

## Twitter Thread by Dr Matthew Ford

Dr Matthew Ford

@warmatters



**So here's my second thread of the week, this time on what I call the origins of the Mad Minute.**

**This is going to draw together the technology, the user & the engineer & reveal the politics behind the**

If you wanted mince pie reviews then you've come to the wrong place. I do those here:

I have Aldi and Asda to review before Chrimbo. I can't even try to fit in Sainsburys...

<https://t.co/ked3NK5fU8>

3/

It is October. There are now mince pies in supermarkets.

Is it too early to start this year\u2019s taste test?

Er... no

1/ [pic.twitter.com/BQCPCIEJdM](https://pic.twitter.com/BQCPCIEJdM)

— Dr Matthew Ford (@warmatters) [October 25, 2020](#)

The focus over the next few days will be on guns, but as I said in my LEME thread I want to break out from guns & think about innovation in the context of the 4th industrial revolution.

So expect more threads on guns, engineers, lethality, and innovation more broadly.

4/

Also I get away from the idea that the history of weapons is about optimising lethality.

Instead I want to foreground society, systems & the socio-technical aspects of innovation.

So don't expect a whiggish interpretation but something that shows how tech is contested.

5/

**DELL**

A Laurel  
Science  
Original

**50c**

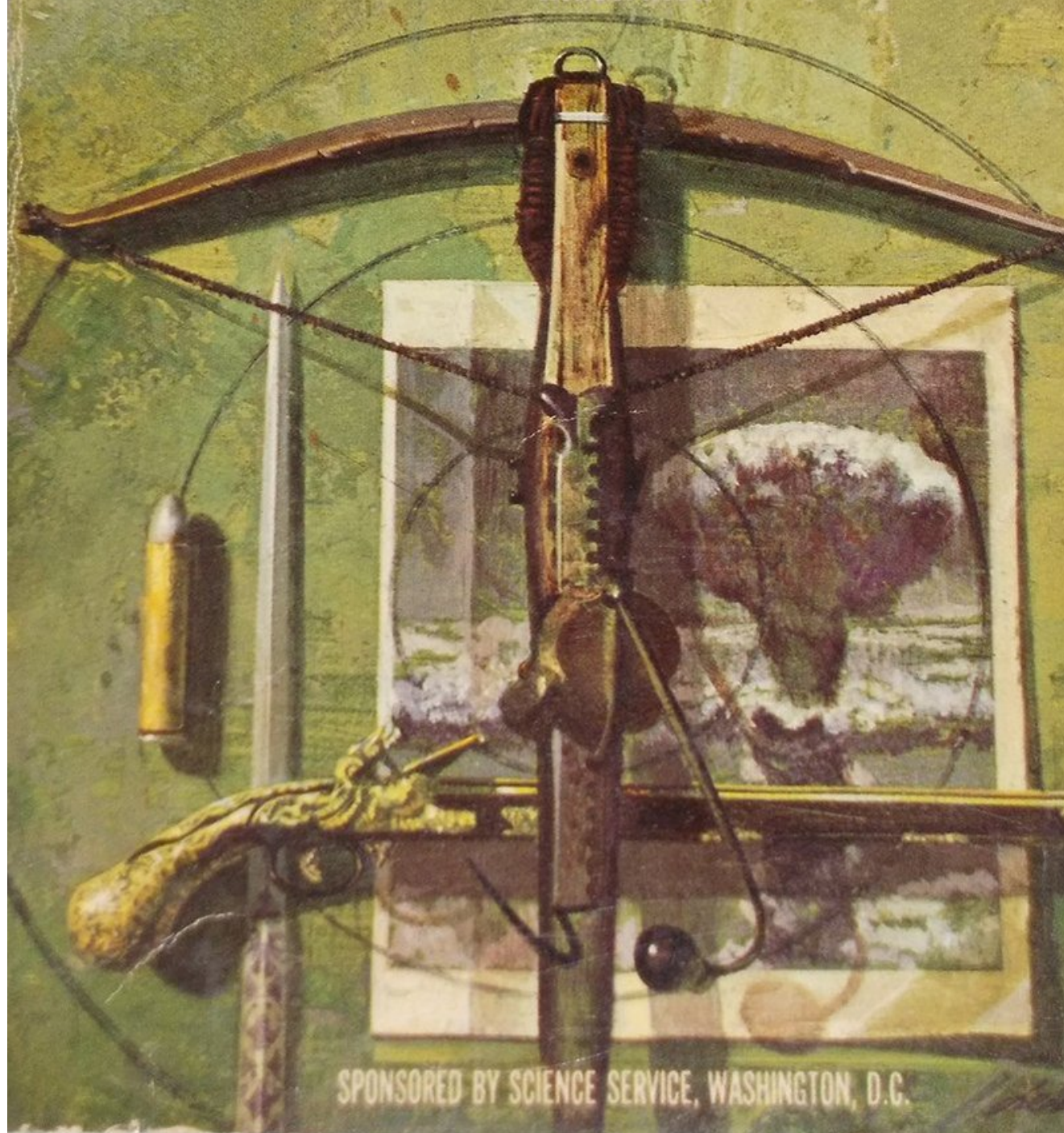
LC167

the evolution of the weapons and tactics of  
warfare in the light of science and invention

# FROM CROSSBOW TO H-BOMB

**BERNARD AND FAWN BRODIE**

illustrated



SPONSORED BY SCIENCE SERVICE, WASHINGTON, D.C.

So to the iconic Short Magazine Lee-Enfield.

This weapon is shorter than a long Lee-Enfield used by the infantry in the 1890s but longer than a Carbine, a weapon typically used by the cavalry, mounted infantry or the artillery.

[wikicommons photos](#)





