

drawn, but the head of the fish remains firmly held in the oral opening of the starfish.

It is quite unlikely that the starfish captured a living *Fundulus*, but the animal had probably died during the night, as all dead fish were removed from the tank on the day previous.

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#### PEOPLE ATTACKED BY AN OWL

ON a residence street in Morgantown, West Virginia, during the early summer of the present year, several people were attacked by a small, savage owl. At least three people, personally known to the writer, were thus attacked, the owl swooping down and strik-

ing them with its claws. One person, a man with a scant supply of hair, had the top of his head scratched; another person, a woman, had her face badly scratched and, but for her glasses, might have had her eyes injured.

After thus attacking people for some days the owl was shot, but the writer did not hear of the attacks until some weeks later, and so could not personally identify the bird. From descriptions, however, it would seem that it was a screech-owl, the commonest species in this region.

It would be interesting to know if such attacks by owls have been noted by others.

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### SCIENTIFIC BOOKS

*The Autonomic Nervous System.* By ALBERT KUNTZ. Lea and Febiger, Philadelphia, 1929, 576 pp., 70 figs.

DURING the past few years increasing appreciation of the importance of the autonomic nervous system in health and disease has stimulated investigation in the pathological and clinical aspects of the subject. This, coupled with numerous recent attempts to determine details of the finer structure of components of the system as well as the exact anatomical and physiological relationships of its neurons, has swelled an already voluminous literature.

In the present work the author has tried to do justice to this relatively enormous literature as far as possible within the limits of a volume of this size. The degree in which he has succeeded raises the book quite out of the ordinary. Comprehensiveness, conciseness and judicial evaluation, in the measure here attained, make a combination deserving hearty commendation.

It is of more than passing interest that the author has chosen to employ the Langley terminology for this division of the nervous system and for the classification of its parts. This, to the reviewer, is a happy beginning for the highly desirable resolution of the confusion of tongues now existing. There is no good reason why "sympathetic" should be used by one group to designate the entire autonomic system and by another group to name one of its subdivisions. Nor is there reason why "autonomic" should be used in a correspondingly equivocal manner. Here, as elsewhere, usage must in the end prevail over priority or logic. In a brief introduction the author traces the history of the several terminologies which have been employed.

The first five chapters of the twenty which comprise the book are devoted to general subjects including the morphology of the autonomic system and its component neurones, central autonomic centers and conduction pathways, the general physiology and the development of the system. Ten chapters are next given to careful consideration of the autonomic innervation and control of systems and of individual organs. These include the heart, blood vessels, respiratory system, digestive tube, biliary system, glands, urinary and sex organs, the eye and skeletal muscle. This part of the book is enriched with numerous excellent illustrations.

Particularly welcome, because of the newness of their appeal, are such chapters as those on "central autonomic centers and conduction pathways" and the "autonomic innervation of skeletal muscle." In these are gathered much information otherwise to be found only in widely scattered individual contributions. The latter chapter, although on a subject somewhat controversial at the present time, can not be said to be unduly Kuntzian.

The remaining five chapters treat of pathological and clinical aspects of the subject. These will be of interest to physicians and surgeons who desire to learn the rationale of many procedures now being introduced into the practice of medicine. The appeal of these chapters is indicated by their titles which include the pathology and the surgery of the system, visceral sensitivity and referred pain, vagotonia and sympathetictonia and the autonomic system in diseases.

Not the least valuable feature of the book is the bibliography which covers sixty pages and is arranged by chapters.

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