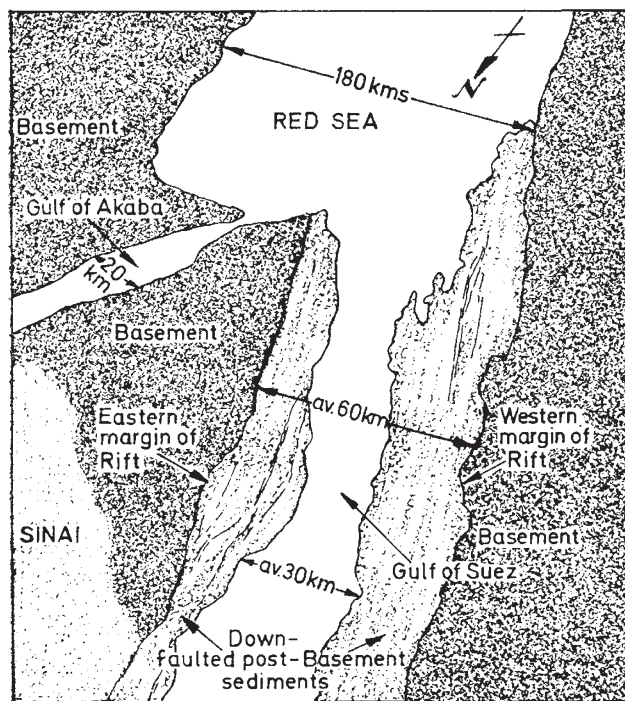


Suez Rift

SIR,—McKenzie *et al.*¹ have recently claimed that an extension has taken place across the Gulf of Suez rift, due to continental separation, of 60 to 90 km. As Freund² has rightly pointed out, this is an impossible figure because the average width of the rift in this region does not exceed 60 km; therefore he would estimate a maximum extension of 25 to 30 km. But even this amount is widely in excess of the evidence established by field investigation.



The accompanying figure is a sketch of part of a space-craft photograph which delineates the rift boundaries with great clarity. The camera was pointing towards the south-east. The photograph illustrates, in the Red Sea region, that the waters occupy the total width of the rift valley, about 180 km, up to the marginal faults on either side. The same is true of the Gulf of Akaba, though the latter rift is only 20 km wide. However, the Gulf of Suez occupies only the central part of the graben which Hume³ described as the Clysmic rift. The land-strip on either side of the Gulf of Suez, within the Clysmic rift, consists of sediments of Palaeozoic, Mesozoic and Tertiary age, in which the structural details are admirably displayed. These sediments have been subjected to intensive block-faulting movements.

I have recorded the details of this faulting as they occur within the eastern (Sinai) land strip. It is very unlikely that extension across this region, due to the downthrowing movements of the highly dipping normal faults, can exceed 2 to 3 km. The downthrows of the faults within the western land strip could also account for an extension of a further 2 to 3 km. Similarly, the extension across the central part of the Clysmic rift, that underlying the Gulf of Suez, is probably of the same order. Moreover, the evidence, on land, for lateral extension within the Clysmic rift, due to intrusion of dykes, is almost negligible—a few tens of metres. Nor do geophysical data provide evidence for any significant dyke injection beneath the Gulf of Suez, as is known to occur in the central and southern regions of the Red Sea. In any case, igneous activity in the Clysmic rift ceased at the end of Oligocene times.

The geological evidence therefore would support an extension across the Clysmic rift up to perhaps 9 km, but this is quite incompatible with the proposition put forward by McKenzie *et al.*, or indeed by Freund. This extension, which reaches a maximum towards the southern end of the Clysmic rift, must gradually become reduced to zero in the north where, in the latitude of the Mediterranean, the Clysmic rift faults die out. Finally, it is a moot point whether this extension represents crustal separation or whether it may not have been a simple movement of foundering in order to take up the stretch imposed by the arching of the crust across the region or during the initiation of Clysmic rift movements.

Yours faithfully,

D. A. ROBSON

Department of Zoology,
University of Newcastle upon Tyne.

¹ McKenzie, P. D., Davies, D., and Molnar, P., *Nature*, 226, 243 (1970).

² Freund, R., *Nature*, 228, 453 (1970).

³ Hume, W. F., *Quart. J. Geol. Soc. Lond.*, 77 (1921).

Filter Efficiency

SIR,—We feel it our duty to draw to your attention and to contradict what we consider to be a dangerous statement in the leader on the Pirbright outbreak of foot-and-mouth disease (*Nature*, 228, 403; 1970) in which the writer states unequivocally, "but it is well known that no biological filter can be more than 99.9 per cent efficient . . .".

This could not be further from the truth. To cite the encyclopaedic literature on filter physics and testing is not possible in a short letter, and it must suffice to point out that without filters of 100 per cent efficiency the rearing of germ-free animals and the success of many large scale tissue culture and fermentation processes would be difficult, if not impossible, and furthermore, many other techniques, both microbiological and even surgical, would be extremely hazardous.

Filters providing a degree of sterility which for practical purposes can be regarded as total are in everyday use, are simple to construct, and readily available commercially.

Yours faithfully,

J. S. PATERSON

Superintendent,
Allington Farm,
Porton.

R. G. DORMAN

Physics Division,
CDE, Porton.

