

THE
PHILOSOPHICAL MAGAZINE
AND JOURNAL:

COMPREHENDING
THE VARIOUS BRANCHES OF SCIENCE,
THE LIBERAL AND FINE ARTS,
AGRICULTURE, MANUFACTURES,
AND COMMERCE.

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“Nec araneorum sane textus ideo melior quia ex se fila gignunt, nec noster
vilior quia ex alienis libamus ut apes.” *Just. Lips. Monit. Polit. lib. i. cap. 1.*

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Hence by substitution

$$\begin{aligned} \cos (A' - B) &= \frac{\sin B}{\sin A'} + \left(\cos B - \frac{\sin B}{\sin A'} \cos A' \right) \cos A' \\ &= \therefore \frac{\sin B}{\sin A'} + \cos B \cos A' - \frac{\sin B}{\sin A'} \cos^2 A' \\ &= \frac{\sin B}{\sin A'} + \cos B \cos A' - \frac{\sin B}{\sin A'} + \sin B \cdot \sin A' \\ &= \therefore \cos B \cos A' + \sin B \sin A' \end{aligned}$$

XXIX. *A new binary Arrangement of the Macrurous Crustacea*. By A. H. HAWORTH, Esq., Fellow of the Linnæan and Horticultural Societies of London, and of the Imperial Natural History Society of Moscow, &c. &c.

[Continued from p. 106.]

To the Editor of the *Philosophical Magazine and Journal*.

Sir,

HEREUNDER I transmit you the promised continuation of my new binary arrangement of crustaceous animals, including the great branch MACRURA; which, if you could print in the manner of my first and second tables, would much better display the horizontal analogies and affinities than my last or third table can; the *first* articles of every dichotomy in any given group having ever the *least* affinity to each other, and the last articles the *most*. Wherefore the said first articles (as animal—vegetable) are often merely *analogies* (in point of relationship to each other); but these insensibly, as we go down the table and arrive at the *genera*, lessen and blend into the closest *affinities*. But I allow that the mode in which you have printed my last or third table shows more advantageously to a mere reader, the current *location*, or natural distribution of the *genera*; which, notwithstanding what is in modern, not old times, supposed to the contrary, I now believe to be *a continuous one*, that is unravelable in the way of a straight line; but arising dichotomously from one root (which I have termed Matter) and proceeding in a repetitely double, and, in point of magnitude or quantity, unequal series; resembling as it were an inverted branching and exuberant tree, whose foliage and flowers may be compared to our artificial genera, and natural, and therefore permanent species.

As soon as I can procure some books which must be consulted before I can proceed much further with this business, you shall have the requisite continuations; and in the mean time

I remain, sir, yours, &c.

Queen's Elm, Chelsea, March 1825.

A. H. HAWORTH.

Macrura, (continued).

