

## EASTERN FAUNA.

*Mellita hexapora*, A. AG.  
*Encope michelini*, AG.  
 „ *emarginata*, AG.  
*Rhyncholampas caribbæarum*,  
 A. AG.  
*Brissus columbaris*, AG.  
*Meoma ventricosa*, LÜTK.  
*Plagionotus pectoralis*, AG.  
*Agassizia excentrica*, A. AG.  
*Mœra atropos*, MICH.

## WESTERN FAUNA.

*Mellita pacifica*, VER.  
*Encope grandis*, AG.  
 „ *micropora*, AG.  
*Rhyncholampas pacificus*, A. AG.  
*Brissus obesus*, VER.  
*Meoma grandis*, GRAY.  
*Plagionotus nobilis*, A. AG.  
*Agassizia scrobiculata*, VAL.  
*Mœra clotho*, MICH.

Supposing species to be constant, this singular chain of resemblances would indicate simply the special creation on the two sides of the Isthmus of two groups of species closely resembling one another, because the circumstances under which they were placed were so very similar; but admitting ‘descent with modification,’ while gladly availing ourselves of the convenient term ‘representation,’ we at once come to the conclusion that these nearly allied ‘representative species’ must have descended from a common stock, and we look for the cause of their divergence. Now on examining the Isthmus of Panama we find that a portion of it consists of cretaceous beds containing fossils undistinguishable from fossils from the cretaceous beds of Europe; the Isthmus must therefore have been raised into dry land in tertiary or post-tertiary times. It is difficult to doubt that the rising of this natural barrier isolated two portions of a shallow-water fauna which have since slightly diverged under slightly different conditions. I quote Alexander Agassiz:—“The question naturally arises, have we not in the different Faunæ on both sides of the Isthmus a standard by which to measure the