The chap on the horse is Imperial Yeomanry, volunteer mounted infantry. They had a slightly different role to cavalry (Duke of Cambridge's own in 1901 at Eland's River).

Good books on this include Stephen Badsey's fab book [here](#):

<https://t.co/TuyGwBmfEq>

7/

Also make sure you check out Andrew Winrow's EXCELLENT book on mounted infantry here

8/

<https://t.co/rw2hKsilHp>

And you should certainly give [@historian1914](#) excellent book on reform in the British Army prior to the FWW a read:

9/

<https://t.co/EN3bttXMNG>

But I am not going to tell the story that they tell. And in any case I suspect my view on the mad minute is slightly at variance to where Stephen, Andrew & Spencer are on this. Because for me the mad minute has its origins in Afghanistan NOT in South Africa.

10/

Short intermission so I can get another coffee! (and possibly a mince pie)

11/

Ok back to the SMLE. If you're a SMLE nerd then you'll want this book by Major E.G.B. Reynolds.

This in the 1967 version. It is testament to the popularity of shooting that this was the 3rd edition.

It contains all sorts of useful but whiggish perspectives on the SMLE

12/

# THE LEE-ENFIELD RIFLE

*By*

MAJOR E. G. B. REYNOLDS

LONDON: HERBERT JENKINS

My story of the Mad Minute starts with three new groups.

The Indians, the Cavalry and the Sceptics.

On the face of it the SMLE is an inevitable improvement on Long Lee-Enfield Rifle, the weapon that replaced the Lee-Metford once the British Army adopted smokeless SAA.

13/

But I want to show you that between Lord Roberts (starting top right), Colonel Ian Hamilton (The Indians), Maj-Gen John French (the Cavalry) and the British National Rifle Association (the Sceptics) the adoption of the SMLE was not inevitable.

14/





The Indians had spent decades politicking with both Field Marshal Wolesley and the Duke of Cambridge from my LEME thread.

But they had been shut out of the decision to adopt the LEME while the RN & the Rifle Brigade had been instrumental.

