

of France, in which he records the close similarity between the edge-trimming on these 'raquettes' and on eoliths².

I have lately found, in Stone Court Valley, a 'floor' on the surface of the Lower Flood Plain gravel situated at the base of the Sunk Channel and overlain by an accumulation of alluvial beds and hill-wash. The Sunk Channel was cut in Late Pleistocene times through the gravels of the Upper Flood Plain, which are here overlain by some 10 feet of glacial material. The Stone Court Valley industry is similar to that described by Dr. Cheyner and consists of quantities of 'raquettes', a few carinated scrapers, points with a small notch on each side of the butt (lames à étranglement basilaire), hand-adzes, cores and plain flakes.

Mr. Barnes had already remarked that the retouches upon the Badegoule 'raquettes' recall on a small scale the high-angle chipping on eoliths; but one of the most interesting features of the Stone Court Valley find is the recrudescence among the other artefacts of specimens analogous, both in sizes and forms, to the Harrisonian eoliths of the Kent Plateau.

The results of this investigation, which I am conducting through the generosity of the trustees of the Percy Sladen Memorial Fund and the kind permission of the management of the Associated Portland Cement Manufacturers, will be published in detail upon its completion.

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¹ *Bull. Soc. Préhist. Française*, 27, 483 (1930).

² *Proc. Prehist. Soc. E. Anglia*, 6, pt. 4, 316.

Scientific Workers and War

THE article on "War, Science and Citizenship" in NATURE of May 9, and the letter on "Scientific Workers and War" published in the following week have expressed views no doubt widely held among readers of NATURE. Neither, however, gives any adequate suggestion as to how those scientific workers who hold such views can make them effective. Any steps depending on collective action through existing scientific organizations are obviously impracticable at the moment, for on the question of war, as on any other question of public policy, there are as wide differences of opinion among scientists as among the rest of the population. No existing organization of scientists, therefore, could at present make any pronouncement, apart from a purely platitudinous one, without serious loss of membership and of effectiveness in other directions.

On the other hand, an individual scientific worker who "first considers what ought to be done and then uses his influence to see that it is done" is acting simply as a private citizen and can do little to achieve that common action of scientists which is desired.

It seems to us, therefore, that the first requisite for any effective action along the lines indicated is the existence of an *ad hoc* organization of those scientific workers whose outlooks are sufficiently akin for an effective common policy to be possible. A policy arrived at by such an organization would not profess to be that of all scientific workers, but would doubtless carry great weight both among their colleagues and among many of the general public who are looking for a new lead. Furthermore, it might well result in existing scientific organizations, with their wider

basis of membership, taking some kind of action. At the very least, it would call for a new standard of discussion among those who would oppose it.

A further difficulty must be faced. "To ally ourselves boldly with constructive political forces" as suggested, is not without its dangers. Opinions differ as to which political forces are the constructive ones. On matters where feelings run so high, any decisive action or expression of opinion is bound to cause offence in some quarters, and the offence is bound to be the greater the more original or effective such actions or opinions may be. Owing to their highly specialized training, many scientific workers have even more to fear than most people from the hostility of those who control their means of earning a livelihood. In these very questions to which we believe, with you, that professional scientists can make a distinctive contribution of real value to the community, we believe also that many of them—even in the remaining democratic countries—are kept silent by the certainty that an open expression of their opinions would seriously affect their careers or even bring them to a sudden end. This would certainly apply, for example, in many places to those holding some of the views mentioned in the Cambridge letter. It is with such considerations in mind that there has arisen among the staff and research workers of this University a group whose aim is to investigate the root causes of war and to find means of avoiding it. Isolated groups are, however, of little greater effect than isolated individuals, and we should welcome contacts with similar groups elsewhere in the hope of being able to arrive at a common programme.

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Photo-Reduction of Fluorescent Substances by Ferrous Ions

DR. K. WEBER¹ has recently published a note on experiments which he connects with the results published previously by me². There is, however, not much relation between his experiments and my investigations, as may be clear from the following remarks. Dr. Weber seems to be unaware of the fact that by the method which I described it is only possible to reduce fluorescent substances, and then only when they are in a suitable state to exhibit fluorescence. Indeed, his own failure to reduce dyestuffs such as neutral red and Nile blue, which he has reported recently³, can be attributed mainly to the fact that these dyestuffs are non-fluorescent in aqueous solution.

It has been shown previously that, in principle, every fluorescent substance can be reduced by the influence of light in the presence of suitable reducing substances, for example, Fe⁺⁺ ions, SO₃⁻ ions⁴, HS⁻ ions⁵, reversibly or irreversibly. Dyestuffs