III parts.

Essentially, an existing M-H III was taken from a rack (some were made from new components) and converted to a M-E I by alterations to the following parts of the original arm.

- Barrel:** three inches (75mm) shorter and slimmer in profile.
- Upper Band:** (at muzzle), had the bayonet bar ground off and had the barrel arch reduced in diameter to fit the new slimmer barrel by having a sleeve brazed into place.
- Breech Block:** a new breech face block was dovetailed into place. This new breech face had a smaller diameter firing pin hole and a finer firing pin point.
- Body:** was reduced in height at the breech, to facilitate the lower sights required for the new cartridge. This height reduction is 2 mm.
- Butt:** was stamped with the respective Mark number, I or II in Roman numerals, and fitted with a brass marking disc.
- Clearing Rod:** of a new approved pattern was fitted in the existing slot under the fore-end.
- Fore-end Wood:** was shortened, re-profiled for the upper band and had a thin wooden liner glued into the original barrel channel to accept the new slimmer barrel.
- Nose Cap:** already quite small, was reduced even more and re-profiled to fit the new barrel.
- Sling Swivel:** was removed from the upper band and replaced with a piling swivel. The sling swivel was relocated to the lower band. The trigger guard sling swivel was removed and a new swivel installed on the butt.
- Bayonet:** the bayonet intended for this arm was the Pattern 1895 triangular socket bayonet (most of them converted from the Pattern 1876 M-H Rifle bayonet).
- Sights:** were graduated to 1800 yards for Cordite ammunition.

The difference between the M-E I and the M-E II depended on which original M-H rifle was chosen as the basis of conversion. The difference between the two Marks was that the M-E I had its fore-end held firmly into the body of the rifle by a metal hook, inletted into the underside of the wooden fore-end, which engaged a socket in the front of the body. It also had a small cocking indicator (the tear drop shaped protrusion on the right side of the body). The M-E I nock's form (the large diameter section of the barrel nearest the body which contained the firing chamber), was about 10 mm shorter than the M-E II. The M-E II differed from the previously mentioned M-E I in that the fore-end was attached by a steel pin which entered the side of the fore-end near the body and penetrated a hole in a lug projecting from the underside of the barrel. The ends of the steel pin can be seen from either side of the rifle. The cocking indicator is also considerably larger than that of the M-E I. The nock's form of the M-E II is about 10 mm longer than the M-E I. Both Marks are fitted with a wooden handguard secured by a spring clip which covers the nock's form of the barrel. The respective fore-ends will not interchange. The M-E I was approved on 4 October 1895 and introduced on 1 February 1896, a total of 48,610 were converted until production ceased in 1903. The M-E II was approved on 11 February 1896 and introduced on 1 April 1896, a total of 40,023 were converted including 7,000 by a private contractor. The year of conversion is stamped on the left side of the body (Figure 2) while the original date of manufacture of the Martini-Henry remains on the right side. The left hand side mark "M.E. 303/I" or "II" will confirm the external features of the particular Mark of rifle. In the case of the modified variant produced for



Figure 2 The Martini-Enfield Mark I conversion details found on the left side of the body. The royal cypher of Queen Victoria, the place and date of conversion, the steel batch mark and the Mark, in this case Martini-Enfield .303 inch Mark I. Note also the various proof and armourer's marks and the twin opposing broad arrows denoting sale or surplus. (Photo D. Elford, W.A.M.)

W.A., the author has adopted the term Modified W.A. Pattern. Strictly speaking they are not a Pattern, but a modification of the Sealed Pattern, but to differentiate this W.A. type from all other variants the term W.A. Pattern has been used.

