

"some years ago we got a very good specimen of a human tail for the museum."

Professor A. H. Schultz, of the Carnegie Institution of Washington (Jl. Washington Academy of Science, June 19, 1925), publishes from the *Scientific American* (1889, p. 296) a photograph of a human being with a tail nine inches long.

So much for a brief statement as to the actual existence of human beings with tails.

The correction I wish to make is as follows: In my book "I Believe in God and in Evolution," I have included in the fourth edition a photograph of an Igorot with a tail, which I vouched for as I understood that it had been photographed by my own grandson, Mr. John Freeman.

A few days ago within a few hours of each other, I received letters from Dr. Aleš Hrdlička, of the division of physical anthropology of the National Museum of the Smithsonian Institution, and Mrs. Ella F. Grove, who a year ago had been doing some work in the Philippines for the National Research Council. Both of these correspondents stated that the Bureau of Science in Manila had shown them the original of this photograph which showed that it was a fake photograph, the tail having been added to the original by a photographer, I suppose as a joke.

On communicating with my grandson I find that I misinterpreted his letter and that he did not photograph this Igorot.

My argument that human tails (of which I have shown there are very many undoubted instances) prove our animal ancestry is not in the least disproved by my having unfortunately used a photograph which further investigation has shown to be a fraud, for there are plenty of genuine tails.

My whole object is to state the truth, and when any statement I have made is proved to be wrong, I wish to be the very first person to disclose the error.

Dr. Hrdlička adds "As to the occurrence of tails of course I am with you in every particular."

W. W. KEEN

## SCIENTIFIC BOOKS

### THE EVOLUTION CONTROVERSY

*Evolution not Irreligious. Some General Aspects of Evolution and its Relations to Religion.* By WALTER C. KRAATZ, Ph.D., assistant professor of biology, University of Akron, Ohio. Published by the author, price 20 cents.

DR. WALTER C. KRAATZ, of Akron, Ohio, sets out to show that "evolution is not irreligious" by "paying respects above all to Nature, for she is the fundamental teacher."

"Nothing is outside the domain of natural law and

the Infinite at the basis of it. There is everywhere change. The Universe is not static in any of its parts." This statement is illustrated by features of cosmic evolution, geological evolution, biological evolution and historic development or evolution in human history, while the finely graded artifacts of stone-age man is but "a pushing back into pre-history and a demonstration of evolution."

Next our author takes up the various features of organic evolution, the present battle ground of attack by enemies of science. Organic evolution is defined by Dr. Kraatz as "gradual development from the simplest primordial matter on earth through modifications or changes to the many diverse sorts or organisms of to-day." The process of descent with modification is again compared with the growth of a tree, the analogies being numerous and striking. The various stages in life are briefly but accurately stated. He concludes that "we are not descended from a monkey or even an ape of any present-day type. Those apes and monkeys we know are living, altered forms. They are our contemporaries, and not in any way possibly in our ancestral lines. Apes and man had a common ancestry. Geologically that was not tremendously long ago . . . it was certainly not more than half a million years ago."

As to varied views of species forming, Dr. Kraatz is non-committal. He omits, however, all mention of isolation with segregation, a condition which acts everywhere along with selection, and without which, so far as we know, neither artificial selection nor natural selection could accomplish permanent results.

The present divergent views as to species forming are largely due to the failure of observers and experimenters to grasp each others' point of view, and to coordinate their results. Truth is always consistent with itself, but facts incompletely understood may seem to point in different directions.

In the third chapter Dr. Kraatz insists that there can be no conflict between the search for objective truth and the emotion or attitude of religion, which rests on no objective facts. The so-called "fundamentals of religion" have no natural or necessary relations to it. Historically they are additions or incrustations devised to promote religious feeling, or to be parasitic upon it. Of either of these we may find plenty of illustrations.

*The Tennessee Evolution Case.* By ROBERT S. KEEBLER, of the Memphis, Tennessee, Bar. Printed by "Friends of Fair Play," Memphis, Tennessee.

