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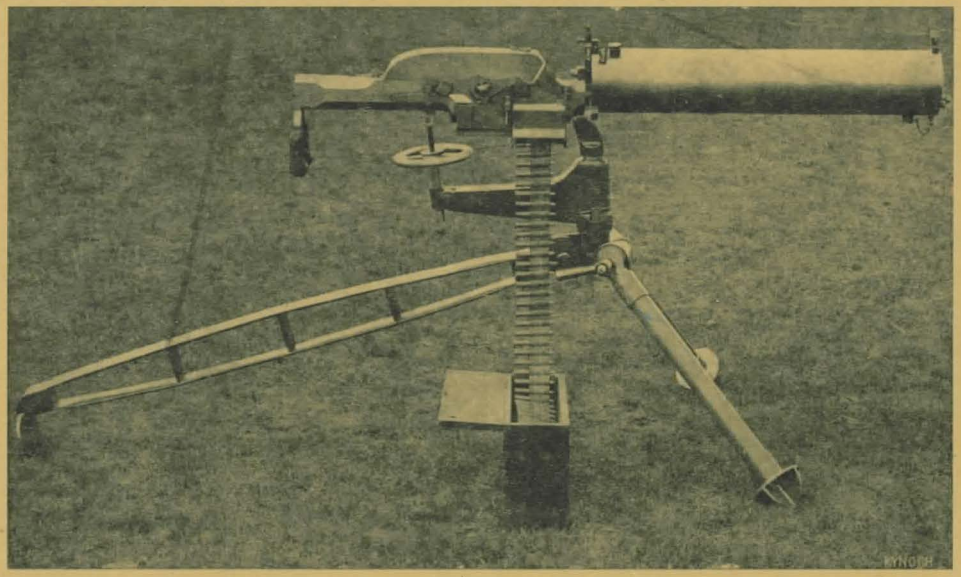
THE KYNOCH MACHINE GUN

(SCHWARZLOSE PATENT)



KYNOCH LIMITED, BIRMINGHAM

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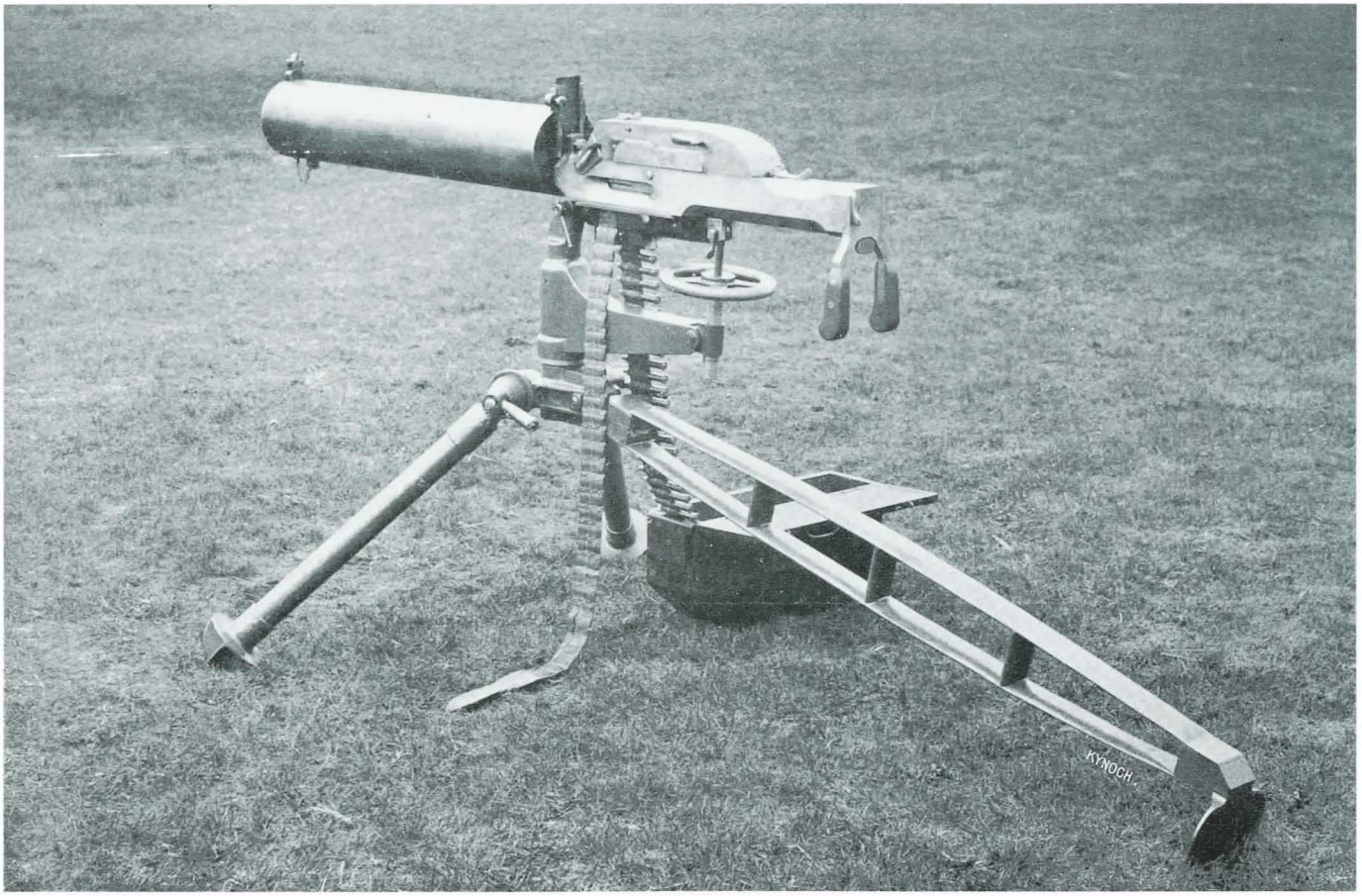
September, 1907