THE MARTINI-ENFIELDS, W.A. PATTERN

The first specimen of the M-E Modified, W.A. pattern, was noted by the author in 1985, it was a Mark I. This specimen (Figure 3) conformed in all respects to the Sealed Pattern of M-E I (See Figure 1) as illustrated in *A Treatise on the British Military Martini* except in one very important feature. The nose cap (Figure 4) of the specimen was the newer Rigby one piece nose cap/bayonet boss now used on the Magazine Lee-Enfield repeating rifle introduced in 1895. As the Magazine Lee-Enfield rifle took the Pattern 1888 sword bayonet, it was therefore obvious that this Martini-Enfield Mark I was also fitted to take the Pattern 1888 bayonet. The butt had been stamped WA/40/D indicating W.A. ownership. It being a solitary specimen with no reference information being available at the time it was impossible to determine whether the arm was "correct". An identical rifle was seen illustrated in a Cobb & Co. militaria catalogue of the late 1980's², but as no details were retained in the Cobb & Co records concerning this arm, no comparison could be made. Although encouraging, the Cobb & Co. illustration provided no additional information other than

² Cobb & Co. Pty. Ltd. Catalogue. Surrey Hills, Victoria (n.d.) p.30.



Figure 3 Martini-Enfield Rifles Mark I Modified, W.A. Pattern. The upper rifle is WA/40/D and the lower is WA/1043/D. Note the Rigby pattern nose cap/bayonet boss, which is the feature of the W.A. Pattern. The fore sight of the upper rifle has been lost and replaced by a bush blacksmith. (Photo D.Elford, W.A.M.)

confirmation that WA/40/D was not an isolated specimen. The specimen was therefore merely noted for future attention.

In 1991, Mr Malcolm Higham, a volunteer worker, reported an unusual M-E I in the W.A. Army Museum collection. This new specimen also had the nose cap to take the Pattern 1888 bayonet and the butt was stamped WA/1043/D. On comparing this butt marking with WA/40/D it was found that the same letter and numeral stamps had been used to mark both rifles (Figure 5). Both rifles conformed to each other in all conversion respects, even to the inspection stamps in the fore-end barrel channel and most importantly, the "J.A." inspection stamp stamped into the end of the fore-end wood under the nose cap (Figure 6), confirming that these two rifles had been converted and inspected by the same armoury and subsequently marked in W.A. at the same time and place. With uniformity such as this it seemed apparent that these rifles could be part of a group of rifles issued to W.A. Defence Force members and which were until now unknown to Australian collectors and arms researchers. It was at this time that Volume II of *A Treatise on British Military Martinis* was published and which provided the first information regarding this *modified* version of the M-E I Sealed Pattern.³ The two specimens conformed to the description of the modified M-E I given in the *Treatise* and it was further stated that in 1898 RSAF Enfield, where these specimens were made, sent 200 M-E I rifles modified to take the Pattern 1888 bayonet to W.A. The *Treatise* however, did not publish a photograph of the M-E I Modified, as no specimens had ever been found. A photograph of a representative specimen made by the private British gun trade was substituted in *Treatise* instead. In one significant feature however the two specimens differed from the published details, which were taken from the RSAF Enfield production records and quoted in

³ *Ibid* pp. 417-419.

