Such an addition to the ranks of workers in pure science would not be disproportionate. The men engaged in pure research are already far too few, and the superior and more immediate rewards in applied science are constantly reducing the numbers of those who are on the quest for new facts without regard to their economic application. Mr. Hoover recently estimated the number of American workers in pure science to be three thousand, as against thirty thousand in applied science. And yet these thirty thousand are constantly deriving much valuable help from the basic work of the three thousand.

To conclude, our experience would indicate that at the present time an older man, duly qualified with respect to technical ability and personal attributes, is not handicapped by his age, in spite of the progress made in technical education in recent years, in addition to the other considerations which have been cited as causative of an age dead-line. We offer this view, not with the feeling that it represents the last word on this important subject, but rather with the object of encouraging a profitable discussion based upon experience.

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DESCRIPTION OF AN ALLIGATOR NEST

WHILE I was in the marsh region of southern Louisiana, some ten miles south of Morgan City, my attention was directed to a nest of the American alligator (*Alligator mississippiensis*) by Mr. Billy Burke, a native of that region. Mr. Burke came upon the nest while hunting frogs along a narrow canal which extended back into the marsh some three miles from the main bayou. A well-worn runway or "run" led from the canal bank to the nest itself, which was about twenty feet back into the marsh.

On July 25, 1925, a party, including the author, visited the nest. Besides the "run" from the canal to the nest, several other "runs" were discovered which led off from the nest into the surrounding marsh. The vegetation immediately surrounding the nest had been either trampled down by the alligator or else removed for the building of the nest. The "runs" were clearly defined and were about a foot and a half wide.

The nest was made of bits of damp, rotting "paille-fine" grass (*Spartina patens juncea*) and "roseaux" (*Phragmites communis*) which had evidently been bitten off by the female alligator. The nest measured four feet in diameter by two feet high. In shape, it was rather square with rounded corners and a flat top. The whole nest was strikingly similar to a muskrat house except that it had a flat rather than a conical top. Also no mud was used in the construction of the nest.

In the center, about six inches below the surface of the top, was the nest proper. In it, covered with the warm, rotting vegetation, were twenty-four white, hard-shelled eggs, cylindrical in shape and rounded at the ends.

The following variations in weights and measurements were found:

Weights—
Variation ..... 59.96 gms to 69.41 gms
Average ..... 63.74 gms

Measurements—
Variations ..... 70.4 mm by 37.7 mm to 75.5 mm by 38.6 mm
Average ..... 72.3 mm by 38.07 mm

The nest had been known by Mr. Burke for about three weeks before our visit, or since about June 14. How long the nest had been there before this time is not known. It may be possible that the nest was built some time previous to the egg-laying in order to give the nest material a chance to heat up for the incubation process.

The female alligator did not appear while we were examining the nest, although according to local accounts the female alligator is constantly on watch to protect her nest from all marauders.

ARTHUR SVIHLA

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A STARFISH ATTEMPTS TO INGEST A MINNOW

THE starfish is known completely to ingest small mollusks, later extruding their shells. The most striking of its achievements is to attach firmly, by the tube feet of its rays, to an oyster or clam and exert a slow, steady pull until the mollusk is opened. Then the starfish protrudes its evertible cardiac stomach and digests the soft parts of the mollusks *in situ*. Protrusion of the stomach is facilitated by a pronounced humping of the disk of the starfish.

While at the Marine Biological Laboratory, Woods Hole, Massachusetts, on the morning of July 5, 1929, the writer observed that a starfish (*Asterias forbesii*), with rays averaging eight centimeters in length, had attached to the glass side of an aquarium, and by its tube feet firmly held between two adjacent rays a full-grown Fundulus ten centimeters in length. The head of the fish was partly ingested, but the cardiac stomach protruded about two centimenters along the body. The starfish had a pronounced hump, roughly estimated at one and a half centimeters.

In the preliminary handling of the animals incident to preservation, the cardiac stomach was partly with-

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.

F. E. CHIDESTER

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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 striking 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 sympatheticotonia 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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