

probably unaware of this, proposed that the name *michron* be given to the millionth of a second, while he suggested that the micrometre be termed the *microm*.

Similarly, many years ago Sir Benjamin Brodie attempted to induce the chemists to rationalise their nomenclature by re-naming CO carbonous oxide, and taking the name carbonic oxide for CO<sub>2</sub>.

Had either of these proposals even partially materialised, it would undoubtedly have led to great confusion.

While to some extent I agree with Dr. Guillaume's remarks regarding the English use of "specific," I do not think he strengthens his general case by referring to "puissance massique," which, to my mind, conveys only the haziest sort of meaning.

I might point out that, according to a view I have heard frequently expressed, the general introduction of the metric system into England has been hindered by prejudice against what is considered the unnecessary number of names of units appearing in the usual books dealing with the subject. It may be desirable to have these for rare use, but it is surely inadvisable to mention them in the school books as if they were current. Thus, for example, among measures of length, one is accustomed to think in metres, centimetres, or millimetres, and of greater lengths in kilometres. The decimetre is rarely used except in connection with the litre, and the decametre, hectometre, and myriametre practically never.

In conclusion, I think I represent the views of readers of NATURE when I say that many of them will be glad to buy the French Physical Society's useful volume, if it is only to be able to get rid from their library table of one or other of the editions of its well-known predecessor, written in the language of the Huns, which at the present moment they are unable to tolerate.

J. A. HARKER.

Teddington, May 25.

#### University Appointments in War Time.

I VENTURE to direct attention to the advertisement for a professor of organic chemistry in the University of Liverpool. It appears to me, and I believe many share my opinion, that this is a very inopportune moment for filling a university chair when eligible men are away on active service. It may seem unfitting to criticise the internal policy of another university, but it is a matter which closely affects many who have no connection with the University of Liverpool. Professors of chemistry and others are being solicited for testimonials by candidates, and in many cases such requests cannot be granted except by doing a grave and irreparable injustice to more highly qualified men who have responded to the country's call for volunteers in the present national crisis. I trust that the University of Liverpool will in this matter follow the same course as has been pursued by the University of Birmingham in the case of the vacant chair of physics, and postpone the appointment of a professor until after the termination of the war.

PERCY F. FRANKLAND,

(Dean of the Faculty of Science).

The University, Birmingham, June 12.

#### Volunteers for Scientific Work.

CIVILIANS of all grades are being enrolled as volunteer workers in our ammunition factories. Are there no Government chemical factories where persons of a certain amount of scientific training could render

voluntary aid towards the production of chemical munitions of war? There must be many who, like myself, are beyond the fighting age, whose skilled labour might be of use at the present juncture.

EDWARD HERON-ALLEN.

Large Acres, Selsey Bill, Sussex, June 12.

#### SCIENTIFIC METHODS IN INDUSTRY.<sup>1</sup>

THE publication of this volume is opportune, for it presents data which will tend to focus attention still further upon the present unsatisfactory recognition of science by the Government and manufacturing interests of this country.

A state of war has disclosed this in detail; and demonstrated that a nation which is ill-prepared against industrial expansion in the modern sense, finds itself in an inferior position in times of war. For reasons which are still somewhat obscure, the British manufacturer has shown in the past a distinct preference towards those industries which develop best on lines of empiricism. Many have held that this is a defect; the present position has proved this to the hilt. Our manufacturers have surrounded themselves with an atmosphere which demands their whole attention in directing their ventures as they exist, manufacturing articles which depend upon a market already existing and the low selling price which always goes with such conditions. If empiricism were the only law of manufacture (as it was some fifty years ago) they would by their application outdistance all competitors.

It has been to Germany's credit that she realised the great driving force behind this system as it has been practised in the northern part of these islands, and that to turn the shield concentration in other directions was demanded, where some new factor could be introduced and the methods of empiricism were useless. British methods were not so much improved upon as superseded; scientific supervision and investigation were the beginning and end of this development; industries were built up which could not even have been started under the old régime; industrially useful products were in the scientific sense in many cases created, and then introduced into commerce. The older method of improving existing manufacture by empirical methods gave place to a new system. Thus the British manufacturer found himself face to face with the German industrialist, who had already convinced the German banks that he was working for a new era, where profits would be large and developments world-wide. To-day we have to consider a position where many of these new industries (by chance, or design) have been of the first importance in the time of war. The manufacture of large quantities of ammonium nitrate and nitric acid from synthetic ammonia (or the nitrogen of the air), has made Germany free from outside supplies of nitrates, and thus to some extent counteracted

<sup>1</sup> "First Principles of Production... A Study of the First Principles of Production and the Relation of Science to Industry." By J. Taylor Peddie. Pp. 231. (London: Longmans, Green, and Co., 1915.) Price 5s. net.