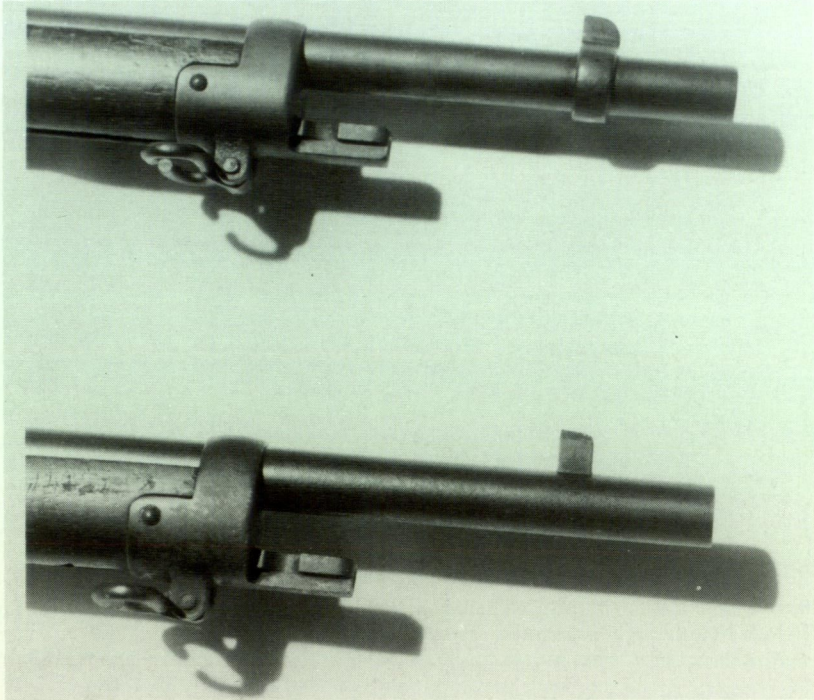


Figure 4 Detail of the nose cap/bayonet boss of the W.A. Pattern Mk I. It is this feature, a modification of the Sealed Pattern which makes the W.A. Pattern unique. The nose cap is also found on the early versions of the Lee magazine rifle. (Photo R. Stein)

Treatise. The RSAF records showed that the 200 M-E rifles sent to W.A. in 1898 had been sighted to 1600 yards for black powder. These two specimens are sighted to 1800 yards for cordite. The barrels are dated 1909 indicating that they are later replacements. Had they still retained their original barrels they would have been dated the same year as the conversion, 1896 and 1895 respectively.

A survey was undertaken to see if any additional specimens could be located in Australia. This was achieved by the publishing of two short illustrated articles by Mr. Higham seeking data on these WA marked arms in the *Journal of the W.A. Rifle Association*, September 1991 and the Australia-wide circulation *Australian Shooters Journal*, February 1992. Over the following weeks approximately thirty replies were received and passed on to the author, resulting in a total of five Martini-Enfields of the modified pattern being confirmed. At this point an anomaly arose, two of the five specimens were identified as M-E Mark II Modified, a Mark not mentioned at all in the *Treatise*. Although the Mk I and II are both Modified W.A. Pattern they differ from each other in the usual details of Mark as described in the introduction. In addition, a further two M-E Mark I rifles, unofficially converted, were located in Perth, making a total of seven specimens of M-E rifles, divided by their conversion characteristics into three distinct groups.

The details of the three M-E groups will now be described, beginning with the Mark I.



Figure 5 Butt markings of WA/1043/D, (Bottom) include the Enfield roundel, the Mark I and Class 1 marks and the surplus mark. The various cancelled marks and numbers are those of the original Martini-Henry from which this Martini-Enfield was converted. WA/40/D is the well worn butt at top. Close examination of these two specimens revealed that the letter and numeral punches used to mark them for W.A. service are identical (Photo R. Stein).

Table 1 Marks, numbers and pertinent features of the M-E I.

Butt Marks	Place/Date of Conversion	Serial Number	Barrel Number & Date	Provision for Clearing Rod in Nose Cap?	Nose Cap Insp. Stamp	Bayonet Type
WA/40/D	Enfield 1896	D 7261	B6460 1909	Yes	J.A.	Pat. '88
WA/ 1043/D	Enfield 1895	D 6321	B7379 1909	Yes	J.A.	Pat. '88
WAA/7	Enfield 1896	D 273	?3154 1910	Yes	J.A.	Pat. '88



Figure 6 The J.A. inspection mark which is found on many Sealed Pattern Martini-Enfield fore-end woods and on the W.A. Pattern Martini-Enfields examined. This mark confirms that both types of arms originated at RSAF Enfield. (Photo D. Elford, W.A.M.)

GROUP ONE: THE .303 INCH MARTINI-ENFIELD RIFLE MARK I MODIFIED, W.A. PATTERN

The discovery of the first two M-E Mark I specimens was supplemented by the confirmation of a third M-E Mark I as a result of the survey articles. The technical details of the three and their W.A. markings reinforced the possibility that these rifles were indeed part of a unique group of W.A. arms.

