Rio Grande and the gulf coast are regarded as the edge of a zoological chasm, which dare not be crossed except by the numerous Mexican and West Indian species which are discovered every year in Texas and Florida.

The references to strictly anatomical and biological papers are also most useful, representing a phase of the subject which is usually entirely crowded out in an essentially taxonomic catalogue. If future cataloguers of other groups would profit by this example they could greatly enhance the value of their work without an expenditure of much extra space and labor.

The special references under many of the families and separate genera to special papers relating to such groups will prove a great assistance to the inexperienced worker as well as a convenience to others more versed in the scattered literature of the subject.

The bibliography fills some 68 pages, including all papers of any importance published before January 1, 1904, while an appendix covers the literature of 1904.

As must be the case with any catalogue covering so large a group, a great number of generic and specific names have been reduced to synonymy since the last authoritative list. These have been dealt with in an admirable spirit of conservatism which contrasts sharply with the extravagant overturning of names often indulged in by insect cataloguers. To quote the writer's own words: 'I have been influenced by the feeling that my catalogue must represent the actual condition of classification, not merely my own views.'

It is to be hoped that the catalogue will stimulate the increasing interest in this group. It will certainly be a great aid towards accurate dipterological work in this country.

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SCIENTIFIC JOURNALS AND ARTICLES.

THE June number (volume 11, number 9) of the *Bulletin of the American Mathematical Society* contains: Report of the April meeting of the Society, by F. N. Cole; Report of the April meeting of the Chicago Section, by J. W. Young; 'A general theorem on algebraic numbers,' by L. E. Dickson; 'On the deformation of surfaces of translation,' by L. P. Eisenhart; 'The groups of order 2^m which contain an invariant cyclic subgroup of order 2^{m-2},' by G. A. Miller; 'Galileo and the modern concept of infinity,' by Edward Kasner; 'Notes' and 'New Publications.'

The July number contains: 'A survey of the development of geometric methods,' by M. Gaston Darboux, translated by H. D. Thompson; 'Note on Fermat's numbers,' by J. C. Morehead; 'Simply transitive primitive groups which are simple groups,' by H. L. Rietz; 'Remarks concerning the variation of the length of a curve,' by T. J. Bromwich; Review of Joly's Manual of Quaternions, by J. B. Shaw; Shorter notices of Zeuthen's Geschichte der Mathematik in XVI. und XVII. Jahrhundert, by D. E. Smith, and of Tannery's Introduction à la théorie des fonctions d'une variable, by L. E. Dickson; 'Notes' and 'New Publications'; 'Fourteenth annual list of papers read before the society and subsequently published'; Index of volume 11.

THE July number (volume 6, number 3) of the *Transactions of the American Mathematical Society* contains the following articles:

H. POINCARÉ: 'Sur les lignes géodésiques des surfaces convexes.'

T. J. I'A. BROMWICH: 'The classification of quadrics.'

J. E. WRIGHT: 'On differential invariants.'

L. I. NEIKIRK: 'Groups of order p^m, which contain cyclic subgroups of order p^{m-3}.'

G. A. MILLER: 'On the invariant subgroups of prime index.'

E. W. BROWN: 'On a general method for treating motions and its application to indirect perturbations.'

L. E. DICKSON: 'On hypercomplex number systems.'

J. H. MACLAGAN-WEDDERBURN: 'A theorem on finite algebras.'

J. ROYCE: 'The relation of the principles of logic to the foundations of geometry.'

J. PIERPONT: 'On multiple integrals.'

The American Naturalist for July contains an article on the 'Restoration of the Titano-

there Megacerops,' by R. S. Lull, accompanied by an illustration which differs from others previously made in showing the animal with a short, double nasal horn. This, it is argued, was, like that of the rhinoceros, composed of agglutinated hairs. We have another of the 'Synopses of North American Invertebrates,' this, No. XXI., by W. R. Coe, being devoted to the Nemerteans, part I. W. B. Davis gives the sixth paper on 'Studies of the Plant Cell,' and the balance of the number is devoted to reviews and correspondence.

The American Museum Journal for July is termed the Reptile Number, the major part of its contents consisting of a synopsis of 'The Reptiles of the Vicinity of New York City,' by Raymond L. Ditmars, accompanied by a key and numerous excellent illustrations. The article is issued separately as Guide Leaflet No. 19.

The Zoological Society Bulletin for July is as good as its predecessors. C. William Beebe describes 'The New Bird House' at length, giving a number of fine illustrations of the building and its contents. There is an excellent article on 'Labeling Live Animals' with samples of the labels used at the New York Zoological Park, one on 'Tree Planting at the Zoological Park' and another on 'Our Series of Batrachians.' The illustrations are particularly good.

The Museums Journal of Great Britain for July completes the fourth volume of this valuable publication and includes the index. Its leading articles are 'The New Local Museum in Bad Bielohrad, near Jitschin, Bohemia,' by Anton Fritsch, and 'A System for the Registration of the Contents of Museums,' by L. Wray, of the Perak Museum. The interest and value of the *Journal,* however, lie largely in its numerous brief notes relating to many museums.

DISCUSSION AND CORRESPONDENCE.

THE NEEDS OF SCIENTIFIC MEN.

Much has been said recently about the desirability of offering 'brilliant prizes' to men who 'succeed' in science. In Science of July 7, p. 27, are some fresh remarks on this subject, from the address of President Roosevelt to the alumni of Harvard. The time has come when the worm, with the kind permission of the editor, desires to turn.

I write as an ordinary working naturalist, and on behalf of my kind. We neither expect scintillating 'success,' nor do we look forward to any prizes in the way of highly-paid positions. Our needs are mainly two: (1) adequate time for work and (2) a living wage. These are exactly the things we can not have, in the present state of this country. It is only necessary to make a few inquiries among scientific workers, to find out that very few, even among the most distinguished, can pursue their studies unhindered. A very short time ago I had a conversation with one of the most able naturalists America has ever produced, holding an apparently excellent position, and he explained to me how he was obliged to spend a large part of his time in routine work, because of the lack of adequate assistance. A day or two later I talked to a man who has a most intimate knowledge of a certain group of animals, and has discovered many new facts; but few of his discoveries will ever be put in print, because of the incessant pressure of other duties. These men are not part of the 'great unemployed'; they hold positions most people would envy; and, moreover, they are excellent samples of all the rest.

The difficulty is intimately connected with the other one, that of the living wage. There is no living wage for *research;* research in pure science is at present a parasitic industry, to borrow a term from the economists. Both of the men I have just referred to get their salaries for doing economic work, and whatever they do in pure science is supported and made possible by the other. A still larger body of researchers lives upon the proceeds of teaching, while those who *actually get a living by research* are very, very few. The experiment stations, even, do not disobey the general rule, for the demand for immediate results of economic value is such that the workers are almost obliged, in the majority of cases, to desist from work of a broad and fundamental