15/

<https://t.co/OJxnQKAIUE>

But let's start with how to think about military-technical change in the Victorian era.

My focus will be to explain the adoption of the Lee-Enfield through the lens four groups that I call the Traditionalists, the Imperialists, the Royal Navy and the Radicals.

6/ [pic.twitter.com/lGvqDIEcaw](https://pic.twitter.com/lGvqDIEcaw)

— Dr Matthew Ford (@warmatters) December 20, 2020

By the mid 1890s, however, Cambridge had gone and the Imperialists while in the ascendancy were vulnerable to the Indians.

16/

The first thing to say was that Lord Wolseley who became C-in-C in 1895 was dead-set opposed to shortening the rifle in favour of a somesort of carbine.

The rifle meant soldiers could hit targets at range. A carbine compromised the tactical possibilities that range offered.

17/

However, when the Chief Inspector of Small Arms, Lt-Col Walter Lockyer, an engineer by background, circulated a memo that new propellants made it possible to hit targets at range, implying the Army could move to a carbine, Wolseley rejected the idea.

18/

Wolesley may have been tactically "progressive", accepting the need for dispersing troops given the firepower potential of new artillery but he still believed in hitting targets at range.

19/

Long range here meant 3000 yards and using a dial site to create a beaten zone of fire - equivalent to a hail of arrows.

This meant pointing the rifle upwards at an angle and dialing the site downwards to adjust for range.

These could still be seen on SMLEs.

20/





But if the British Army rejected the idea of a carbine or a shortened rifle, the Indians were quick to recognise the value of this innovation.

21/

British officers had of course been commanding the Indian and British Armies on frontier with Afghanistan for several decades.

Roberts, for example, made his reputation at the 1880 battle of Kandahar.

22/



But of course the British Army was subsequently sceptical about the reliability of the Indian Army and that helped to fuel the politicking between the Roberts and Wolseley rings.

23/

Nevertheless, the Indians understood how to fight on the frontiers and trained the Indian Army accordingly.

This meant abandoning volley fire in favour of open order, fire at will tactics and controlling hill tops along the route of a march was essential.

24



Roberts was a keen shot and backed the South India Rifle Association and organized his staff into a shooting team.

Ian Hamilton also enjoyed shooting, was a keen game hunter & had studiously drilled his Regt, the Gordon Highlanders in how to shoot straight.

25/

Hamilton first came to the notice of Roberts during the 2nd Afghan War where he demonstrated courage in retaking a picket after it had been abandoned by some British troops.

26/

Known as a brave officer and to have served with distinction in India and during the First Boer War of 1881,

It was Hamilton's interest in musketry that made him instrumental to the story of the adoption of the SMLE in 1903.

27/

The Indian Army was so good at shooting that Roberts forced Cambridge and Wolseley to adopt the Indian system of musketry. This led one Indian paper to comment that the real British school of musketry 'is at Simla and not Hythe'.

28

In 1885, Hamilton published his views on reform in the Army in a book called "The Fighting of the Future".

For Hamilton 'the paramount desideratum in a fighting man is, that he should shoot intelligently and well'

29/

John Lee discusses Hamilton in a really good book but you can find Hamilton's papers in the Liddel Hart Military Archives <https://t.co/ddAQkY5HHu>

30/

<https://t.co/9WwQHd1O7d>

Anyway, I'm rambling.

