The occasional occurrence of a "tail" in man or of an azygos lobe of the right lung, microcephaly, large canine teeth, the fourth molar, the divided malar bone, the "third trochanter" of the femur, the entepicondylar foramen of the humerus, supernumerary mammae and many other characters have been, and still are, cited as examples of atavism. Yet in every case it can be conclusively shown that such characters are not upon any view to be regarded as reversions to an ancestral condition. Changes in development and in developmental rates resulting in persistence, suppression, reduction, hypertrophy, duplication or multiplication of structures and normal variability, are processes quite adequate to account for the so-called "atavisms" which are commonly cited.

In short, it is more than doubtful whether the concept of atavism has any counterpart in reality; and, I think it will be agreed, that unless the concept can be applied to some demonstrable type of phenomenon, it were better that the term were altogether dropped from the vocabulary of the biologist.

M. F. ASHLEY-MONTAGU
NEW YORK UNIVERSITY

BIOLOGICAL ABSTRACTS HAS GONE TO PRESS

Biological Abstracts has been saved! Funds for Volume 12 are pledged in sufficient amount to guarantee publication.

The first number of Volume 12 went to press on April 19, and will consist mostly of abstracts appearing in the last half of 1937, together with a few from 1938. The second number will follow close on the heels of the first, appearing before June 10, and will consist of 1938 material. It is planned that Number 3 will be a supplement, and will bridge the gap between Volumes 11 and 12. Thereafter publication will be prompt. The indices to Volumes 10 and 11 are likewise provided for. Over one half the index of Volume 10 is already through galley proof.

The budget adopted has been set at the lowest figure consistent with this worthy project. Under it some 15,000 abstracts are planned. A list of journals will be published in an early issue. It is planned to extend the scope of *Biological Abstracts* as subscriptions are added. To insure satisfactory coverage, steps are being taken to secure the appointment of advisers from the various biological organizations having a stake in the enterprise.

The Board of Trustees, taking office as an emergency measure in mid-February with ten months of the fiscal year gone, are deeply grateful for the prompt and generous response given their appeals a month later in SCIENCE and the *Library Journal*. They regret the unfortunate features of the plan under which the present funds have been solicited, and pledge their energy to the liquidation of that plan at the earliest possible moment. The new editor-in-chief, Dr. John E. Flynn, is keenly aware of the problems facing *Biological Abstracts*, and is very eager to do his bit in keeping this journal up to the minute and in making it a more useful one.

Now that publication has been resumed, it is hoped that institutions and individuals will forward their orders at once. This is particularly necessary if they wish to avoid interruption of their files, since the edition must be kept reasonably close to the subscription list. That their institutions are saddled with various subsidies is lamentable, but the Board of Trustees promises relief in another year in the case of *Biological Abstracts*.

The present Board of Trustees has been maintained intact during the current emergency. While the membership has been criticized because of too great concentration in certain states, this has been a distinct advantage when personal consultations were needed. Committees have been appointed, however, to study the problem of a more satisfactory geographical distribution, together with other pertinent problems.

Biological Abstracts is *yours*. Its success depends upon an active interest taken by you and the societies of which you are a member during the coming years. If you do this, a creditable journal can be confidently forecast.

GEORGE W. HUNTER, III, *Chairman*
PAUL R. BURKHOLDER
M. L. RANEY
Executive Committee

QUOTATIONS

SCIENCE AND SOCIETY

THE correspondence shows a remarkable consensus of opinion. Practically all are agreed that some organized body is necessary which shall study the problems, many of them highly controversial, evoked by the impact of science on society, in an objective and rational manner. Such a body must have the closest linkings with the physical and biological sciences, with economics, engineering, psychology, anthropology and sociology. It must provide a platform for free and frank debate; it should conduct its investigations as much by means of research committees and discussions

as by the formal reading of papers; it should endeavor to make its findings plain to the man in the street.