The Kynoch gun in normal position for firing

THE KYNOCH MACHINE GUN

SCHWARZLOSE PATENT

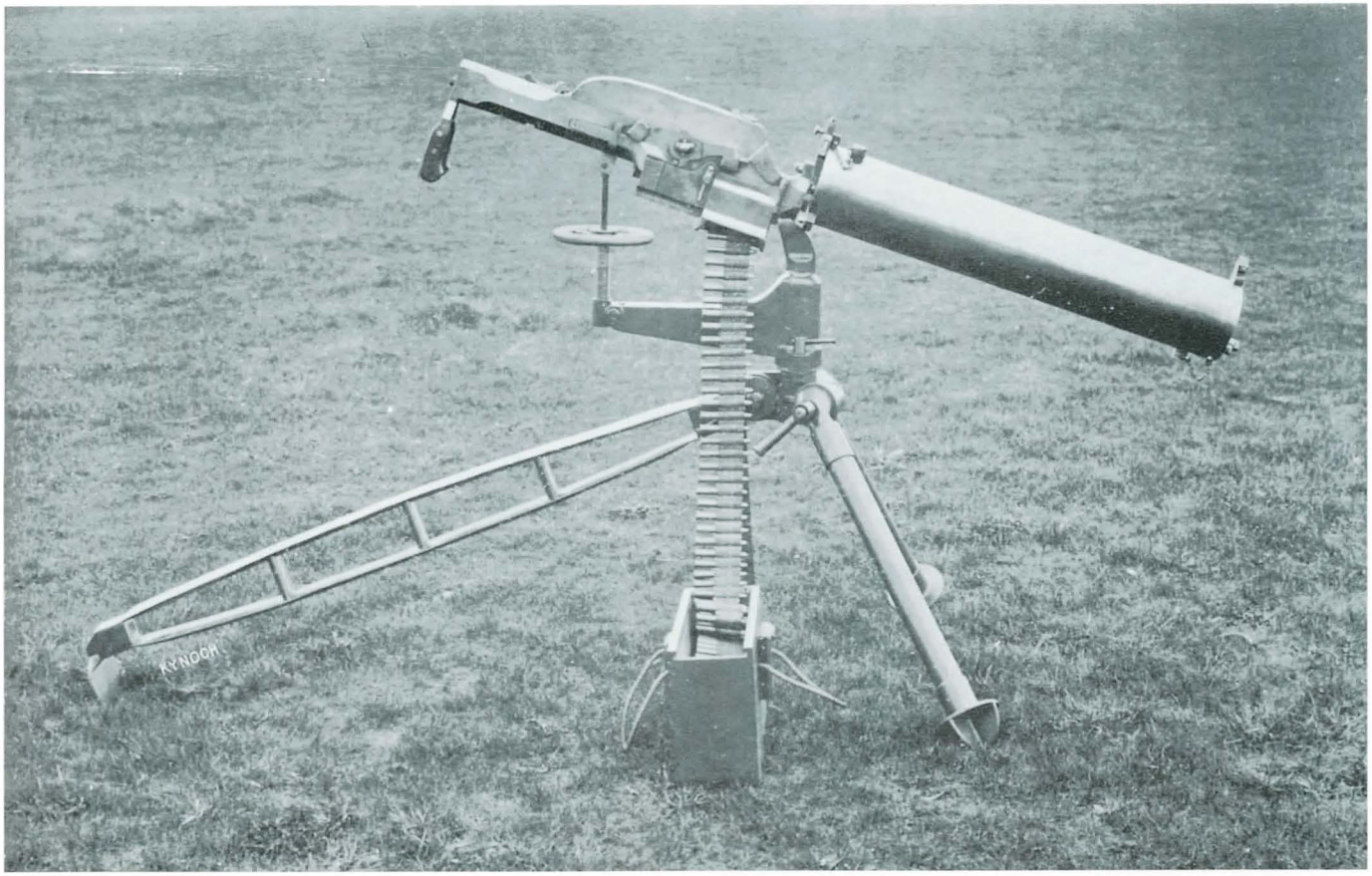
THE AUTOMATIC MACHINE GUN is a weapon which has now well proved its utility in warfare and is an indispensable requirement of all the armies and navies of the world.