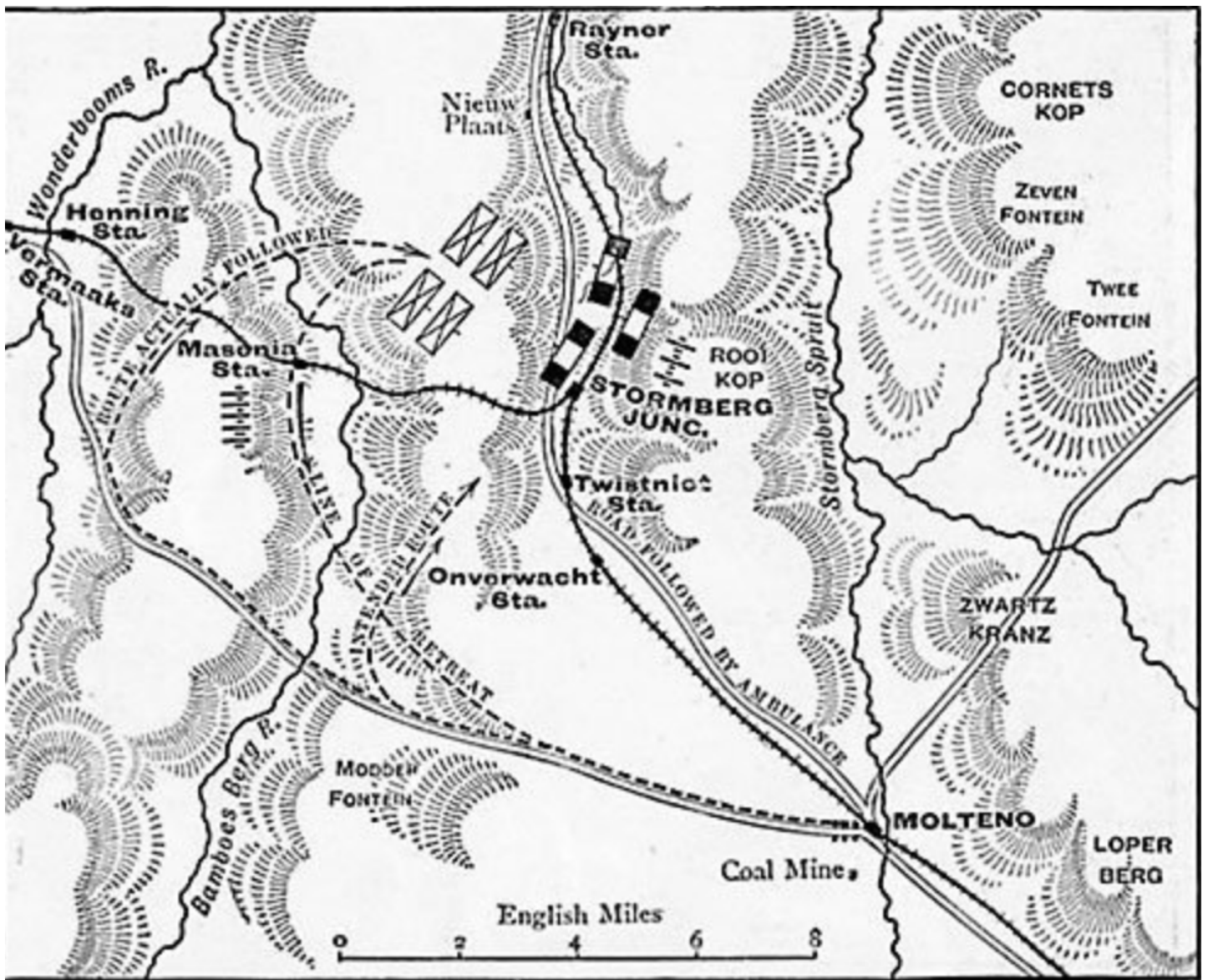
The point is that the British Army had actually rejected the idea of a SMLE in 1895 and it took Hamilton and Roberts before the idea was given any credence.

31/

And of course Roberts and Hamilton could only formerly come to power in the War Office following defeats in South Africa during Black Week at the battles of Stormberg, Magersfontein and Colenso where Britain's other famous General Sir John Redvers Buller was defeated.

32/





But if the Indians were prepared to accept the possibility of a shortened rifle they did not necessarily accept the idea of a Carbine.

The carbine gave the cavalry the tactical flexibility that might come from having access to both the lance/arme blanche & small arms.

