

American Lepidoptera, which, with its untold wealth of type-specimens and uniques, went to the British Museum, or the Scott collection of the birds of Florida, the result of several years of patient toil on the part of a skilled ornithologist, which found its way into the same mighty storehouse, it can be imagined how quick European science is to profit by this display of parsimony in America.

To recur to the case of the Amazonian explorer, this present apathy can best be shown by quoting from a letter which has just been written to him by one of the gentlemen prominently connected with the American Museum of Natural History in Central Park. After stating that the authorities of the museum appreciate the "advantages to the museum" of the proposition made them, he adds that they "felt it would be impossible to meet its requirements;" yet these requirements were simply that a sum of but a few hundreds of dollars be raised for this purpose. After stating that "the trustees are already overburdened with the load of extra expenditures they have to meet from their own pockets to equip the new exhibition halls," the writer continues, "it would not be practicable for the present to co-operate with you in your very laudable enterprise. . . . Your case, however, is only one out of a score or more of a somewhat similar character which have ended in a similar way—greatly to the disadvantage of our museum."

This is a dark picture, coming as it does from the nation's centre of wealth and business energy, but it is, unfortunately, only a sample of what is of almost monthly occurrence in one or the other of our larger cities. The occasional exception to this, which has made possible the infrequent dispatching of small expeditions, but emphasizes the general rule. Our museums are carried on, made possible, in fact, by the self-denial and enthusiasm of men who, after spending years in attaining a degree of special knowledge fitting them for their scientific positions, are yet willing to accept salaries that would be spurned by book-keepers and country parsons, that they may continue in touch with their chosen walk in life. The idea so prevalent among successful business men that such specialists are as a rule visionaries who are, by the very nature of their long scientific training, unfitted for any other life, is found on the most cursory examination of the facts to be erroneous. The researches of Henry in electricity, of Langley in aërodynamics, of Goode in ichthyology, or Riley in entomology, to take examples from one museum, are none the less practical and of incalculable value to the public, given free to the world as they are, than they would be if they had been protected by ample patents and had yielded their discoverers great financial returns in place of the plaudits of their fellows, best able to appreciate their work, with the which they have been willing to rest content.

It is time that more of our moneyed men were brought to regard this subject in a different light. The country naturally, and with right, looks to New York to set the example in this direction of larger aid for public museums of natural science.

EUGENE MURRAY AARON.

ASTRONOMICAL NOTES.

MR. BERBERICH of Berlin has recently called attention, in a letter to the editor of the *Astronomical Journal*, to some interesting facts connected with the periodic comet discovered by Wolf in 1884. He gives an approximate ephemeris for the return of the comet in 1898, as it will not be greatly perturbed in the interval. From these data it appears that

the comet will be favorably placed for observation during its next return. In following returns the comet will not be so favorably placed for observation. As seven revolutions of the comet are nearly equal to three of Jupiter, a second approach of the two bodies will occur in 1922-23, which will probably deprive us of a view of this comet for a long time, and perhaps forever.

Again the telegraph flashes the announcement of the death of another eminent English astronomer and mathematician, Professor J. C. Adams. To Professor Adams is due the grandest work ever performed for astronomy by the human mind—the discovery by mathematical reasoning of our outermost planet, Neptune. At another time we hope to be able to give the readers of *Science* a sketch of his life.

The Sidereal Messenger, which has for the past ten years been published by Professor W. W. Payne, at Northfield, Minn., has been greatly increased in size, and in the future will contain not only subjects in general astronomy, but will take up the subject of astrophysics. In the January number of the magazine will be found the photographs of prominences upon the sun, obtained by Mr. Hale of Chicago. That gentleman will have charge of the astrophysical department of the magazine.

In No. 253 of the *Astronomical Journal* Professor A. Hall gives the result of his discussion of the observations made of Iapetus, the outer satellite of Saturn, made with the large equatorial at the Naval Observatory. The resulting elements for Iapetus give for the mass of Saturn

$$M = \frac{1}{3485.7 \pm 1.28}.$$

The following is a continuation of the ephemeris of Winnecke's comet, which is now due. The epoch is for Berlin midnight:—

	R.A.			Dec.	
	h.	m.	s.	°	'
Feb. 6	12	47	23	+ 17	0
7		47	55	17	13
8		48	26	17	26
9		48	55	17	39
10		49	23	17	52
11		49	49	18	6
12		50	14	18	21
13		50	37	18	36
14		50	39	18	51
15		51	19	19	6
16		51	38	19	22
17	12	51	55	+ 19	39

G. A. H.

HAINAN.¹

THE great island of Hainan, off the south-eastern coast of China, is but little known to Europeans, although since 1877 there has been a treaty port there. Mr. Parker, the Consul at Kiungchow, the port in question, lately made a short journey in the interior of the island, of which he gives some account in a recent report. He travelled about sixty miles up the Poh-Chung River, to within a mile or two of Pah-hi, which is, at most seasons of the year, considered the limit of navigation for all but the smallest craft. He walked round the walls of Ting-an city, one of the disturbed districts during the recent rebellions, on New Year's Day (Feb. 9); they are just one mile in circuit, and differ little from those of other

¹ From Nature.