

icised by Mr. Bather is very rare, if not entirely non-existent. In a tolerably active and rather long experience I have never known of an instance of the sort he mentions. Of course, there may be such, but in the lines I am familiar with I have never come across one.

Of far more practical importance to workers are the concealment by Societies of the true date of issue of their publications and the false dates of some well-known periodicals. Glaring instances of this unscientific procedure will occur to everybody. This is an evil which the committee would be generally supported in denouncing. Every issue of a periodical, or, better, every signature, should have the actual date of printing upon it. When this is delayed until a whole volume is printed the possessor of an extract is left in the lurch. The dating would cost nothing to the Societies and would often save the isolated worker hours of weary labor.

WM. H. DALL.

SMITHSONIAN INSTITUTION, December 21, 1898.

LEHMAN AND HANSEN 'ON THE TELEPATHIC PROBLEM.'

TO THE EDITOR OF SCIENCE: Professor Titchener in to-day's SCIENCE assumes that Messrs. Lehman and Hansen have performed a work of definitive demolition in the well-meant article of theirs to which he refers. If he will take the pains to read Professor Sidgwick's criticism of their results in the S. P. R. *Proceedings*, Vol. XII., p. 298, as well as the note to my report of his paper in the *Psychological Review*, Vol. IV., p. 654, he will probably admit that, owing to the fewness of the data which they collected, they entirely failed to prove their point. This leaves the phenomena in dispute still hanging, and awaiting a positive interpretation from other hands.

I think that an exploded document ought not to be left with the last word, even for the sake of 'scientific psychology.' And I must incidentally thank Professor Titchener for his admission that 'aloofness, however authoritative' (which phrase seems to be *style noble* for 'ignorance of the subject, and be d — d to it'), is an attitude which need not be invariably maintained by the 'Scientific,' even towards matters

such as this. I only wish that his admission were a little less apologetic in form.

CAMBRIDGE, MASS., WILLIAM JAMES.  
December 23, 1898.

SCIENTIFIC LITERATURE.

*Footnotes to Evolution.* A series of popular addresses on the evolution of life. By DAVID STARR JORDAN, PH.D., President of Leland Stanford Junior University. With supplementary essays by EDWIN GRANT CONKLIN, PH.D.; FRANK MACE MCFARLAND, PH.D.; JAMES PERRIN SMITH. New York, D. Appleton & Co. 1898. Price, \$1.50.

Although the title of this book does not seem entirely self-explanatory or expressive, the lay reader will gain from a perusal of the volume a clear idea of what evolution means. He will also realize that what has been worked out in the world of animal life applies equally well in the main to man himself. Though man is an animal he is much more, and problems of existence arise in the social, moral and spiritual realms which are quite foreign to the subjects investigated by the zoologist only.

Dr. Jordan himself discusses, in a homely but clear and attractive and at times pithy and telling way, the 'kinship of life,' 'evolution: what it is and what it is not,' 'the elements of organic evolution,' 'the heredity of Richard Roe,' 'the distribution of species,' latitude and vertebræ; finally attacking such subjects as 'the evolution of the mind,' 'degeneration,' 'hereditary inefficiency,' 'the woman of evolution and the woman of pessimism,' 'the stability of truth' and 'the struggle for realities.'

While the facts of organic evolution, or, to use Geddes' term, bionomics, are discussed in an interesting way, we have given us few new facts or views, but current facts, opinions and inferences are presented in a readable form. We should naturally have expected, in the chapter on the distribution of species, to be treated to the discussion of data drawn from a study of the animals of California, for the relation of the local varieties or incipient species to their environment is very striking on the Pacific coast, and could be made very interesting and suggestive to readers not possessing a special knowledge of the matter. To be sure,

the heads of some chipmunks of California, showing distinct species produced through isolation and very well drawn by Mr. W. S. Atkinson, forms the frontispiece, though we have been unable to find any reference to it in the text.

Dr. Jordan's own studies on the relation between latitude and the number of vertebræ contains many interesting facts, but these are not correlated with a number of similar cases of change in structure characterizing local varieties and races, which would throw more light on this attractive subject, though all these cases appear primarily to be due to local or comparatively restricted changes of the environment, and secondarily to isolation.

The chapter on 'the evolution of fossil cephalopoda,' by Dr. Smith, gives the results, some very striking, of long-continued studies on the evolution of these animals, and will be of much value to the specialist in paleontology. It is illustrated by five excellent plates.

The reviewer hardly feels qualified to pass judgment on the sociological chapters, but has enjoyed reading them and thinks that they merit attention, and will undoubtedly secure it from a wide circle of readers. They are all concerned with some of the burning questions of the day. The fancy sketch of 'the heredity of Richard Roe' is very well done. Based on the essays of Galton and others, with studies of his own, our author shows that the same conditions which have resulted in the formation of the English race will apply to such a colonial type as ours, and that in a few centuries "these same conditions will unite to form a 'Brother Jonathan' as definite in qualities and as 'set in his ways' as his ancestor, the traditional 'John Bull.'"

The chapters on 'the evolution of the mind,' 'degeneration,' 'hereditary inefficiency,' 'the woman of evolution and pessimism,' 'the stability of truth' and 'the struggle for realities' contain strong, wholesome thoughts presented in a clear, simple, homely style, which seem to us sound, progressive and most timely. When our race, and our people especially, wake up to and realize the strength and nature of the forces for evil, the tendencies to degeneration, and begin to battle with and overcome these—when that moment arrives, our nation need not fear the negro problem, the pauper phantoms of the

submerged thousands of our cities or the scandalous influence of our boss politicians. Then with the ever-growing strength resulting from long striving and experience in ruling the savage and barbarian elements actually among us, we can reach out and absorb, and perhaps turn to some good use, rather than exterminate, the millions of the barbarous and uncivilized of the Philippines, which have suddenly drifted in upon us as the wreckage of war.

A. S. PACKARD.

*Earth Sculpture or the Origin of Land-forms.* By JAMES GEIKIE. New York, G. P. Putnam's Sons. 1898. Illustrated.

The editors of The Science Series are fortunate in their selection of the author of this volume. Dr. James Geikie, Murchison professor of geology in the University of Edinburgh and author of 'The Great Ice Age,' is one of the ablest and best known geologists in Europe. His wide acquaintance with geological phenomena, his experience as a teacher and his conservatism make him an eminently fit and safe person to follow into a field that has been explored of late years by so many enthusiasts.

We feel thankful, too, that the subject has been treated by a man who concerns himself with the processes and results of earth sculpture, and but little with the names that have of late years been so copiously showered upon them. Dr. Geikie tells us in the preface that he has 'made scant use of those neologisms in which, unfortunately, the recent literature of the subject too much abounds.' A glossary is given at the end of the work for such technical terms as are indispensable.

The volume does not pretend to be a textbook on physiography. Its scope is best indicated by the contents, which are briefly as follows:

Agents of denudation.

Land forms	{	in horizontal strata,
		in gently inclined strata,
		in highly inclined strata,
		in faulted regions,
		due to igneous action.

Rock character and land forms.

Land forms modified by	{	glacial action,
		æolian action,
		underground water.