This article was downloaded by: [The University of Manchester Library]

On: 13 April 2015, At: 07:44

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered

Number: 1072954 Registered office: Mortimer House, 37-41

Mortimer Street, London W1T 3JH, UK

Royal United Services Institution. Journal

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rusi19>

Experimental Aluminium Horse-Shoes

Captain E. Lambart R.H.A.

Published online: 11 Sep 2009.

To cite this article: Captain E. Lambart R.H.A. (1892) Experimental Aluminium Horse-Shoes, Royal United Services Institution. Journal, 36:177, 1229-1229, DOI: [10.1080/03071849209417669](https://doi.org/10.1080/03071849209417669)

To link to this article: <http://dx.doi.org/10.1080/03071849209417669>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and

views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

EXPERIMENTAL ALUMINIUM HORSE-SHOES.

Translated from the "Invalide Russe" by Captain E. LAMBERT, R.H.A.

IN the Finland Dragoons an experiment has been made with aluminium horse-shoes. A few horses were chosen and shod with one aluminium shoe and three iron shoes, the former being on the fore foot in some cases, and on the hind in others. Some of the horses were remounts working only in the school, and others fully trained horses. The experiments lasted six weeks, and showed that the aluminium shoes lasted longer and preserved the foot better than the iron ones. No aluminium shoes broke, and they were used over again for re-shoeing. The horses were worked over hard and very stony ground. It had been feared that the aluminium shoes would suffer from contact with urine, and that the shoeing would suffer from the acid products, but this was not found to be the case. To try this fully, pieces of the metal were kept a whole month in urine, but no chemical change took place in them. A very trifling loss of weight was observed.

The aluminium shoes are only one-third to one-fourth the weight of iron shoes. Their cost is certainly greater, but this is to some extent compensated for by the facts that very little charcoal is required in shoeing, that there is no loss in weight, and that the value of the old metal is the same as that of fresh. In making the shoes some skill is required, as the forging must be done at a rather low but exactly regulated temperature. This also makes the operation a rather lengthy one.

Taking into consideration the importance of light shoes, especially for horses doing fast work, and the advantage of being able to carry a larger number of spare shoes on a campaign without increasing the load of the wagons, and, lastly, the probability of a fall in the price of aluminium, it is safe to predict the general introduction in the future of this metal for the shoeing of cavalry and artillery horses.