That being so, it is of the highest importance that the best gun should be adopted by any nation who desires to keep in the vanguard of progress in military matters.

What constitutes the best gun? Obviously the gun which shoots best; is most easily handled and transported; is least liable to get out of order; and in the event of breakdown is easiest to repair. To fulfil these conditions, that design is clearly the best which, while shooting well and answering the requirements as to handling and transport, has the simplest possible mechanism with parts of substantial dimensions, so that little or no adjustment is needed under varying conditions of service.

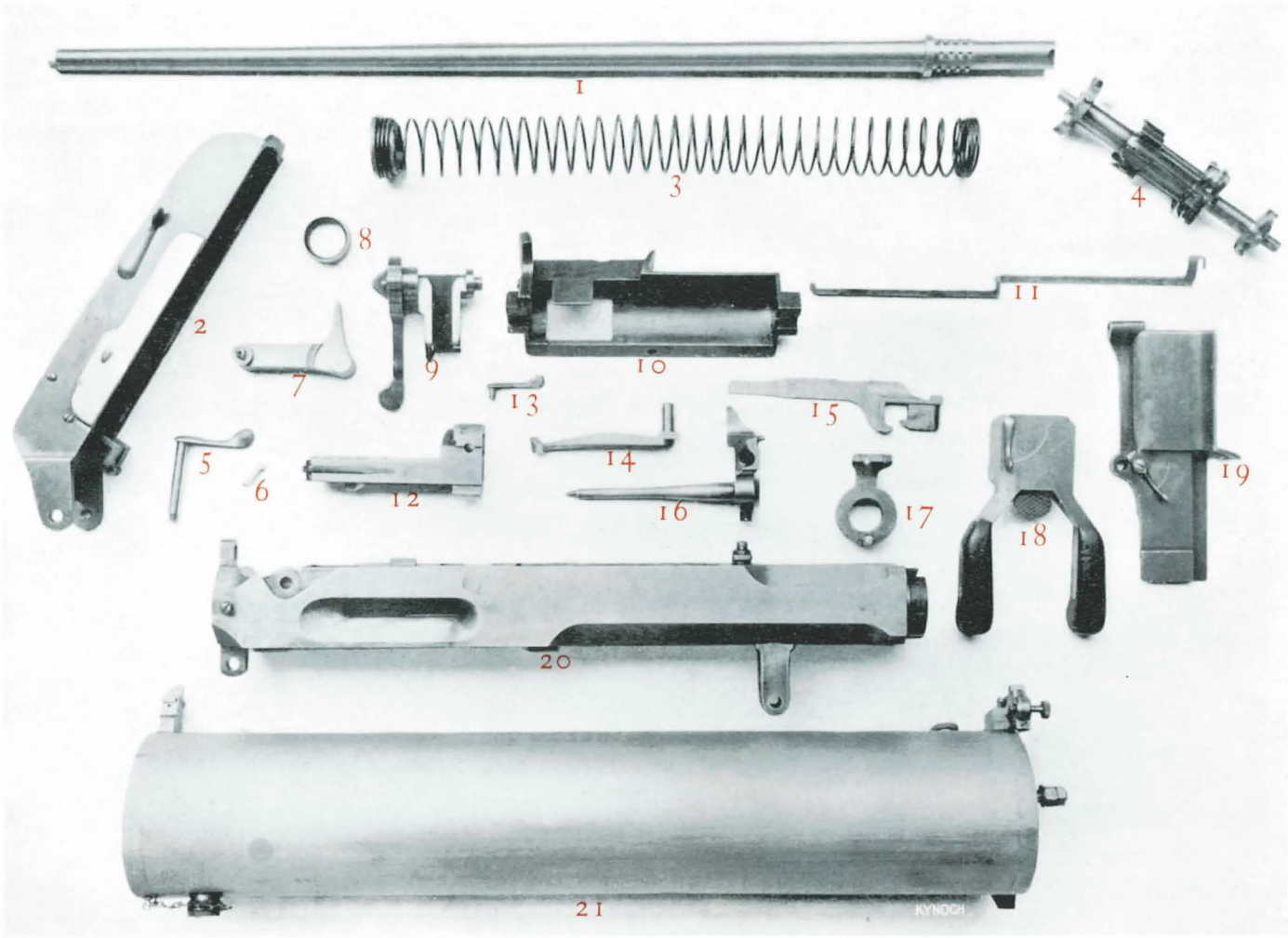
We claim that the gun which is the subject of this booklet fulfils all these conditions, and its advantages may be enumerated as follows :—