33/

However, the Indians were sceptical of the utility of the arme blanche and wanted the cavalry to have the firepower of the infantry.

Maj-Gen John French of course, did not want to give up the Lance or the arme blanche.

34/

But firepower advocates like Hamilton were not convinced by the cavalry's performance in South Africa, viewing French's action at Poplar Grove in 1900 as a demonstration that the cavalry needed reform.

35/

In the Cavalry's opinion the problem was not with the arme blanche which they viewed as important to their role but that they had been equipped with a carbine.

For them, replacing the carbine with a rifle that wasn't as long as the Long-Lee would rebalance the battlefield

36/

They were in favour of adopting the SMLE then because they believed it would put them on an equal footing with the infantry should they be forced to dismount.

37/

With a wooden hand guard that covered the entire barrel, the new design of rifle not only protected the trooper from a hot barrel while he was firing but also made it more comfortable when it was strapped to his back in the manner determined by Lord Roberts.

38/

Equally, however, it was important that the mounted infantry did not subsume the cavalry. In this respect, cavalry officers had to emphasize the tactical flexibility of the arme blanche as embodied by the ethos of the cavalry.

39/

The cavalry were uniquely able to undertake shock action, reconnaissance, and flank protection.

40/

Embracing the SMLE was, therefore, a shrewd move in deflecting those critics who argued that the cavalry ought to be replaced by the mounted infantry or who claimed that firepower had made the place of the horse on the contemporary battlefield redundant.

41/

Well done for sticking with this so far. Final stretch now. I promise!

42/

Now just because the Cavalry and the Indians could agree, it does not follow that retired officers will understand & agree or Ministers will do what the Army says...

43/

In this case the Traditionalists (see my LEME thread) could use the National Rifle Association -home originally in Wimbledon but now at Bisely- to influence Hugh Arnold-Forster, sec of state for war, to question the need for a shorter barreled rifle.

44/

<https://t.co/Ma7Hyacu2x>

The NRA had strong links to Cambridge who offered an annual prize and even today the Queen's Prize -originally established by Queen Victoria- is a BIG shooting event.

One of the prize winners will feature in a future thread on small arms in the SWW.

45/

<https://t.co/KT4BAevwKd>

Anyway, the NRA used their influence to get Arnold-Forster (L) to question the validity of the decision with the director general or ordnance Sir Henry Brackenbury (R) on 5 key areas.

46/



*H. O. Arnold - Torke.*  
*Belfast. (U.S.) July, 1898.*

1/ on whether the decision to adopt the SMLE was subject to a trial by independent judge

2/ on whether other nations adopted 1 rifle for both cavalry & infantry

47a/

3/ on whether the SMLE really was better than other nation's rifles

4/ on whether the SMLE range was sufficient

5/ on why long range was deemed no longer relevant.

47b/

The Army was unimpressed and replied they had a need for a light and handy rifle that was more than sufficient for the infantry.

48/

& that there was no need for a match rifle 'for the use of experts contesting across the green expanses of Bisley [but instead a weapon] for use by comparatively clumsy practitioners, whose operations extend from Canada to the Cape, and from the Afghan frontier to Singapore'

49/

So there we have it.

The Army adopted a weapon designed for clumsy practitioners who were not expected to be marksmen.

The Indians were instrumental. They needed soldiers to quickly bring their weapons to bear on a hiding/dodging enemy.

Who needs range when there's artillery.

Not so many pictures this time. More challenging set up that the LEME thread and bound to have forgotten something. For example Hamilton was commandant of the School of Musketry at Hythe & was instrumental in pushing Lockyer's view of the SMLE into the Army.

end +1/





Image from the King's Own Royal Regiment Museum, Lancaster

end+2/

<https://t.co/FOjkDOD9ek>

Last thing and I nearly forgot to tell you lot about it.

You can find the article version of this thread below. I should have called the paper the Origins of the Mad Minute but only thought about it too late!

end+3/

<https://t.co/7T0uo5oFfi>