

and earlier in age are strata of limestone, useful to man in utilizing the iron. These many layers of rocks were made by nature in the geological era now called by scientists the Carboniferous on account of its coal. Below them there are Devonian and Silurian rocks and earth upon which the town of Dayton itself rests, and out of which spring the strawberries and peaches, the principal products of the region.

In all of these rock layers evidence of prehistoric life can be found. There are spores of the trees that made the coal, calcified remains of trilobites, ancestors of the modern cockroach, fossil tree trunks, and other animal and vegetable remains of a time that antedated man by millions of years.

Is it any wonder that it was Dr. G. W. Rappleyea, superintendent of the Cumberland Iron and Coal Co., who instigated the anti-evolution test case against the young Dayton high school science teacher, Scopes? For in his work of finding iron and coal, he has learned the reliability of the record of the rocks.

Scopes, too, knows how to read the story chronicled in limestone, shale, iron and coal. And it makes him more determined that he shall not be prevented from teaching his eager young pupils the most basic, most interesting and most fundamental facts of nature.

Perhaps, if the question of the reality of evolution arises in the evolution trial set for July 10, it would be well for the judge to have the jury take a walk among the hills and see for itself just how, at one stage in the world's history. Nature slowly and purposefully conducted the building of the earth.

TENNESSEANS READING EVOLUTION BOOKS

The fundamentalist legislator who wrote the anti-evolution law of Tennessee will hardly believe that he has materially helped the dissemination of the scientific facts of evolution.

But there is no question but that the people of Tennessee have learned more about evolution since the national interest in the Scopes case at Dayton, just an hour's train ride from Chattanooga, than they have since Darwin started to study nature.

Evolution has long been unorthodox. Darwin was linked with the devil. Now when evolution is outlawed in the schools, when the law says: "Don't", when an attempt is made to hide the facts, the people start to think for themselves.

The Carnegie Library of Chattanooga, somewhat bulging with good books, has a surprisingly adequate shelf of books on evolution. Before Scopes was arrested for the heinous crime of teaching evolution these books on evolution were consulted only occasionally. Now every book on evolution is in circulation or spoken for. Business men, school children to whom evolution is forbidden fruit, and many others are reading Darwin's "Descent of Man", Osborn's "From The Greeks to Darwin", Huxley's "Essays", and dozens of other books by Conklin, Kellogg, LeConte and other evolutionists. The bookstores report a brisk demand for evolution literature, and one shop handling lowpriced pamphlets has had to reorder the evolution booklets several times. Evolution is taught on the front page of every newspaper. In Nashville, Knoxville and Memphis similar conditions exist.

Thousands are expected to attend the Dayton trial, millions will read the newspaper accounts of the trial and listen over the radio. Prof. Scopes instead of teaching evolution to only a dozen or so of high school boys and girls will have a nation in his classes.

It is important to science, of course, that the Tennessee anti-evolution law be declared unconstitutional, for there can be no adequate teaching of science or medicine with such a ban in force. But in the meanwhile, knowledge of the scientific facts, the best antidote to the anti-evolutionist, is becoming widespread.

DARTMOUTH PROFESSOR SAILS FOR ARCTIC IN SEARCH OF A MISSING LINK

The real missing link in the evolutionary chain according to Professor William Patten, who teaches the Freshman course in evolution at Dartmouth College, is not the immediate progenitor of man, but a much more remote ancestor, which connected the fishes with the earlier invertebrate forms. Professor Patten has long held that the secret of this problem would be found in the oldest fish-like animals known, the Ostracoderms, who made their appearance in the early Paleozoic, long before the first true fishes came into existence. The last representatives of this class died out in the Carboniferous era and their fossil remains are rare and fragmentary.

But Professor Patten has heard of a new find of these fossils on the northwest corner of Spitzbergen, and he is starting as soon as possible to explore the locality for this new evidence of evolution. From the northern point of Norway he will proceed to Spitzbergen, five hundred miles north, and then charter a motor boat to convey him along the coast of the islands.

Professor Patten's motive in undertaking this voyage of exploration may be given in his own words;

"To the biologist, the real 'missing link' in animal evolution is not between man and apes but between vertebrates and invertebrates. For the genesis of practically every great system of organs in man can be traced in various ways without serious question to corresponding organs in the fishes. But there the genetic trail ends.

"Thus there is the greatest difference of opinion as to what class of invertebrates gave rise to the fishes and through them to the higher vertebrates. Many biologists now regard this problem as insoluble. I am not of that opinion. I have worked on various aspects of it for nearly forty years and am convinced that I have found essentially the correct solution. The recent finds in Spitzbergen, judging from the as yet brief preliminary accounts, confirm my prediction in a most striking manner.

"This problem has great practical as well as theoretic possibilities. Its solution would more than double our present perspective of the course and manner of animal evolution. Moreover, three of the oldest, and most important organs of man from a medical standpoint, are the pineal gland, the pituitary organ, and the thyroid. They apparently have essentially the same structure and functions in all the back-boned animals from man down to the fishes. If we can prove that the ancestors of the Ostracoderms and fishes were spider like animals, as I believe we can, the homologues of these mysterious organs can be readily identified in living invertebrates, such as modern scorpions and the horseshoe crab. It would then be possible