described under circulatory organs. Perhaps the author meant only that the excretory organ consists of branching tubes or vessels, and is vascular, according to the etymological, though not to the technical, meaning of the word. Odd, too, is his designation of the ciliated funnels as 'vibratile tags.'

Chapter ii. gives a succinct, well-prepared and instructive history of the literature of the subject. Chapter iii. discusses the classification, and, after reviewing the previous systems, advocates a new one, which is more convenient than its predecessors, but, like them, artificial and arbitrary. The new system may stand for the present, but only as a convenient makeshift, pending the establishment of the permanent and natural classification upon a true morphological basis. Chapter iv. is devoted to sketchy notes on the haunts and habits. It concludes the first part.

The second part is entirely concerned with the monograph proper, and deals with the Flosculariadae and Melicertidae. The British species are figured and described with considerable detail, and several new ones are added. Concerning most of them numerous and valuable observations on the anatomy are also recorded, both in word and picture; for the authors have embodied results from their own original investigations so largely as to give their work importance as a contribution to zoölogical knowledge. The foreign species are also described, and in most cases figures of them are reproduced. It results that an urgent need is well met, for it is about quarter of a century since the last general revision of the rotifers was published in Pritchard's 'Infusoria.'

The plates have the figures on quite a large scale, and are partly colored. The drawings represent characteristic appearances, and are instructive. The lithographer has done his work quite, though hardly very, well. The printing of the text is good, and several fonts are so employed as to essentially facilitate the consultation of the pages.

To still further characterize the work, it must be added that the style is simple, direct, and of a distinctively literary quality. It is pleasant to reflect that most English scientific writers avoid both the pompous prolixity of the French and the uncouth cumbrousness of the Germans.

The morphologist will miss much from Hudson and Gosse's treatise, for it is essentially descriptive even when it touches upon anatomical matters. We have found no indication that the authors have considered the affinities of rotifers, nor the remarkable demonstration by Hatschek of the fact that they are the living representatives of the ancestral form common to worms, mollusks, and

bryozoans, — the ancestral form which is still preserved to us in veligers, Lovèn's larvae, etc. There can be little question that nearly all bilateral animals, except the Echinodermata, are derived from rotifer-like ancestors. It is this conclusion which renders the investigation of the wheel animalcules so important at present, and which causes regret that Mr. Hudson does not apparently include the morphological significance of the class within his range of study. C. S. MINOT.

## PROPER NAMES.

THE subject of proper names, on which we have an extended scientific literature, has so far not had the good fortune to fall into the hands of a writer possessed of both philological training and the talent for making his subject popular. The author of the present work disclaims all pretensions to have produced a philological treatise : indeed, the specialist would very soon remark, that, for such a task, Dr. Kleinpaul is hardly well enough versed in the principles of the modern school of philologians, if he makes such observations as this one : "Es fragt sich nur ob sosor ein t eingebüsst oder *schwester* ein t eingeschoben hat" (p. 51). Sosor (later soror) cannot have lost a t, because st is about the most persistent combination of consonants to be found anywhere, and the t is never lost in Latin.

Leaving out of the account a number of 'philological' excursions of this character, which the author might have very well dispensed with, as they have little or no bearing upon the subject, we must admit that Dr. Kleinpaul has produced an extremely readable book, based in its details, in the main, upon the latest and best authorities on etymology, with the exception of a few words where the author adheres to antiquated derivations (cf. daughter); while the general treatment and classification of the subject-matter are decidedly interesting and original. The book is not, like some others of similar pretensions, merely a dictionary of curious names, like the puritan What-ever-may-contrive-those-which-are-to-youcontrarious-praise-God Pimpleton, or the aristo cratic Von-der-Decken - vom - Himmelreich - zum-Kuhstall, although such are also treated of in their proper places; but it is an attempt at a logical, not a philological, classification of proper names according to their origin; and while, of course, the list of names must necessarily be incomplete, it seems that the author has overlooked no important source from which names for in-