There can be no question as to the need for such work to be undertaken. The present age is deafened by the cries of advertisers of nostrums of all kinds; and those of us who believe that, before all and above all, reason, and conviction by an appeal to reason, are the indispensable bases for any ordered, successful and permanent social advance, can not but be alarmed at the growing tendency to explosions of mass-hysteria. It is only when reason provides the outlook that the emotions may be trusted to control the direction. In a society such as is proposed it is of the first importance that its explorations should be conducted and its conclusions reached in a detached and cool spirit. Coolness does not mean coldbloodedness nor does it connote any hesitation in pursuing the right path once that path is known.

The main problem being one of the interaction of science and social relations, it is clear that, as Professor Ginsberg has put it, "the study of the effects of science on social relations requires not only a knowledge of science, but also of social relations." The problems are, in fact, sociological, and the society which undertakes the task of studying these repercussions must have a very wide field on which to draw. It may be that the ends in view will best be served by the formation of a new society charged with the special task of surveying and interpreting the social relations of science, but before actually constituting such a society, the British Association, itself a pioneer in the attack on some parts of the problem, might be invited to undertake the task.

As some correspondents have pointed out, the annual meeting of the association provides an admirable platform from which to announce progress, but that much more than this is needed: and much more is possible. Already the association is enlarging its activities to meet the changing needs of a changing era. It has initiated, in many of its sections, papers and discussions which touch upon these topics; it has taken part in the jubilee meeting of the Indian Science Congress Association, recently held in Calcutta, thereby establishing an important principle of overseas delegations. At the present moment its general officers are in consultation with their colleagues of the American Association for the Advancement of Science on a scheme for international cooperation such as that association has recently adumbrated. The association possesses sections the work of which touches closely that of a society for the study of social relations, and it is second to none in its experience of the manner of work of research committees. Is it too much to suggest that the association might very well consider the arranging of discussions of these problems to be held in London or elsewhere at regular intervals outside the annual meeting? For the organization of such meetings, and the undertaking of appropriate investigations by research committees, an entirely new department of the association might be constituted. It seems to us that this plan would be preferable to the addition of a new section, or subsection, to deal with the social relations of science.

A new society of the kind contemplated implies much more than an annual report; and if the British Association accepted responsibility for its functions, either by the formation of a new department or otherwise, the present annual report would have to be supplemented by a new periodical publication comparable to the proceedings or journals of other societies, and devoted mainly to the advancement of knowledge of the impact of science on society and of society on science.

It may be that the serious questions of finance and of policy involved will make it too difficult for the association to undertake this work. But in its constitution and outlook it is at least a possible body to undertake such duties, and its long and brilliant traditions are sufficient guarantee that the work, if undertaken, will be carried out in the true spirit of science and of public service. We suggest, therefore, that when a meeting is held to discuss proposals for constituting a body to organize inquiries into the social relations of science and publish the results, the possibility that the association might accept this responsibility should be considered. Even if the association fails to do so, for financial or other reasons, it might in many ways assist the work of any new society which may be formed.—*Nature.*

THE NATIONAL ACADEMY OF SCIENCES. II

ABSTRACTS OF PAPERS

The morphogenetic significance of the tonic-neck-reflex in the early patterning of human behavior: ARNOLD GESELL (introduced by W. R. Miles). The tonic-neck-reflex has been chiefly studied in quadrupeds, as a specific postural reaction in which aversion of the head induces (proprioceptively) an extension of one forelimb and a flexion of the other. Observations at the Yale Clinic of Child Development show that the counterpart of this postural attitude is a prominent and pervasive feature of infant behavior, particularly in the first four weeks of life. The data include (a) dictated observations of the spontaneous supine activity of 26 or more infants at 4, 6, 8, 12, 16 and 20 weeks of age; (b) cinema records of selected infants at these ages; (c) daily observations of one infant in the neonatal period; (d) cinema records