THE EDIBLE CRAB.

The life history of the crab is extremely interesting. The strange little animal that escapes from the egg resembles in no respect the parent crab. Its form is lengthened, ending in a forked tail; on the back is a long spine curving backward, and on each side a short spine directed outward. The eyes are large but not projecting, and the head is armed with a mosquito-like rostrum. This first stage of the crab is called zoea. After remaining for a certain length of time in the zoea form, it comes forth from its infant skin an entirely changed animal. Here the eyes are very large and projecting, the body squarish, without the long spine seen in the first stage; it has eight perfect legs and two claws; the "tail" has become short, and turned under; and yet it has no resemblance to the mature crab. This second form is called the megalops or great-eyed stage. When it again changes its skin, the body assumes a much broader shape; a distinct spine appears on each side, and the tail-like process is doubled up under the body. When its skin again becomes too tight for it, it at length comes forth a small but perfectly formed crab, *Callinectes hastatus*.

The crab is obliged to moult or cast off its shell many times during its life. This moulting appears to be an unpleasant ordeal to pass, for they often die during the act. When we see that they are not only obliged to escape from the carapax or shell, but also from the hard covering of their legs, delicate mouth parts, and even gullet—turning themselves inside out, as it were—it is not surprising that they perish during the ordeal. The crab crawls up into some secluded nook or cove in shallow water to moult, out of the way of its hard-shelled relatives, for the helpless, newly moulted, or "soft shell crab," if found, is devoured by them, as well as by several species of fishes.

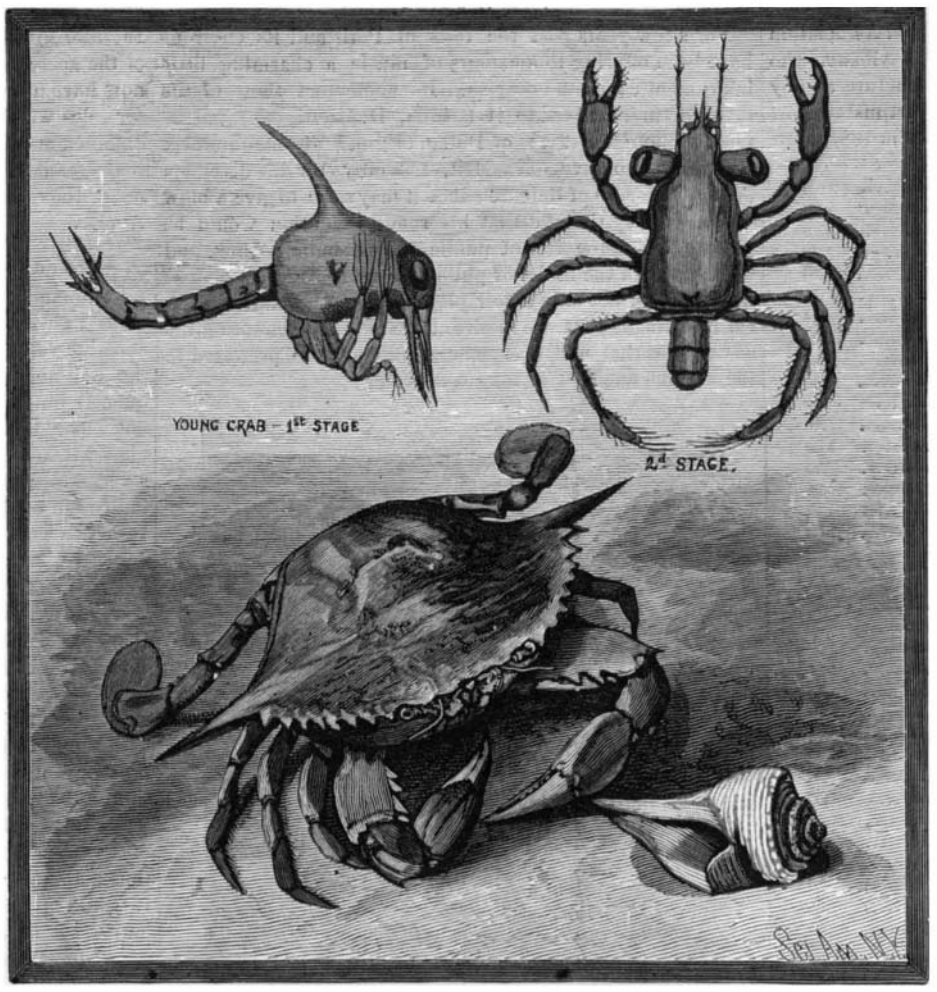
Fortunately for the crab, the soft covering hardens rapidly, and in a few hours it has a new and strong armor, and it then goes fearlessly out into the deeper water among the eel grass.

