

LETTERS TO THE EDITORS

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James Prescott Joule and the Unit of Energy

A CENTURY has passed since Joule read his paper on the relation between heat and work at the meeting of the British Association at Cork on August 26, 1843. It is unfortunate that a difference of opinion has arisen about the correct pronunciation of his name and also of the word *joule* used to denote a unit of energy (ten million ergs or one Newton-metre). The "Oxford English Dictionary" gives *dzawl* as the pronunciation of the unit, where *au* represents the sound in the word *loud*. In "Webster's New International Dictionary" (1911) is found the statement: "The proper name is pronounced *joul* (*ou* as in *out*) and this is the correct pronunciation for the unit; but the incorrect *jool* [*oo* as in *food*] is very common especially in the United States." In "Chambers's Technical Dictionary" (first published 1940) we find the contradictory statements

joule, jool (Phys.). A unit of energy equal to 10^7 ergs.

(Named after F. [sic] P. Joule, 1918-89; name pronounced jowl.)

From boyhood I have been accustomed to the pronunciation *jool*, and was pleased to receive support for this from my colleague Sir D'Arcy Thompson, whose memories of the Royal Society of Edinburgh go back to the days of Lord Kelvin. He consulted Sir John Stopford, vice-chancellor of the University of Manchester, who replied on August 17, 1943: "I believe it is JOOLE and I never heard Jowle until comparatively recently when I think it came from the South. The family I knew in my youth insisted upon JOOLE and I think they were descendants". My friend Dr. George Green, of the University of Glasgow, was at one time private secretary to Lord Kelvin, and he writes (August 22, 1943): "The name Joule should rhyme with 'rule'. This is how Lord Kelvin pronounced it, and this has always been the pronunciation in Glasgow, as far as I can remember—by Prof. Gray (Senior) for instance." Prof. G. W. O. Howe (August 25, 1943) writes: "Some years ago I was troubled by the same question and I made enquiries—also in Manchester—and came to the conclusion that Joule and his relatives always pronounced the name 'jool'. I was pleased to learn this as I had always so pronounced it and regarded 'jowl' as a hideous mispronunciation".

I venture to suggest that the pronunciation 'Jowle' may have originated in Salford through the sardonic humour of local workpeople who, having in mind such an expression as 'cheek by jowl', spoke of 'Jowle's brewery'.

The pronunciation *jool* for the unit of energy (the joule) in the M.K.S. system of units has the advantage that it is immediately applicable in the French language—compare the words *boule* and *jour*. I am told by Mr. W. D. Oliphant, to whom I am indebted for much assistance in this question, that in the War of 1914-18 a French submarine (lost in the Dardanelles) was named *Joule*.

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Seed Selection in Forestry

I HAVE been expecting to see a protest from one of our leading plant geneticists against the casual treatment of the subject of genetical research in the White Paper on Post-War Forest Policy (Cmd. 6447), but as it has not drawn their fire, I must presume that it has not come to their notice, and so venture to write as a forester with limited experience in this field. Right at the end of the section on "Ancillary Research", among the "Miscellaneous Investigations" of paragraph 383, is a bald reference to "work on the origin of seed, i.e., the effect of selecting seed of a given species from different parts of its natural range (a large number of comparative plots have been established in different parts of Great Britain)". The only other reference is in paragraph 395, where research on tree breeding is dismissed as insufficiently urgent to justify taking it up among the major projects after the War.

Now the White Paper envisages for Great Britain the afforestation by planting or sowing of some three million acres of bare land, and the effective management, which must also involve extensive planting, of a further two million. The trees planted out now will remain from, say, 40-120 years; we have complete control of the choice of stock to be used, but no possibility whatever of remedying during those long periods any mistake made in its genetic suitability. One might well marvel that, in view of the classical disastrous errors made on the Continent and the almost complete ignorance of the subject for the exceptionally varied conditions of Britain itself, this field was not made one of the major subjects of research from the very initiation of national forestry after the War. That it should continue to be viewed as a minor sideline is, to say the least, astonishing. There are often good grounds for suspecting that the genetic constitution of the stock is primarily responsible for the badness of the inferior tree crops so often met with in most parts of Great Britain; yet the collection and distribution of tree seed continues to be almost entirely haphazard. Surely it would be worth waiting even several years to make sure of procuring the best strains available for each district. Helpful as existing experiments on the differences between seed from different (again ill-defined) sources may be, the scale and execution is utterly inadequate to the importance of the subject.

An immediate step called for doubly urgently at the beginning of the present War was the selection and preservation of suitable stands on an adequate scale for seed production, but this is only one of the steps needed. It is almost superfluous to point to the example set us by several of the smaller countries of Europe in this matter, including some where planting is a far less common practice than with us.

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Spray-Dried Rose Hip Powder

THE increasing interest that is being taken in natural sources of vitamin C in general, and in the extraction of this vitamin from rose hips in particular, suggests that some observations made by us on the production of a spray-dried rose hip powder may be of interest. In the autumn of 1942 it was desired to