

of different types among randomly selected individuals in the general population.

Court Brown was among the first to appreciate the importance of applying the techniques for chromosome analysis to population surveys, and it is in this field that he made his own special contribution. He saw that it would be necessary to determine the incidence of chromosomal abnormalities both in the newborn and in the general adult population in order to assess the significance of the findings obtained in selected groups, such as the mentally retarded or disturbed, the congenitally handicapped, the infertile or groups of people persistently exposed to particular external hazards such as low doses of radiation. He also saw that the study of individuals with specific types of chromosomal aberration, ascertained through such population surveys, would open up new possibilities in medicine and in human genetics.

To translate these ideas into practice was a formidable undertaking, and it is a remarkable tribute to his powers as an organizer of such multidisciplinary research, and his insight into its fundamental significance, that so much was achieved in just a few years. A great deal has still to be published in detail, but the principal findings are presented and critically discussed in the short monograph *Chromosome Studies in Adults* (Cambridge University Press, 1966) and in a valuable review just published in the *British Medical Bulletin* (25, No. 1; 1969). His ideas on the medical and biological significance of the work are ably presented in his book *Human Population Cytogenetics* (North-Holland Press, 1967).

Court Brown was very conscious that the time consuming and laborious nature of chromosome analysis by direct microscopy imposed a severe restriction on the numbers of individuals who could be studied in such investigations. He concluded that the speed of advance would be much increased if computer aided techniques for the automatic counting and analysing of chromosomes in cells could be developed. With characteristic enthusiasm a great deal of his energy in the past three years was devoted to getting a research programme started in his unit to solve this problem. Much progress has already been made, and it is a tragedy that he will not be able to see it brought to fruition, or be able to take part in organizing the new and exciting epidemiological studies which its successful development should make feasible.

Human population cytogenetics, although a very recent field of study, has already been shown to have important implications both in medicine and in human biology. To Michael Court Brown must go much of the credit for the emergence of this new subject.

Correspondence

Monsters by Sonar

SIR,—My scientific complacency was utterly shattered by the nature and tone of your News and Views note entitled "Monsters by Sonar" (*Nature*, 220, 1272; 1968). I was particularly shocked by the way mud was thrown in the eyes of two reputable British scientists. The problem of the so-called Loch Ness monster is still a very real one and I was surprised that a famous scientific journal should be willing to dismiss the topic solely on the grounds of the armchair views of one man. Had your writer been given the opportunities that I have had to visit and study Loch Ness and also to interview some of the relatively few people who have seen the so-called "monster", his opinion would probably not be so narrow minded.

There is a very definite problem which still defies a

rational solution and it is in this context that Professor Tucker and Dr Braithwaite's results are particularly interesting. Of course sonar, like all electronics, is open to artefact; but Professor Tucker is presumably also aware of this. Admittedly their results would have been more valuable had calibrations been provided of the kind of reflexion which could be obtained from specified objects—both animate and inanimate—at known ranges and depths; but this does not detract from the considered opinion of both Professor Tucker and Dr Braithwaite that they obtained evidence for some object or objects which moved both horizontally and vertically at speeds of up to 5–10 knots. Whatever the explanation of these particular recordings, they represent a sensible scientific approach to a very real problem and certainly do not merit the sneer with which they appear to have been greeted.

Yours faithfully,

P. F. BAKER

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Cambridge.

Is Botany Dead?

SIR,—In the light of recent correspondence in *Nature*, I cannot resist sending the enclosed letter which, if it does nothing else, will show the botanists that there is nothing new in the criticisms to which their branch of learning is now being subjected, and that the remedies now being suggested were also pointed out almost two centuries ago—by one whom we remember mostly as a zoologist:

The standing objection to botany has always been that it is a pursuit that amuses the fancy and exercises the memory, without improving the mind or advancing any real knowledge; and, where the science is carried no farther than a mere systematic classification, the charge is but too true. But the botanist that is desirous of wiping off this aspersion should be by no means content with a list of names; he should study plants philosophically, should investigate the laws of vegetation, should examine the powers and virtues of efficacious herbs, should promote their cultivation; and graft the gardener, the planter, and the husbandman, on the phytologist. Not that system is by any means to be thrown aside; without system the field of Nature would be a pathless wilderness; but system should be subservient to, not the main object of, pursuit.

[And so I could go on, but the rest of this letter, which I wrote to my friend Daines Barrington some time ago, is already in print for those who might wish to consult it¹. I venture to think that it may be apposite to the discussion in which our botanical colleagues are currently engaged in the columns of your illustrious journal.]

Yours faithfully,

Gilbert White,

Selbourne, June 2nd, 1778.

¹ *The Natural History of Selborne* 1789, and several subsequent editions.

Yours faithfully,

G. FRYER

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