1. The mechanism is extremely simple and has very few parts.
2. The rate of firing is from 350 to 400 shots per minute, and may be kept at this speed for any length of time without liability of jamming. (*The gun will fire* 600 *shots per minute, but it is generally agreed that such a high rate of firing is useless in warfare.*)
3. It can be taken to pieces as far as usually required in less than ten seconds, and put together again in less than twenty seconds, without the use of tools.



Firing at an angle of depression of 30 degrees

4. As there is plenty of energy for operating the gun, the parts are made very strong and have good wearing surfaces, hence great durability.
5. There is only one main spring in the whole gun, and this needs no adjustment, unlike other guns, in which the springs need to be delicately adjusted for varying angles of firing.
6. The gun will fire from 45° elevation to 70° depression without any alteration or adjustment in the mechanism.
7. The barrel is fixed to the body and does not recoil when the gun fires ; hence, as no power is absorbed in moving the barrel, its weight does not in any way affect the mechanism.
8. For the same reason the water jacket may be properly jointed and no trouble from leaky glands will occur, while no energy is absorbed by the friction of such glands as in other guns.
9. The cartridges are lifted chiefly on the recoil stroke, hence the spring need not be so strong as it otherwise would require to be, and the cartridges can be lifted from the ground level.
10. The gun can be constructed for cartridges of any calibre in use in the civilised armies of the world.
11. The weight of the gun with water jacket is only 22·6 kilograms, and this could be reduced if necessary, while the tripod mounting weighs 20·4 kilograms.