An inspection of the fore-end wood under the nose-cap on a number of "control" Sealed Pattern M-Es bearing Eastern States ownership marks, revealed that several of them also had the J.A. inspection stamp. This mark confirmed that the nose-cap modification was an official RSAF Enfield modification and eliminated the possibility that the specimens of Martini-Enfield Mk I and II located could have been modified locally. The nose caps, inspection markings, conversion characteristics and dates which appear on these three specimens conform to the known features of the RSAF modified conversions produced for W.A. in 1898.

These rifles conform to the description of how those sent to W.A. in 1898 should appear, except for the replacement cordite sighted barrels.

GROUP TWO: THE .303 INCH MARTINI-ENFIELD RIFLE MARK II MODIFIED, W.A. PATTERN

As already stated, the arms survey located two Martini-Enfield Mk II Modified with W.A. marks (Figure 7) and in addition a 1911 photograph of another (Figure 10). No record of the manufacture or shipment of these arms exists at RSAF Enfield, therefore, officially they do not exist. No

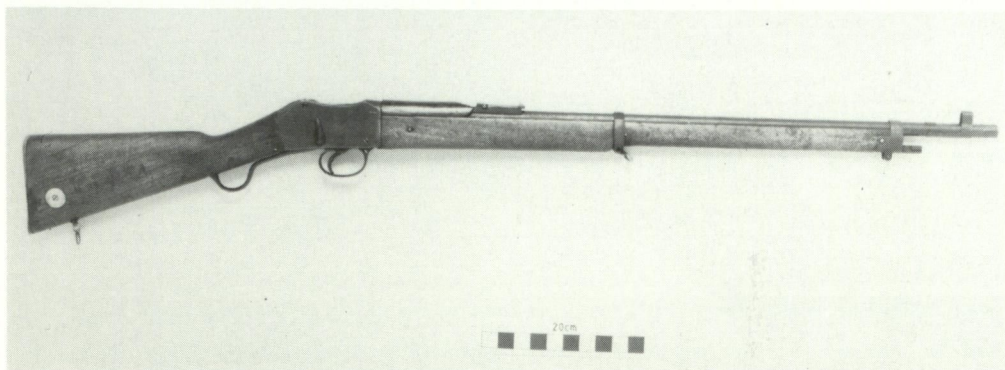


Figure 7 Martini-Enfield Rifle Mark II Modified, W.A. Pattern. The larger cocking indicator and fore-end attachment pin, which distinguishes this rifle from the Mark I are apparent. The spring steel fore sight protector is still present on this arm, while the piling swivel is missing from the nose cap. This arm is WA/34. (Photo D. Elford, W.A.M.)

