

PROMINENT EXAMPLES of the "flat" and the "round" types.

Animal Types

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this connection. Undoubtedly the endocrine glands, and especially the thyroid, pituitary and interstitial glands, are concerned in the production of both the extreme and intermediate types."

The pycnics and the asthenics may be considered as standing at the extreme ends, so to speak, of the scale of classification. In between is a huge group of intermediates that partake in a measure of the characteristics of both. Among the several subdivisions of this group the muscular types have been designated as athletics. He-man high spots of this category are so widely advertised in the sporting pages and the movies that further elucidation would be superfluous.

Stout and Slender Animals

Human pycnics can find their prototypes throughout the whole animal and vegetable kingdom. In dogdom there are bulldog, mastiff and Prince Charles pycnics and many an elon-

gated asthenic among the grey-hounds, wolfhounds and whippets. With birds there are the rounded parrots and finches on one hand and lanceolate cranes, herons and flamingoes on the other. Among animals in general, the giraffe and the armadillo furnish striking examples of the linear and the curved. The snake and the tortoise, the eel and the carp, and the vines and the melon cacti carry out the contrast

among reptiles and fishes and over into the plant family.

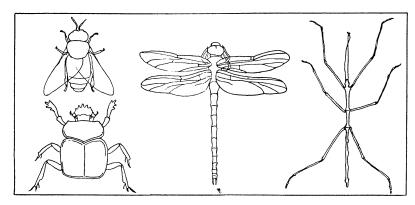
Insects, being most lavishly represented on this terrestrial sphere, furnish particularly plentiful examples of Mutts and Jeffs, Prof. Wheeler points out. Chunky, round pycnic beetles, moths, bugs and caterpillars abound, while thousands of tenuous grasshoppers, mosquitoes and walking-sticks can be met with on any summer day. In the insect world as among humans, however, the intermediate types are numerous, and, adds Prof. Wheeler, "if I designate this group as athletic, the economic entomologists who spend their lives ardently and often unsuccessfully wrestling with them will certainly not object."

Dwarfs and Giants

Prof. Wheeler also calls attention to the exceptional types among insects such as giants and dwarfs. The soldier ants of certain species are in many respects analogous to the grotesque giants of the human species while the small workers might be called ant Tom Thumbs. The development of these forms evidently depends on both genetic and endocrine glandular factors but the proportional intervention and interrelation of these factors have not been established.

"Owing to lack of knowledge," he says, "of the precise functions of the various glands which in insects might be regarded as analogous to the endocrine glands of vertebrates, we are unable to frame any satisfactory physiological explanation of the Hexapod dwarfs. If certain ants have really learned to produce achondroplastics and ateleotics (malformed dwarfs and types of arrested development) ad libitum and to turn over to them the main asexual activities of the colony, we should have another fine example of

(Just turn the page)



CONTRAST THE CURVING CONTOURS of this chunky bee and beetle with the sylph-like grace of the dragon fly and walking stick.