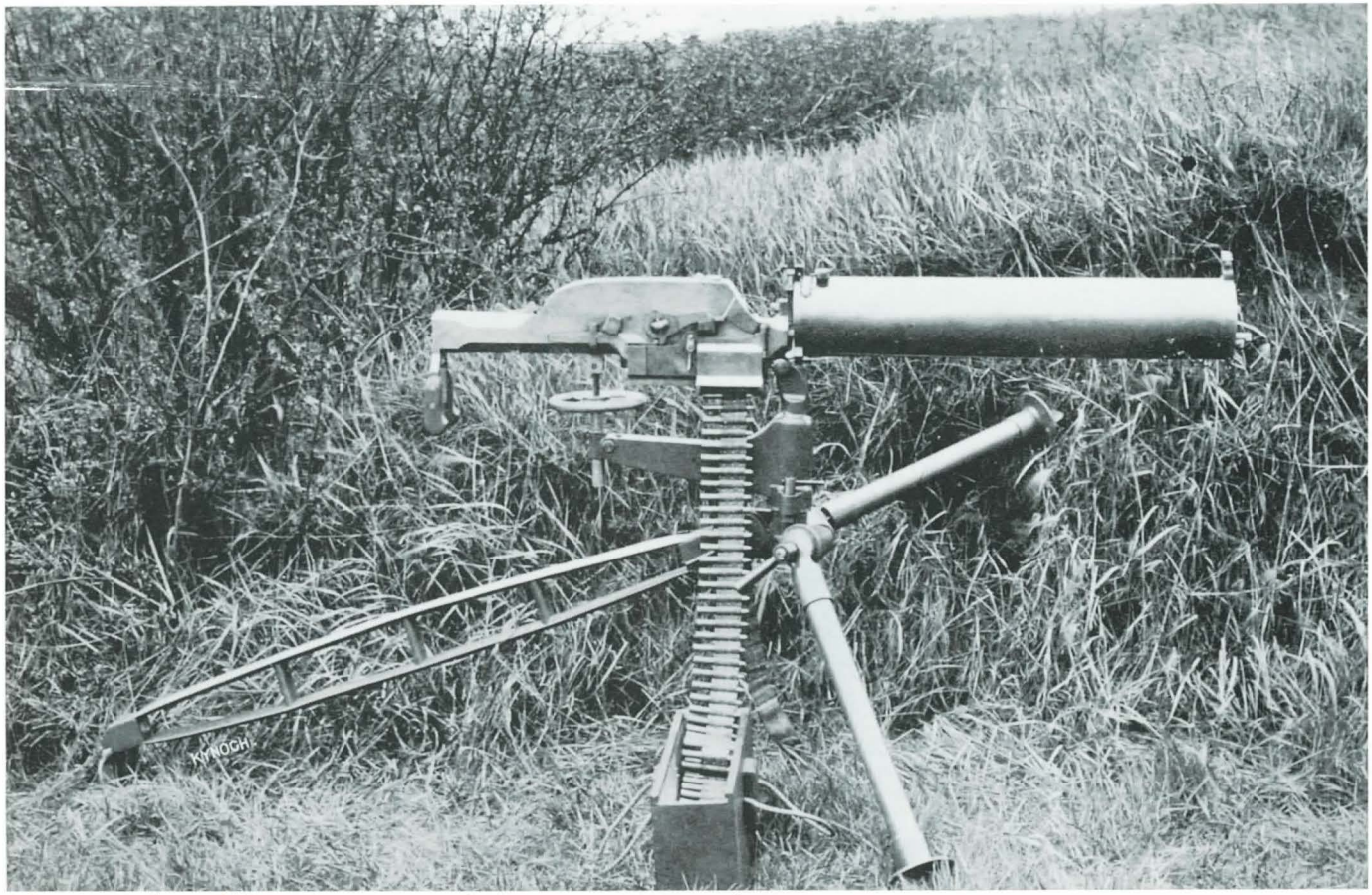


View of the 21 parts of gun, shewing simplicity of construction

The parts are as enumerated on the accompanying photograph :

1. Barrel
2. Body Cover with Oil Pump and Safety Pin
3. Main Spring
4. Feed Drum
5. Hinge Pin for Cover
6. Ejector
7. Bell Crank Lever
8. Gland Washer
9. Crank and Handle
10. Bottom Cover of Feed Drum
11. Trigger Rod
12. Breech Block
13. Locking Pin for No. 10
14. Seat Lever
15. Feed Drum Escapement
16. Firing Pin
17. Spring Block
18. Rear Cover with Handles, Trigger and Locking Pin
19. Side Cover for Feed Drum
20. Main Body
21. Water Casing complete with Sights

It will be found by comparison with other guns now in use that the Kynoch Machine Gun has only one spring and only 21 component parts, as against as many as 14 springs and 52 component parts in other guns now in use ; whilst its weight is only 22·6 kilograms as against 27·5 kilograms.



