That theorem remains the property of students whose approach is more subtle than "probability considerations". The only use of the above remarks is to satisfy those who feel that the failure of the probability argument needs some elucidation, by showing how the factors do indeed tend to "avoid one another". I am grateful to Lord Cherwell for directing the attention of readers of NATURE to this question, and hope that he will find this answer satisfactory.

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[1] NATURE, **148**, 436 (1941).
[2] Hardy and Littlewood, *Acta Mathematica*, **44**, 36–37 (1923), especially footnote 4, p. 37.

I AM grateful to Prof. Furry for his sympathy with the outlook of a mere physicist and for the light he has thrown upon this matter. Prof. E. M. Wright, some months ago, sent me privately a proof on somewhat similar lines that the probabilities could not be independent for primes greater than $n^{0.76}$. Prof. Furry has carried the process a step further and shown the degree of divergence.

The mode of attack is not unlike one which I had pursued earlier without success. If ε is small compared with n, there seems no apparent reason why the density of composites containing prime factors less than n should not be the same in the neighbourhood of $n^2 + \varepsilon$ as it is in the neighbourhood of n^2. But in the neighbourhood of $n^2 + \varepsilon$, over and above the composites whose smallest prime factors are less than n, we must take account of the composites whose smallest prime factors lie between $\sqrt{n^2}$ and $\sqrt{n^2 + \varepsilon}$. Pursuing this line of thought, the following equation for the number of primes in the neighbourhood of z seems to emerge :

$$f'(z)_{z=n^2} = -\left(\frac{f(z)}{2z}\right)^2_{z=n}.$$

At first sight this seems promising since it is obviously satisfied by $f(z) = \frac{1}{\log z}$. But unfortunately it is also satisfied by the expression $f(z) = \frac{a}{z^{a/4}}$ where a may have any value, and I have not so far succeeded in finding any simple argument which excludes solutions of this type.

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Relationships of some Primitive Tetrapods

IN the final draft of an earlier letter[1], the occurrence of Diadectes in the late Stephanian was omitted by mistake. A misprint also needs correction, the index to reference 7 (par. 5, line 8) should follow "Moodie" (same line).

The opening sentence of par. 4 requires further comment. A somewhat similar structure is found in the Lower Carboniferous (Viséan) Otocratia, from the Burdie-house Limestone of Midlothian[2]. This skull has the otic notch nearly closed, and with one exception the skull-pattern (so far as it is known) is remarkably similar to that of Microbrachids and primitive Captorhinomorphs. The exception is the larger size of the postparietals, which exclude the parietals from contact with the tabulars. The structure of the homologous region in Osteolepids, Elpistostege, Ichthyostegids and most Stegocephalia is similar and undoubtedly represents the primitive condition. In Anthracosaurs, Microbrachids and early reptiles the postparietals are smaller, and the parietals and tabulars meet; in these forms the posterior part of the skull shows great shortening. It is therefore possible to regard the difference in structure between Microbrachids and Otocratia as due to increasing specialization of the former, for which Otocratia could thus provide a suitable morphological ancestry. In these forms the broad contact of the parietal and postorbital separates the supratemporal from the postfrontal, there is no separate intertemporal, and the orbits lie in front of the middle of the skull.

Otocratia is remarkably similar in skull-pattern to the Ichthyostegids and Elpistostege, except that its otic notch is obliterated by downward rotation of the tabular. The structure in Otocratia regarded by Watson as an internal nostril is too anteromesially placed, and appears to be the anterior palatal vacuity, bridged (as in some Osteolepids) by a strong median bar from the premaxillaries. The "advanced" features noted by Watson in this genus are found also in Ichthyostegids[3], and form indeed a very sharp contrast to early Embolomeres. I regard Otocratia as probably derived from Ichthyostegids. Its structure is suitable for the morphological ancestry of the Dinantian Adelospondyls described by Watson[2].

It is noteworthy that the earliest-known Embolomerous types (Loxommoids and Anthracosaurs) come from strata of Namurian age, while Otocratia, the Adelospondyls just mentioned and an undetermined "Lepospondyl"[2] are of late Dinantian (Viséan) age; the last-named is the earliest known 'Amphibian' skeleton except the Ichthyostegids. The vertebræ of these earliest forms have large centra and small or absent intercentra, as in Microbrachids and Captorhinomorphs. Currently accepted views on vertebral evolution seem to require adjustment.

I suggest tentatively that the Ichthyostegids and Otocratia, which are quite distinct from the commoner Labyrinthodont groups, are early members of a group of primitive Tetrapods which gave rise to the typical Microsauria and to the Diadectomorph and Captorhinomorph reptiles. I hope to discuss the implications of these observations and suggestions elsewhere.

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[1] Westoll, T. S., NATURE, **149**, 667 (1942).
[2] Watson, D. M. S., *Palaeont. Hungar.*, **1**, 221 (1926).
[3] Säve-Söderbergh, G., *Medd. Grönland*, **94**, Nr. 7 (1932).

Narcotic for Marine Invertebrates

THE following method is cheap and simple, and gives excellent results with such soft-bodied marine animals as have been tried (Polychætes, Doris, Priapulus, Nemertines, Ascidians). Make up 80 gm. of crystalline magnesium chloride in a litre of tap water. Immerse the animals in it. In one to four hours they will be relaxed and expanded. Add strong formalin to the magnesium solution; when they are dead, transfer to any desired fixative or preservative.

The solution is isotonic with sea-water, has apparently no irritating effects, and appears to be better and easier to use than menthol, cocaine, etc. In