generally sound view of our provision for education to interested foreigners; and to our own students of education in this country, whether superintendents, principals, teachers or university students, it is a store-house of information; at the same time it suggests our many and complex educational problems vividly, and it shows their intimate relation to the other problems of our national life. Its great value to all students of our social and educational problems is indisputable, both as a book of reference and as a foundation for further study.

PAUL H. HANUS.

HARVARD UNIVERSITY.

Catalogue of the Lepidoptera Phalænæ in the British Museum. Vol. II., Arctiidæ (part). By Sir George F. Hampson, Bart.

This volume is similar to Volume I., issued in 1898, and which treated of the family Syntomidæ. It contains the same advantages of practicable keys to genera and species, being simply invaluable to the working entomologist.

The title is misleading, as the work is really a monograph of the groups treated, embracing the known fauna of the entire world, not simply a catalogue of the species represented in the collection of the British Museum, though it may be noted that this collection possesses examples of 77 per cent. of the species described. Each genus and species is described briefly, but characteristically.

The volume contains the subfamilies Nolinæ and Lithosiinæ of the Arctiidæ, as classified by the author. These groups would seem to be more properly of family rank, especially the Nolinæ, which, on larval and pupal characters, show a separate origin from a low Tineid type to that of the Lithosiinæ, which are themselves a true derivative of the Arctiinæ and properly classified here. The larval characters of these groups are, in fact, well marked, though not clearly brought out in the volume before us.

On page 256 we note a curious error, where Seirarctia bolteri Edw. is given as a synonym of Protosia terminalis Walk., whereas it is really the same as Halisidota ambigua Streck., belonging in the Arctiinæ.

There are a number of curious modifications of structure clearly brought out, such as the antennæ of Chamaita, the hind wings of Boenasa and the larva of *Nola argentalis*; but for the details of these we must refer to the book itself.

HARRISON G. DYAR.

DISCUSSION AND CORRESPONDENCE. THE PSYCHOLOGY OF PITY.

TO THE EDITOR OF SCIENCE: The interesting study of Pity in the July American Journal of Psychology suggests some further considerations. In the first place pity as grief for another's pain is not sufficiently set off from mere sympathy, Mitleid, in the literal sense as partaking of another's pain by direct contagion. All kinds of emotions are contagious, and in the case of fear we denote it by a special name, panic. But it is plain that panic is not pity for fear, but really hinders it; and in general the mere partaking an emotion or feeling interferes so far with emotion for emotion, such as pity. Emotion by contagion adds no new psychic quality, as panic fear is simple fear; but pity is a new specific reaction, and not a mere communication. In contagious painful feeling we seek to suppress the cause; but pity moves us to seek the sufferer, to relieve him not for our own sake, but for his sake. Pity as altruistic grief has thus a quality of its own, as has altruistic joy as distinguished from contagious joy.

Again, this study scarcely notes whether animals pity, and how far pity plays a part in the general struggle of existence as between competitors and as between the hunters and hunted. We judge it likely that the biological origin of pity in its general form is the perversion of parental sympathy in the predaceous animals by the prey as a last resort, the prey thus by cunning circumventing the stronger. The occasional adoption by lions and other ferocious animals in menageries of small beasts offered them as food suggests this, and a closer study of beasts in their natural habitat may show some indications of pity-inspiring as a sub-human method in life and death issues. Certain it is that animals sometimes consciously or unconsciously take advantage of the human

hunter's pity. Thus Carstensen in his 'Two Summers in Greenland' gives an instance of an Eskimo hunter who was so affected by the sad appealing eyes of the seals as he was about to despatch them that he was unable to shoot, and was obliged to give up hunting to the detriment of his own family. Monkeys and giraffes often escape human hunters through the pity their actions inspire when driven to extremity, as all readers of sporting books will recall. Hough reports that even the bear when cornered and completely at the mercy of the hunter sometimes exhibits a pitiful submission and despair.

A third point which deserves more considertion is whether, as the authors represent, the literature of pathos is preferred by mankind in general to that of joy (p. 581). Certainly humorous and comic papers abound, and most news sheets and general periodicals have a section devoted to wit and humor, whereas there are no journals or portions thereof devoted to Most novel readers prefer, I think, pathos. the tale where everything turns out right in the The vast vogue of farce and burlesque on the stage is another evidence of popular With the modern development of humor especially with the Anglo-Saxon races, much annoyance and suffering that would once have been pitiable in ourselves and others, is merely laughable. On the whole the present tendency seems to be to restrict the field of pity and to intensify and rationalize it in that field.

The pleasure of pity is little referred to, but the survival theory is mentioned: "It seems as though our race had developed modern civilization in which the leisure field is so vastly widened and the pain field so greatly reduced, too suddenly, and that our nervous system is not yet wonted to so much ease and luxury and had therefore to hark back to play over the old litany of sorrow and pain in the falsetto way of the stage novel and poem." But certainly the primary and main pleasure in pity is that it emphasizes power of protector over protégé, and the secondary source is in seeing the desired relief effected. Pity which is in no wise objective and effective, but solely subjective indulgence—e. g., pleasure in the tragic poem is like other emotion for its own sake, an art sphere, a late severance of emotion and action, and so while resting upon the past is not to be described as survival, but as the progressive development of experience for its own sake. Thus literature and music idealize pity into pure and subtle forms, and the soul, dissolved in infinite, delicious sadness, experiences the most evanescent and distant development of maternity-paternity.

HIRAM M. STANLEY.

LAKE FOREST, ILL., Sept. 10, 1900.

THE KIEFFER PEAR AND THE SAN JOSÉ SCALE.

In his New Jersey Report for 1897 (p. 484), Dr. J. B. Smith writes: "A curious fact was emphasized this year; in an orchard of Kieffer trees, when once it becomes infested [with San José scale], the scales flourish as well as anywhere, and the trees become as completely incrusted as any other variety. But where Kieffer is mixed with other varieties it remains almost exempt, even where neighboring trees are badly infested. This was noticed several times, and Le Conte seems almost less troubled than Kieffer."

In the Yearbook of the Department of Agriculture for 1897 (p. 415), Messrs. Swingle and Webber write: "The Kieffer and Le Conte pears * * * are almost certainly hybrids between the Chinese sand pear (Pyrus sinensis) and the common European pear (P. communis), since both were grown from seeds of the sand pear obtained from trees which were surrounded by various European pears." On the same page they write of "the problem which the French hybridizers have successfully solved in obtaining hybrid grapes combining the resistance to Phylloxera of the American grape and the quality and size of the fruit of the European grape."

I have elsewhere set forth my reasons for believing that the San José scale is a native of eastern Asia, and, if this is the case, does it not appear that our hybridizers have unwittingly obtained a pear combining resistance to the San José scale with the good qualities of the European pears, the fruit of the Chinese sand pear being very poor? The facts, at all events, are strongly suggestive of such a thing,