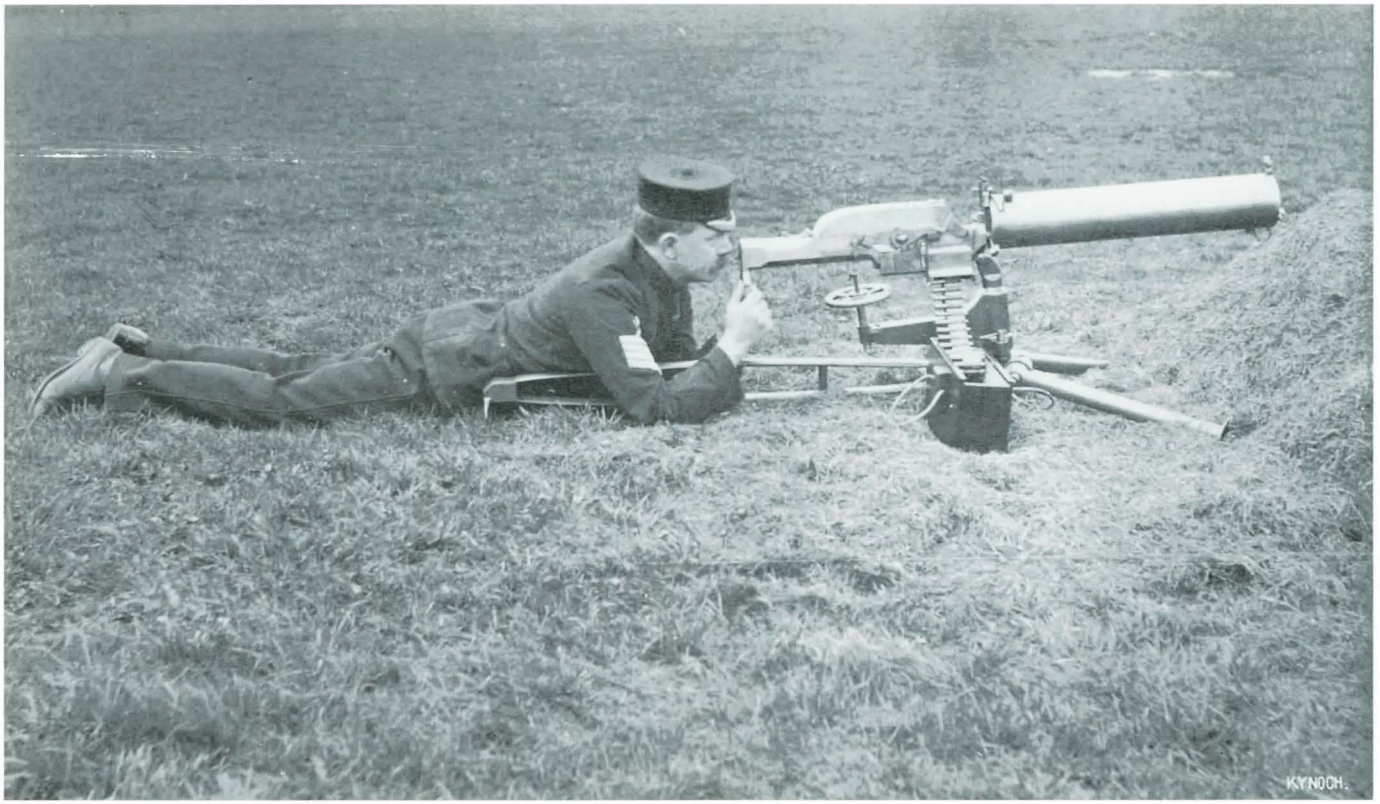
Shewing adaptability of gun mounting to uneven ground

GUN MOUNTING

The Kynoch Automatic Machine Gun may be fixed on any kind of mounting; but the one illustrated has been designed and successfully proved as convenient and simple for land service.
When the gun has to be transported, it is taken off the mounting, and then can be easily carried by one man, while the mounting is so designed that by slackening the joints of the legs it can be folded up compactly and also easily carried by one man.
The mounting allows of a very large range of adjustment for angle of fire and to give a firm stand on uneven or hilly ground.

CARTRIDGE BELTS

The cartridge belts are carried in wooden boxes with lids, each holding a belt containing 250 cartridges, which are placed when in use on the ground in the most convenient position for feeding into the gun.



The legs of gun mounting are adjustable for firing behind very low cover

GENERAL DESCRIPTION

The principle of action is an entirely novel one, and is very simple. When a cartridge is fired the pressure in the gun barrel which propels the bullet also forces back the cartridge a little out of the chamber, thereby imparting to the breech block a smart blow, in consequence of which the block is driven some distance back into the body of the gun against the pressure of the main spring. In its travel it operates the mechanism whereby the exploded cartridge case is withdrawn from the barrel and ejected. A fresh cartridge is elevated and withdrawn from the belt, and the firing mechanism is got in readiness for another shot. The force of the blow having been expended, the spring re-acts and pushes the breech block forward again, returning also at the same time the other mechanism to its normal position. At the moment when the breech block has pushed a fresh cartridge home into the barrel, the firing mechanism is automatically released and the gun fires once more.

This cycle of operations is repeated at each shot, and firing may be continued in this manner as long as the trigger is kept pressed by the thumb. On releasing it the gun at once stops. Thus single shots or any number may be fired at the will of the operator and according to the length of time he keeps the trigger pressed.

Further detailed information will be given when required on application to the manufacturers, Kynoch Limited, Witton, Birmingham, and a practical trial at the shooting range may be witnessed by appointment.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