sects; or in Insects as in Mammals; although the grand fundamental principle at the basis of the organism is the same in each.

3. Our objector observes again, with like misconception of the subject, that as "the conversion of the front wings into elytra amounts to a decephalization," "instead of classing Hemiptera as inferior to Coleoptera and Orthoptera to Hemiptera, we ought to adopt exactly the opposite arrangement. For Coleoptera have the front wings entirely elytriform, Hemiptera (Heteroptera) only about one-half elytriform, and Orthoptera scarcely or but slightly elytriform. Those groups, therefore, according to Dana's own principle ought to stand, 1, Orthoptera, 2, Hemiptera, 3, Coleoptera, instead of the reverse."

Thus, Mr. Walsh sets up his man of straw, and combats it with great success.

"Dana's own principle," above announced and demolished, is not to be found in any of Dana's own writings. The fact of the fore-wings being coriaceous wholly, in part, or not at all, has no bearing whatever on the question; this is a mere external characteristic, of no dynamical value, like most of the characteristics appealed to by ordinary systematists. I expressly state that the true distinction depends on the *posterior* wings being the main flying-wings; I say, further, that the fore-wings may be used for flying, and still, if the hinder wings are the more powerful, the insects are *metasthenic*, and have the characteristic of the inferior or Coleopteroid division.

The segment of the body bearing the stronger flying organs in these metasthenic species (Coleoptera, Hemiptera, Orthoptera) is one *posterior* to the same in the higher prosthenic species (Hymenopters, &c.); and the fact that the force is consequently, more posterior among the body segments, and among the nervous ganglions, is hence one of direct observation, and not a hypothetical inference. The terms *prosthenic* and *metasthenic* bear the profounder meaning of cephalization in their composition.

There being two sthenic characters of acknowledged value based on the limbs, one on the *wings*, and the other on the *legs*, it is asked, why the former should be made to have the precedence in classification. Simply because they have the precedence *in fact*. The species of the grand division of Coleopters are *throughout metasthenic as regards the wings;* that is, the posterior wings are the only flying wings or, at least, the stronger, in all the species; and this is true also, of the Hemipters and Orthopters: while they are not all metasthenic as regards the legs; for under these groups there are subordinate divisions which include among the species both those that are *prosthenic* and those that are *metasthenic as regards the legs*. The latter distinction is, therefore, as a matter of fact, of limited importance or compre-