ROBERT S. KEEBLER, a leading attorney of Memphis, has taken up arms against the Tennessee law, its origin and its effects, in spirited fashion. He says of the statute itself:

This was no dull, cold, lifeless act of a sort which make the law a dismal science. It flashed lightning and rolled thunder. Hailed by some as a signal triumph if the Christian faith as against the atheistical tendency of science, by others as clear ecclesiastical tyranny and a recrudescence of the Inquisition, and by still others as a triumph of asininity which would defeat its own aim, the law attracted the attention and provoked the opinions of lawyers, scientists, ecclesiastics and teachers throughout the nation.

This discussion from the legal standpoint is noteworthy because the case is clearly stated, and because the Tennessee Bar Association, before which it was read, meeting at Memphis, officially rebuked the author because he "instead of being confined to the legal question discussed a religious issue."

But the point of his discourse lay in the fact that the force of law had been invoked in the interest of opinions claiming to be "religious."

Keebler claims that the "anti-evolutionist law" is unconstitutional on the following grounds:

(1) It violates the sacred duty imposed by the Constitution of the state of Tennessee upon the legislature to cherish science.

(2) It violates our constitutional guaranty of religious freedom.

(3) It violates our constitutional guaranty of intellectual freedom.

(4) It violates the fourteenth amendment of our federal constitution.

(5) In so far as our university is concerned, it violates a solemn contract between the state of Tennessee and the United States of America.

In an eloquent closing paragraph this idea is stressed; "We may know that whatever rubbish of the centuries is penetrated in this irrepressible quest after truth, the essential verities will remain."

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### SACCARDO'S "SYLLOGE FUNGORUM"

WHENEVER the history of botany is passed in review one of the outstanding monuments of patient comprehensive industry will be found always in the classified enumeration of the known fungi of the world, inaugurated and carried as near to completion as the term of a lifetime permitted, by the late Professor P. A. Saccardo, of Padua.

Like the comparable work of Linnaeus, his "Sylloge" seems destined to be continued in a series of supplements and revisions for many years before a successor is launched. As was true of his great Swedish precursor, Saccardo will incur much criticism for the artificiality of a classification suited to the state of knowledge of his time rather than ex-

pressing relationship, that ought never to obscure the value of his organized compendium to other branches of science and particularly to the new science phytopathology of which it forms an essential foundation stone.

After a dozen years, a twenty-third volume of the "Sylloge" has been given out under the authorship of Professor Trotter, of Portici. This constitutes the tenth general supplement to the work—and includes additions to Basidiomycetes in the broad sense which includes rust and smut fungi in this group. To descriptions of these, 950 large octavo pages are devoted; host- and name-indexes adding seventy-six pages more.

A special feature of this volume is a list of eighteen biographic sketches of Saccardo; and an enumeration of 238 publications by this distinguished Italian botanist whose interests were not at all closely limited to the field of mycology.

Tribute is paid by the editor to numerous workers whose studies have contributed to the present knowledge of fungi—grouped by countries; and in addition to the Americans included in this list it is to be noted that the late Professor Farlow, of Harvard University, and Professor Stevens, of the University of Illinois, receive special recognition in the preface.

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### INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

THE Secretary of the International Commission on Zoological Nomenclature has the honor to announce the publication of Opinions 82 to 90 rendered by the International Commission on Zoological Nomenclature by the Smithsonian Institution in Smithsonian Miscellaneous Collections, volume 73, number 3, pages 1 to 40. The summaries read as follows:

Opinion 82. Suspension of Rules for *Musca* Linnaeus, 1758a, Type *M. domestica*.—By authority of the power conferred on the Commission by the 9th International Congress of Zoology to suspend the Règles as applied to any given case where in its judgment the strict application of the Règles will clearly result in greater confusion than uniformity, Article 30 is hereby suspended in the case of *Musca* Linnaeus, 1758, and *Musca domestica* Linnaeus, 1758, is hereby designated as type of *Musca* without prejudice to other cases.

Opinion 83. *Acanthiza pyrrhopygia* Vigors and Horsfield, 1827, versus *Acanthiza pyrrhopygia* Gould, 1848.—The principle of the Rule of Homonyms is that any properly published identical name of later date is "still-born and can not be brought to life." *Acanthiza pyrrhopygia* Vigors and Horsfield, 1827, invalidates *Acanthiza pyrrhopygia* Gould, 1848.

Opinion 84. *Trematode*, *Cestode*, and *Acanthocephala*