Menschen- und völkernamen. Etymologische streifzüge auf dem gebiete der eigennamen. Von Rudolf Kleinfaul. Leipzig, Reissner, 1885. 8°. dividuals, families, or peoples, are drawn, — from favorite national dishes, like Jack Pudding for an Englishman, and Käsekrämer for a Swiss, to the cardinal virtues, like the Puritan Faith and Charity; from bodily peculiarities, like Oedipus ('swollen foot') and Colfax ('black hair'), to offices and dignities, like Schulze and Richter; from calendar-terms, like Augustus and Robinson Crusoe's Friday, to meteorological conditions, like Storm and Schneidewind; from trades and occupations, like Smith and Taylor, to articles of dress, like Caligula and Quijote; from oaths, like Jasomirgott (*ja*, so mir Gott sc. helfe), to kind parental wishes, like Fürchtegott and Bleibtreu.

These principles of forming proper names are classified and grouped in logical sequence, and they are considered in their proper relations to the growth of human society. We wish to take issue with the author upon the principle laid down in the introduction; viz., that the first source of proper names is to be found in the limitation of general terms. Thus a primitive tribe, separated from other people, would call the only river in the vicinity of their domicile 'the river,' but, on becoming acquainted with other rivers, would apply distinguishing epithets to their particular river, calling it, for example, the Red River, thus forming a proper name. There seems a certain lack of logic in this reasoning, because, as long as a people know only one river, the term 'the river' is really a proper name, and it only ceases to be one when the people begin to apply the same word to all objects of the same kind. Thus it would be more correct to say that proper names are the starting-point; that they afterwards become generic terms by being applied to other objects of the same kind; and that, as necessity arises, new proper names are formed from them by the addition of distinguishing epithets.

The strength of the book lies in the fact that not only odd and rare names are taken into the account, on the origin of which we necessarily reflect when we meet them, but the origin of the most common every-day names has received a philosophical treatment. This strength of the book is also its weakness. The author, forgetting that he was not to give us a dictionary, has not always confined himself to mentioning a few characteristic examples, but has given us, in many cases, all the instances that have come under his observation, thereby increasing the bulk of his work without making it sufficiently complete to be used as a work of reference. The various tables, especially those at the end of the work, which show to what extent certain principles of creating proper names prevail among different nations, are unique and interesting. The

idea deserves to be carried out more fully in a future edition.

The book will recommend itself to English readers by the clearness and unaffected simplicity of its style, which contrasts very favorably with the style of many German works on related subjects.

## KING OF THE BELGIANS' PRIZE.

A PRIZE of 25,000 francs, or \$5,000, is offered every year by Leopold II., the king of the Belgians, we learn from the Journal of the Society of arts, for the best essay on some predetermined subject tending to advance the well-being of mankind. The competition is alternately restricted to Belgians, and thrown open to the world, being settled by an international jury. The subject of this year's competition, open to the whole world, was 'The best means of improving sandy coasts; and the prize has been awarded by an international jury, including some of the most eminent English and French engineers, to M. De Mey, engineer of ponts et chaussées, Bruges, against fiftynine competitors. This is only the second time that the international prize has been awarded; that in 1880, the year that the prize was instituted, having been adjudged to M. A. Wauters, archivist to the Brussels municipality, for his 'History of the origin of communal franchise in Belgium.' The subject for the essay at the next international competition is 'The progress of electricity applied to motive power and illumination, its applications and economical advantages.' The essays for competition, which must be written in French, or translated into that language, are to be sent before the 1st of January, 1889, to the minister of agriculture, industry, and public works, from whom the conditions of the competition may be obtained.

THE Haager society for the defence of the Christian religion has offered a prize of 400 Holland gulden - or medals, if preferred - for the best treatment of the two following subjects : 1°. A history of the application of historical criticism to biblical study, in order to establish a position which shall, if possible, avoid both dogmatism and scepticism; 2°. A biblical apologetic, or a comparison and estimate of the manner in which religion is unfolded and defended in the various books of the Bible. The competing essays must be signed with a motto, and forwarded, together with a sealed envelope indorsed with the motto and giving the name of the author, to Prof. A. Kusnen at Leyden before the 14th of December, 1886. The essays may be written in Latin, German (with Latin letters), French, or Dutch.