H. M. DARLOW

Head, Hygiene Section,
MRE, Porton.

R. COOK

Head, Technical Services,
MRE, Porton.

SIR,—We would agree that your editorial statement "that no biological filter can be more than 99.9 per cent efficient" might be misinterpreted.

The problem at Pirbright is to filter large quantities of air from the laboratories and animal accommodation. The filters used are commercially available and their efficiency is quoted as 99.99 per cent on the sodium flame test procedure. Tests on the filter material used¹ indicated that for filtration of aerosols of the virus of foot-and-mouth disease the efficiency was 99.99 per cent or greater. The filters are arranged so that outgoing air must pass through two in series.

We therefore consider that our filter installations give a degree of sterility which for practical purposes can be regarded as total. We still would hesitate to describe it as 100 per cent!

Yours faithfully,

J. B. BROOKSBY
R. F. SELLERS
W. BRUCE

Animal Virus Research Institute,
Pirbright,
Woking,
Surrey.

¹ Thorne, H. V., and Burrows, T. M., *J. Hyg.*, 58 409 (1960).

Singular Mistake

SIR,—Although the *Shorter Oxford English Dictionary* gives the word *nare* ("now only archaic"), anyone who uses it as the singular of *nares* in a scientific communication (*Nature*, 228, 873; 1970) deserves a kick on each *natis*—or both *nates*.

Yours faithfully,

L. HARRISON MATTHEWS

The Old Rectory,
Stansfield, Sudbury,
Suffolk.

Announcements

University News

Professor R. W. G. Hunt, Kodak Research Laboratories, has been reappointed visiting professor in the Department of Ophthalmic Optics at the **City University**.

Dr P. J. Lachmann has been appointed to the chair of immunology at the Royal Postgraduate Medical School, **University of London**; **Dr W. Plowright** has been appointed to the chair of veterinary microbiology and parasitology tenable at the Royal Veterinary College, and **Dr J. A. S. Smith** has been appointed to the chair of chemistry tenable at Queen Elizabeth College. The title of professor of computer systems has been conferred on **Dr P. T. Kirstein** in respect of his post at the Institute of Computer Science.

Professor P. W. Richards, University College of North Wales, has been appointed Royal Society visiting professor to the Department of Botany, Fourah Bay College, **University of Sierra Leone**.

Appointments

Mr Frank Horne, who recently retired as director of the **National Institute of Agricultural Botany**, has been elected a vice-president of the institute.

Dr Julius H. Comroe, director of the Cardiovascular Research Institute, University of California, San Francisco, has been appointed to the **National Advisory Heart and Lung Council of the US National Heart and Lung Institute**.

Major-General James W. Humphreys has been appointed director of life sciences in the Office of Manned Space Flight, **US National Aeronautics and Space Administration Headquarters**. This new post entails responsibility for all NASA activities in the life sciences.

Dr Sydney Jones, member for engineering and research of the British Railways Board, has been elected chairman of council of the **Sira Institute**, in succession to **Mr William Storey** who has retired. This will be Dr Jones's second term of office as chairman.

Miscellaneous

Miss Peggy Hodges, who is responsible for guided weapon simulation and systems studies at the Stanmore establishment of Marconi Space and Defence Systems, has won the **1970 Whitney Straight award** for her

contributions to guided weapon and avionics technology. The award consists of a bronze sculpture and not less than £200.

Applications are invited by the council of the Institution of Electrical Engineers for the **1971 Karl Heinz Gyr and Heinrich Landis** commemorative prize. The prize will be awarded for an outstanding contribution to the advancement of electrical or electronic science or engineering, and is intended by the donors to help the winner to further his knowledge and experience in his field of study. Further information can be obtained from the Secretary, Institution of Electrical Engineers, Savoy Place, London WC2R 0BL.

ERRATUM. In the article "Differential Inhibition of Red Cell Carbonic Anhydrase Isozymes in Hyperthyroidism" on page 1197 of this issue of *Nature*, please ignore Table 1 and all the figures, which were included as a result of an editorial error. Table 2 should be regarded as Table 1.

ERRATUM. In the article entitled "Drug-induced Release of ³H-Norepinephrine and ³H-Serotonin from Brain Slices" by K. Y. Ng, T. N. Chase and I. J. Kopin (*Nature*, 228, 468; 1970), line 1 of the penultimate paragraph should read "The net efflux of labelled monoamines . . .". The sentence beginning on line 18 of the same paragraph should read "The direct releasing action of amphetamine . . .". The first sentence of the final paragraph should read "It is likely that exogenous norepinephrine and serotonin enter the relatively abundant dopaminergic terminals in striatal tissue . . .".

International Meetings

January 7–8, **Chemical Society Molecular Beam Kinetics Group Meeting**, Abingdon (Dr A. R. Burgess, Department of Chemical Engineering, University College London, Torrington Place, London WC1E 7JE).

January 28–February 2, **Asian Congress of Nutrition**, Hyderabad (Dr P. G. Tulpule, National Institute of Nutrition, Hyderabad 7, India).

March 16–17, **Computers in Medicine**, Blackburn (Dr J. Rose, College of Technology, Blackburn BB21 LH).

March 22–April 2, **Circuit Theory**, Bangor (Secretary, Institution of Electrical Engineers, Savoy Place, London WC2R 0BL).