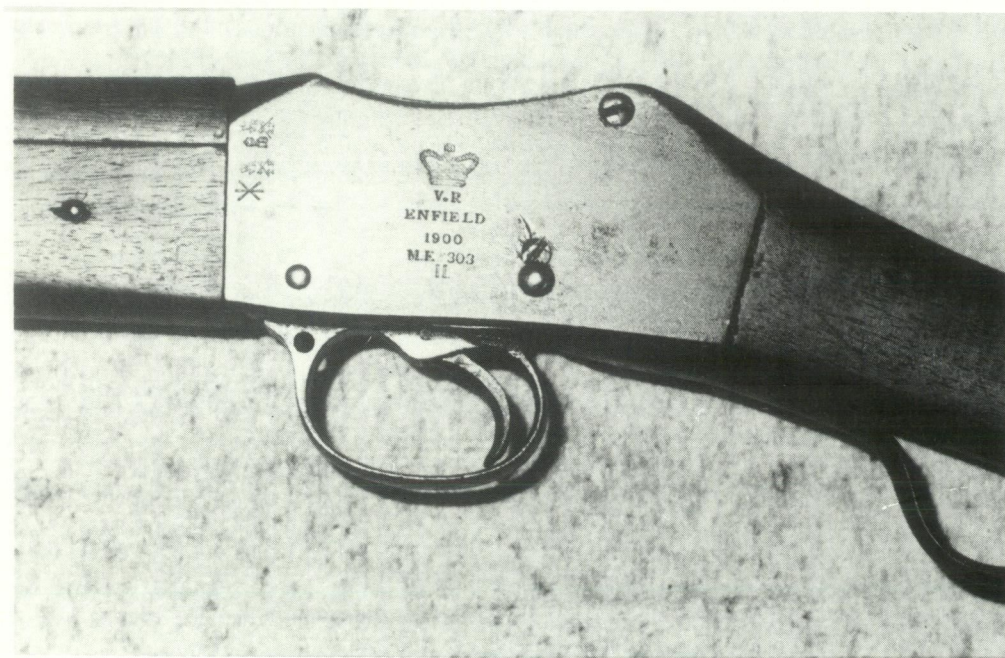


Figure 8 The conversion side of the W.A. Pattern Mark II. (Photo R. Stein)



Figure 9 Butt markings of the Mark II. W.A. is punched with different, larger letter punches which have also been noted on another Mark I W.A. Pattern butt. The Enfield roundel, Mark II stamp and surplus marks are also evident. (Photo R. Stein)

documentary evidence other than a contemporary photograph has been located which specifically refers to this Mark of M-E. The 1911 photograph and the arms themselves prove their contemporary existence in W.A. and their survival to the present, but confirmation of how they came into official W.A. hands and the archival proof of their conversion at Enfield is as yet undiscovered. A strong case is put in Part II however which tentatively identifies their origin and acquisition and can be taken to be, in the absence of that confirmation, the most probable explanation for their existence here.

Table 2 Marks, numbers and pertinent features of the M-E II.

Butt Marks	Place & Date of Manufacture	Serial Number	Barrel Number & Date	Provision for clearing rod?	Nose Cap Insp. mark	Bayonet Type
WA 34	Enfield 1900	B4384	4384B1900	No	J.A.	Pat. '88
WA2(3?)	Enfield 1900	A5424	5424B1900	No	E	Pat. '88
WA 750D	Contemporary Photograph taken in 1911			No		Pat. '88

The table shows that the major difference between these Mark IIs and the Mark Is previously discussed, apart from the Mark differences outlined in the introduction, is the absence of the bored-through clearing rod hole in the nose cap/bayonet boss. Clearing rods, originally provided for all .303 arms were found to be unnecessary and in May 1899 were declared obsolete.⁴ Consequently these M-E IIs do not have the nose cap/bayonet boss bored through to accept a clearing rod. This

⁴ *Ibid.* Temple & Skennerton p 423.



Figure 10 This 1911 photograph depicts Patrol Leader A. Foster (age 14) who has just received his marksman's badge, earned with a Martini-Enfield Mark II Modified W.A. Pattern. Close examination of the butt in the original photograph reveals the markings WA/750/D, the Enfield roundel and the Mark II stamps. The butt also bears the surplus stamp. This butt marking conforms exactly to the Mark I numerical sequence of fig. 5 and appears to be struck with the same letter and numeral stamp. (Photo D. Elford from the collection of P. Hodgson)

type of nose cap is the correct one for the 1900 date of these rifles. The rifles also retain their original 1900 dated cordite sighted barrels. These specimens and the one in the photograph of 1911 (Figure 10) conform to what the modified version of a normal Sealed Pattern M-E II would look like if they existed. It is thought that this is a previously unrecorded variant of the Martini-Enfield group

of rifles and as such is of considerable importance in the sphere of Martini military arms. The JA stamp on WA/34 and the use of the same letter and numeral stamp to mark WA/750/D (of the 1911 photograph) as were used to mark two of the 1898 order of Mark Is, establishes a common link between the two groups of specimens in terms of their common RSAF Enfield origin and their common W.A. issue.

GROUP THREE: THE UNOFFICIAL MARTINI-ENFIELD MARK I MODIFIED, W.A. PATTERN

Two M-E Is which were not official RSAF Enfield conversions were located by the survey. In addition a separate fore-end, complete with nose cap was also located. These two specimens are conversions of the .450 inch Martini-Henry Mark III to Martini-Enfield Mark I Modified, W.A. Pattern.

Table 3 Pertinent features of the Unofficial conversions of Martini-Henrys Mark III to Martini-Enfield Mk I Modified, W.A. Pattern.

