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## THE CONFUSION OF TONGUES<sup>1</sup>

## By Dr. OSCAR RIDDLE

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THE large brood of zoological sciences has filial concern in an event of just 100 years ago. From October, 1835, to the following January—and from weeks in the Galapagos Islands to the arrival of the *Beagle* in New Zealand—the idea of evolution first came clearly into Darwin's mind. Only after a lapse of nearly 25 years of further investigation did Darwin publish (1859) what he termed an "abstract" entitled, "The Origin of Species by Means of Natural Selection, Or the Preservation of Favored Races in the Struggle for Life." If there are such things as ferments in the sphere of ideas this century-old idea must outrank all others—because of its significance to man and because of what it has already done to synthesize, develop and then to split off the many units or

<sup>1</sup> Address of the vice-president, Section F (Zoological Sciences), American Association for the Advancement of Science, St. Louis, January 1, 1936.

branches of biological science. Just now we may witness the result of 100 years of action of this ferment.

It is not my purpose here to discuss either Darwin's work or the notable later developments in which the geneticist has been able to assist and observe the formation of new species. As a preface to the real theme of this hour I nevertheless ask permission to make some use of this intellectual ferment—first considering its fruitful accelerating action in building and splitting off zoological sciences, some of which have become capable of dealing effectively with questions of great intellectual interest which Darwin's own idea of organic evolution touched only in part or by implication only.

We do well to remember that if the many aspects of the living animal body were now less known, if specialization had not proceeded so far, Section F the zoological sciences—would now be the natural