worms continued their development was not ascertained, as an autopsy could not be conducted on this animal. In all cases, the *S. douthitti* cercariae used were taken from *Stagnicola reflexa* (Say) collected in a pond near Edina, Minnesota.

Attention should be called to the fact that *Cercaria douthitti,* now shown for the first time to penetrate the skin of a very young primate and migrate through to the lungs, might also go at least this far in man, and particularly in children who swim in infested areas. Whether the worms can go farther than the lungs is not known. That the entrance of this species of larval trematode into the lungs might carry infections mechanically from the outside is of potential importance and in the infested areas where wading or swimming is done, may constitute a public health problem not yet realized.

LAWRENCE R. PENNER
UNIVERSITY OF MINNESOTA
HARVARD MEDICAL SCHOOL

A CLOTTING FACTOR IN RABBIT PLASMA

WHILE working on the isolation of certain fractions of immune rabbit plasma a fraction that exhibits very high clotting capacity has been found. It was noted that this clotting factor in rabbit plasma is almost quantitatively localized in a very small fraction, namely, that which is precipitated by 20 to 30 per cent. ammonium sulfate (between 200 and 300 gm of dry ammonium sulfate per one liter of plasma). Furthermore, the clotting factor could be isolated in purer form from the mixture of inert proteins precipitable in the above-mentioned concentration of ammonium sulfate. Such separation was possible because the globulin fraction possessing this clotting property is insoluble at pH 5.3 in the absence of NaCl and passes in solution on addition of 0.1 per cent. of NaCl.

The clotting globulin of rabbit plasma prepared in this way is able to accelerate the clotting of freshly shed blood and to clot blood-plasma (prepared by addition of sodium citrate, potassium oxalate, heparin and germanin). Excess of these anti-coagulants did not prevent the clotting of the plasmas by this fraction. Human, horse and rabbit blood-plasmas were used.

The above-described preparation of clotting globulin possessed a high potency. Some of the preparations, when concentrated to contain 10 per cent. total solids, clotted 100 volumes of horse plasma within 30 seconds and 1,000 volumes in from 10 to 15 minutes. Our experiences so far have indicated that solutions of clotting globulin are comparatively stable. Some preparations of clotting globulin preserved with ether-phenol and phenyl mercuric acetate showed partial loss of potency after one year of storage in the ice box. The described properties of the clotting globulin prepared from rabbit serum suggest the possibility of its use as a hemostatic agent. Work in this direction is in progress.

I. A. PARFENTJEV
LEDERLE LABORATORIES, INC.,
PEARL RIVER, N. Y.

LITTLE KNOWN ENEMIES OF YOUNG OYSTERS

IT is well known that starfish and drills kill and devour large numbers of recently set oysters. Few persons are aware, however, of the fact that several other species of our common mollusks besides the drills are also inflicting extremely heavy losses among young oysters. Observations carried on during the last four summers showed definitely that two genera of mollusks, namely, *Anomia* and *Crepidula,* are responsible for the destruction of oyster spat in several areas of Long Island Sound, where at the beginning of each season very good set of oysters was recorded.

As a rule, setting of oysters, *Anomia* and *Crepidula,* occurs at approximately the same time. However, the rate of growth of oysters is much slower than that of *Anomia* or *Crepidula.* Therefore, the latter soon outgrow the oysters. While growing, the shells of *Anomia* spread over the oyster spat attached nearby. The oyster spat covered in this manner soon suffocate and die. Our examination of shells collected from the lots where sets of *Anomia* and oysters occurred revealed that in almost every instance there were several smothered young oysters under each *Anomia* shell. In one instance, for example, there were 22 dead oyster spat found under a single *Anomia* five eighths of an inch in diameter. *Crepidula,* although having but one shell, destroys the oyster spat in the same manner. Rapidly growing, it covers oyster spat, which soon dies on being deprived of oxygen and food.

VICTOR L. LOOSANOFF
JAMES B. ENGLE
FISHERY BIOLOGICAL LABORATORY,
MILFORD, CONN.

SCIENTIFIC BOOKS

ENTOMOLOGY

Entomophagous Insects. By CURTIS P. CLAUSEN. 688 pp., 257 figs. New York: McGraw-Hill Book Co. 1940. $7.00.

THE raw facts in the struggle for existence among organisms are nowhere better illustrated than by the diverse hordes of animals that form the class Insecta. Led by inexorable instincts and provided with innum-