ButtMarks	Place/Date of Conversion	Original Date/Maker	Barrel Number and Date	Clearing Rod Hole	Nose Cap Insp. Mark	Nose Cap Type	Bayonet Type
WADF 521	None	1885 BSA & M Co	5747 B'08, '09	Yes	Nil	Rigby Metford	P. '88
WADF 529	None	1885 BSA & M Co	V68295'14	Yes	Nil	Rigby Metford	P. '88
-	-	Fore-end only		Yes	Nil	Rigby Metford	P. '88

Except for the differing barrel dates, these two arms conform to each other in all respects. They have had the breech block face dovetailed and replaced with one with a smaller firing pin hole and a finer firing pin, also the "hump" at the breech on the front of the body has been reduced 2 mm in height as for an official RSAF conversion. The fore-end has the glued barrel liner to facilitate the slimmer barrel and bears Enfield inspection marks in the liner but does not have the "J.A." inspection stamp on the end of the wood under the nose cap. These arms (and the solitary fore-end) conform to the official Enfield RSAF converted Martini-Enfield Mark I Modified W.A. Pattern in all their features and dimensions, except in two important ways. They bear no conversion details or date on the left side of the body and the two-piece Rigby nose cap/bayonet boss is the earlier Martini-Metford type mentioned in the introduction, and which requires different machine profiling of the wooden fore-end tip. These two M-Es therefore do not conform in these two points to the specific characteristics of the Enfield converted specimen M-E Is and IIs. What is instantly recognisable however is that these arms in fact constitute a third distinct group or sub-group of W.A. marked W.A. Pattern arms.

CONCLUSION

It can be seen from the reference in the "A Treatise on the British Military Martini" detailing the 1898 production of this type of arm for W.A. that the first of these three groups of the WA Pattern variant (the Mark Is) are undoubtedly linked to that production. The second group (the Mark IIs) are, although not recorded in the *Treatise*, definitely linked by markings to both RSAF



Figure 11 Unofficial conversion of a W.A. marked Martini-Henry Mark III into a Martini-Enfield Mark I Modified, W.A. Pattern. The muzzle has been shortened at a later date and the rear sight replaced on this specimen. The nose cap is of the earlier bulky two piece Rigby pattern usually found fitted to Martini-Metfords and Lee-Metfords. The middle band and sling swivels are missing. The left hand conversion side of the body is unmarked on these arms. (Photo D. Elford, W.A.M.)



Figure 12 Butt markings of the Unofficial Conversion Martini-Enfield Mark I. WADF (in a circle) 521, with sale mark. The WADF stamp (W.A. Defence Force) was originally applied to the Martini-Henry rifle from which this specimen was converted. They were not re-marked at the time of their conversion. (Photo D. Elford, W.A.M.)

Enfield and W.A. The group three Unofficial Conversions appear to be a separate but conforming variant. The common functional link between the three groups of arms is the fitting of the Rigby one or two piece nose cap which allows the fixing of the Pattern 1888 bayonet, a definite connection with and a continuation of, the earlier 1893-95 procurement of 700 Martini-Metford Mark I (W.A. Pattern) rifles by W.A. which also fixed the Pattern 1888 bayonet.

An examination of archival records of the procurement of arms by colonial W.A. must be undertaken in order to establish whether W.A. did in fact order arms conforming to this pattern and whether the dates and circumstances of procurement conform to the dates and physical features of these W.A. Pattern Martini-Enfields.

ACKNOWLEDGEMENTS

Special thanks are due to Malcolm Higham for publishing the survey articles and forwarding the data received. The author would have found it impossible to present this discussion were it not also for the support of the following individuals who went to considerable trouble to provide information on arms in their collections, and advice. I thank them all for their generosity. Barry Temple, Ian Skennerton, Herb. Woodend (RSAF, Enfield), Murray Rose, Noel Blakely, Warwick Murray, Jim Grant, Nathan Thompson, Phil Hodgson, Ross Sinclair, John Sweetman, Sgt. Alan Gronow (W.A. Police), W.A. Army Museum, Ron Cook, Kim Gray.