

Mr. Huxley slowly and deliberately rose. A slight tall figure, stern and pale, very quiet and very grave, he stood before us and spoke those tremendous words—words which no one seems sure of now, nor, I think, could remember just after they were spoken, for their meaning took away our breath, though it left us in no doubt as to what it was. He was not ashamed of having a monkey for his ancestor; but he would be ashamed to be connected with a man who used great gifts to obscure the truth. No one doubted his meaning, and the effect was tremendous. One lady fainted and had to be carried out; I, for one, jumped out of my seat.

Almost 64 years have elapsed since this repartee. In this interval evolution has become more firmly entrenched in observation, while the opposition seems not to have altered noticeably. One may venture to wonder why Mr. Bryan denies that only his grandmother was a monkey; surely he had at least two grandparents!

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SCIENTIFIC BOOKS

Weather Proverbs and Paradoxes. By W. J. HUMPHREYS. Baltimore, Williams and Wilkins, 1923, pp. viii, 125.

HERE is a volume written by a well-known scholar, dealing with an exceedingly complex subject, explaining the principal phenomena of meteorology in words of one syllable, so to speak, yet without ever using language merely to catch attention. The treatment is elementary, but everywhere clear, dignified and accurate.

The exposition consists of two parts. In the first eighty pages the author explains some of what he calls reasonable and sound proverbs. The remainder of the book is devoted to a number of meteorological principles which are rather strikingly presented as paradoxes, and are explained with a clarity that comes only from a profound understanding of the facts.

At the very start, the reader's curiosity is aroused to learn the source of all these proverbs. Some are quoted from certain authors; some are placed between inverted commas without any name; all the others, most of them in metric form, are presumably expressions of the author. Under the head of "Sky Colors" is an exquisite account of the significance of the red and gray skies of both morning and evening. Incidentally, this section includes very briefly the story of Lord Rayleigh's dynamics of the blue sky and the subject of cloud formation.

The section on tides impresses a layman as being a little farfetched. The tide is a synonym of regularity. Here, however, the word is used to indicate "irregular tides," which would appear to be tides

only in the sense that any *seiche* in a lake is a tide.

The first paradox which reads, "Air pushed north blows east," offers opportunity for explaining, in a most interesting style, the phenomenon of deflection to the right—the fact that any steady wind always blows along the direction of the isobar and not at right angles to it. Another paradox, "To cool air, heat it" serves as text for a discussion of convective equilibrium. In the same manner the existence of that remarkable isothermal region which is only six miles away from any one of us at any time is set forth so simply as to fall well within the comprehension of a first year student in physics.

The curiosity of any intelligent lad is certain to be aroused by the second half of this book; while the first half is more likely to interest the lad's father, who is probably more weather wise. Joseph Henry said that his interest in physics was first awakened by reading Gregory's "Popular lectures on experimental philosophy," (London: 1808), which begins by asking questions such as these:

You throw a stone, or shoot an arrow into the air; why does it not go forward in the line or direction that you give it? Why does it stop at a certain distance and then return to you? . . . On the contrary, why does flame or smoke always mount upward, though no force is used to send them in that direction? And why should not the flame of a candle drop toward the floor when you reverse it, or hold it downward, instead of turning up and ascending into the air? . . . Again you look into a clear well of water and see your own face and figure as if painted there. Why is this? You are told that it is done by reflection of light. But what is reflection of light?

Dr. Humphreys' volume raises dozens of just such queries: they are answered in delightful English and can not fail to stimulate the curiosity of many readers. It is gratifying to notice that the historical development of the various sciences is attracting more and more interest. One can only wish that the author had seen fit to include some remarks concerning the personal history of the men who have established these principles—the knights-errant of meteorology—

The dead but sceptered sovereigns who still rule
Our spirits from their urns.

The book is excellently produced, and is made especially attractive by numerous full page illustrations.

HENRY CREW

CRETACEOUS FISHES OF BRAZIL

UNDER the title of "Peixes Cretaceos do Ceara e Piahy," Dr. David Starr Jordan has written an elaborate account of Cretaceous fishes from the famous locality of Barro do Jardim, from which