

The bones were found on a hill slope bordering a small stream valley. They were embedded in fine-textured, uniform, very fine sandy and silty material of light brown color, without stratification, and entirely free from gravel or coarse gritty materials.

Accompanying the larger fossil bones were a number of jaws, skulls and small bones of small rodent or rodent-like animals, and there was some evidence in teeth marks on some of the rib bones that at least some of these smaller animals were of contemporary date.

A more accurate and exhaustive account of the fossil remains has recently been published by Dr. Bryan.<sup>1</sup>

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### DEFEAT OF ANTI-EVOLUTION IN MINNESOTA

SINCE Minneapolis, Minnesota, is the home of the Reverend W. B. Riley, a leader in anti-evolution agitation and in attempts at legislation against the teaching of evolution in tax-supported schools in many states, a little more than ordinary interest may be felt by scientific men in the failure of the "Riley bill" before the Minnesota legislature that is now in session. This may be especially so because a letter by the Reverend Riley in a leading newspaper here now admits his defeat, but with so much apparent cheerfulness that a person who knows him well may be inclined to wonder as to just what he expected to accomplish by this bill and whether after all his defeat is not more in appearance than in reality.

It may be well for the evolutionists not to be deceived. The bill as it was presented to the legislature is any way more of a gesture or oratorical skirmish than an effectual attack on evolution teaching. Something more serious for Minnesota may lie behind it. In Minnesota, where the function of the university is defined in the constitution of the state, a mere legislative enactment very probably could in no way bind the university as to its educational policy. It is virtually a fourth department of the state and coordinate with the executive, the legislative and the judicial functions.

The State University has little if anything to fear from direct legislation against teaching any subject whatever in Minnesota. Again it is notable that the Riley bill does not aim broadly to forbid the teaching of evolution, but is specifically directed against the

doctrine of the descent of man from animals, as if a particular department of the university is criticised. Against this bill, however, other universities of this state join with the State University in common. Both sides of the controversy thus make a great showing of political strength before the legislature.

Arguments used by either side are not such as are used *pro* and *con* in a scientific debate on the validity of natural science theories of evolution. No scientist as such appears against the bill nor for it. The battle is political when not theologic. Dogmatic assumption and deduction and even gross bigotry are met in kind largely. As a geologist, I could view the whole matter as in the clouds above me. I am spectator only.

Very obviously the Reverend Riley's opponents who do not know him intimately are deceived in him. From occasional contact with him for thirty years, it is not consistent for me to say that there is anything shallow about him. He doubtless has a very deep and serious purpose from which he may not be easily diverted. It may be a very pertinent matter to pause to consider just now as to whether any advantages are losing to the Riley attack.

To the best of my knowledge, the legislature and the governor do not commit themselves in the essential matter in laying aside this bill. Nothing is built up that hinders further agitation. The most sanguine of my friends predict only a lull of a year or two or even four, in Minnesota, whereas a few years ago any such attack at all would have been taken as highly improbable. Anti-evolution may be gaining in public respectability.

As a scientist, I am aware that something new is happening in this controversy about the teaching of evolution in Minnesota's schools. Attack by anti-evolutionists is not new here, however. Attack from the pulpit and otherwise by the Reverend Riley as against individual teachers of sciences began some 20 years ago. An effective method then is to back him off the board in defense of natural science theories of evolution by a plain show of visible evidence in their support. My personal experience is then that he can be a very reasonable and gentlemanly antagonist when faced in that way.

The new thing in the present instance, however, is not only his open attack on whole universities here, but further that the old effective method of meeting him can not be used by anybody. The controversy is gone beyond the field of the natural sciences, dogmatically into theology and politics on both sides. In all this controversy in Minnesota now the science professor is only an innocent bystander, in a sort of a no-man's-land. And, the end is not yet!

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<sup>1</sup> U. S. Geol. Survey, Bull. 790-B, The "Palouse Soil" Problem with an account of Elephant Remains in Wind-Borne Soil on the Columbia Plateau of Washington.