

request you will have the goodness to send me as early as convenient a statement in detail of the measures which you propose to take to attain the object in view, so that I may be enabled to order the requisite arrangements to be made in time to begin on the date above mentioned, when I am informed you will be present.

J. C. Soall, Esq.,  
Kyber Pass Road, Auckland.

I have, &c.,  
W. C. LYON, Lieut.-Colonel,  
Commanding Waikato District.

## No. 4.

Mr. SOALL to Lieut.-Colonel LYON.

Kyber Pass Road, Auckland, 13th November, 1876.

SIR,—

I have the honor to acknowledge the receipt of your letter dated November 10th, in which you request me to give you a detailed statement of the measures I propose to suggest as best calculated to obtain the object in view, &c., and in answer would respectfully point out the difficulty of a fair test being made by the Armed Constabulary, inasmuch as that they are trained men under what is termed the system now in use in the Colonial Forces—in other words, the Imperial system of musketry instruction for the army.

You will perceive from this remark that I am in the position of a person heavily weighted. I trust you will also perceive that the competitors in the trials should be novices, especially in the judging-distance matches, as the question at issue is, "Which is the best system for making novices effective with the rifle in the shortest time?" With these remarks I respectfully suggest the following matches, after the settlement of the questions of first principles by the Board:—

Any number of men you may deem best, taking into consideration the targets available, &c.

Each match will require 2 targets—1 white, 1 dark; the whole of the matches to be fired with the black and white foresight alternately.

Two matches at 200, 300, and 400 yards, 3 shots at each range at each target; any position.

Two matches at 500 and 600 yards, 2 shots at each range at each target.

Two matches,  $\frac{1}{2}$  minute, at 200, 300, and 400 yards, at each target.

The usual sized targets for these ranges, any position.

Two matches at 100, 130, 160, 250, and 280 yards, 3 shots at each distance at each target.

Two matches at 100, 130, 160, 250, and 280 yards,  $\frac{1}{2}$  minute, at each distance at each target.

These four matches to be fired with the elevation on the back sight due to 200 yards throughout.

Targets, 6 x 2; centre, 2 x 2; 1 point for every hit; any position.

*Remarks.*—For the results, note the number of points made by each sight, and also note the number of points made on each target.

The grounds for judgment in the judging-distance matches are—the minimum of time required, simplicity of procedure, and results in points.

I would also respectfully remark that, to insure best efforts by the competitors, prizes are necessary to produce good honest firing.

Lieut.-Colonel Lyon, Commanding Waikato District.

I have, &c.,  
J. C. SOALL.

PROCEEDINGS of a BOARD of OFFICERS assembled at Hamilton, Waikato, on 23rd November, 1876, by order of the Hon. the Native Minister, bearing date 31st October, 1876, for the purpose of testing the System of Musketry proposed by Mr. J. C. Soall of Auckland, as against the System now in use in the Colonial Forces.

*President.*—Lieut.-Colonel Lyon, commanding Waikato District.

*Members.*—Captain McPherson, New Zealand Militia, Captain Marshall, New Zealand Militia, commanding Nelson Volunteer District.

The Board, having assembled according to order, proceeds to receive statements from Mr. Soall upon the points under consideration.

Mr. Soall propounds the following question upon "first principles," to which he requests answers from the Board.

*First.*—Ought the eye and judgment of the rifleman to be educated in conformity with the circumstances that he will meet with in the field?

*Second.*—Would the ground or colour either of a person of an enemy or his surroundings be white or dark?

*Third.*—Taking into consideration the circumstances likely to be met with in the field, should the rifleman's eye and judgment be educated to meet them by having to aim on a dark ground?

*Fourth.*—Which would be the best colour for use in the field as respects rifle sights, black or white?

*Fifth.*—Would not a mechanical means of finding distance by the individual rifleman be as desirable and advantageous as the use of the back sight of a rifle?

In accordance with a request contained in a letter from the President (copy herewith attached and marked B), Mr. Soall forwarded to the President of the Board, Lieut.-Colonel Lyon, a letter dated 13th November 1876 (marked A and attached), containing a detailed statement of the measures he proposed as best calculated to attain the object he had in view.

The matches proposed by Mr. Soall were carried out by six men of the Armed Constabulary who were above average shots, in the presence of the Board, with the exception of those marked \*, which were not considered necessary, and with which opinion Mr. Soall coincided.

The target practice registers of the several performances of the different ranges and targets are hereto attached, as well as the result of his mode of judging distance.