Crab fishing is an amusing but not always exciting sport. You simply row up into some shallow cove or bay of the seacoast, which has a muddy and grassy bottom, cast anchor, tie a good sized piece of meat on a strong line, lower it to the bottom, and wait for a bite. When you perceive a tug at your line, pull it up gently until the crab is visible; you must not attempt to lift it out of the water by means of the line, for then the crab will quit its hold and escape, but with one hand quietly but adroitly get the dip net under it, and with a dexterous sweep land it in the boat. Frequently two or three crabs are caught on the line at once.

Should you chance to go crabbing with a party of ladies, be extremely careful that they do not overturn the basket of lively crabs about their feet, for if this happens you will have your light skiff almost or entirely upset by the ladies jumping up and standing upon the seats, and you will get your fingers pinched, perhaps until the blood comes, as you recklessly endeavor to catch the crabs as they wildly scamper about the bottom of the boat. I have learned this from experience.

The edible crab of our coast can always be known by two long lateral spines of the carapax. The claws are blue above and whitish beneath, and the carapax above is of a dull olive or bluish color. It is called the "blue crab" by the fishermen of the New England coast.

C. FEW SEISS.



THE EDIBLE CRAB.

SADDLE MEN.

In Nepaul, India, there is a class of natives who serve as "saddle men," and take the place of saddle horses. Strapped around the waist and fitting into the curve of the back is a padded ledge. It is supported vertically by shoulder straps.

The rider rests on the ledge, in the position shown in the engraving, which is from the *Graphic*, and represents the Duke of Portland, and the Earl De Grey, going on a hunting excursion. Ladies of rank in this part of India are carried on "saddle women," in the same style.

SADDLE MEN.

Rain and Snow.

A paper giving results of experiments with rain gauges differently located, and of experiments as to the ratio of depth of snow to the depth of same when melted, by Edmund B. Weston, was lately read before the Amer. Soc. of Civil Engineers. It was found that in a number of experiments extending over considerable periods of time a gauge 14 ft. 8 in. above the ground collected 9 per cent less water than one 8 in. above the ground; that a gauge 22 ft. above the ground collected 10½ per cent less water than one 8 in. above the ground, and that a gauge 3¼ ft above the ground collected 6·7 per cent less water than one 3 in. above the ground.

The average result of 53 experiments at one point was that the depth of snow was 6·25 times the depth of the same when melted, and the average result of the same number of experiments at another point gave 6·64 times the melted depth.

Wood Flour.

A letter from the Catskills to the New York *Sun* says: The chief industry up here is producing wood flour, a kind of cousin to wood pulp. It was first manufactured in the Catskills about nine years ago, and now over twenty mills are in full blast. The process is exceedingly simple. Any soft wood tree—poplar is the favorite—is felled and drawn to the mill. The bark and boughs are removed, and the trunk put in a machine which is nothing but a lead pencil sharpener on a large scale, with four or more knife edges instead of one. On starting the machine the pencil sharpener revolves with great swiftness, and in a few minutes converts the log into a hundred miles of fine, clean shavings. These are ground and bolted exactly as in a flour mill. The product is a soft, fine, yellowishly white flour, similar in appearance to a very well ground corn meal. It possesses a slight woody smell, and is almost tasteless. It is put up in large bags, and then is dispatched, unmarked, to the buyers.

I tried to find out who purchased the article, but with no success. The wood miller was not very communicative. "It makes," he said, "well, I don't know how much exactly. One log may give five bags, or it may give ten. It sells, well, that is, pretty tolerable. I reckon I clear about $8 or $9 a day out of it—perhaps more. I never figured it up. What's it good for? Good many things. It's used to stiffen paper, but if you put in too much the paper gets brittle. Paper stock is much dearer than poplar flour, and that's why they put it in. If you mix the flour with linseed gum and 'biled' oil, you may get a kind of oil cloth. Some folks mix it with meal to give to pigs and other animals. I guess it's good, but I never give it to my hogs, and even those fellows give it to some other fellow's critters, and not their own. Yes, I heard that some bad contractors mixed it with meal for army and Indian supplies, but I don't take much stock in the story, because they could buy sour meal as cheap as poplar flour. It wouldn't pay to mill pine, cedar, or hemlock; they are worth too much as timber. But any wood that isn't used that way can be milled into flour. I use poplar almost altogether, but when I run short of logs I grind up buttonball, birch, elm, or willow."

The farmers dislike the new industry, as it promises to play havoc with the forests, which are both an attraction to the border and a protection to agriculture. The tanneries years ago used up all the oak and hemlock; the lumbermen have stripped the country practically of pine, cedar, and walnut; the chair factories are consuming the hickory and maple; now the wood flour mill promises to grind up what remaining trees there may be.

Opening of Great Grain Regions.

Russia has resolved to develop her system of railway communication on an enormous scale, and for this purpose has just contracted a loan of $75,000,000, to be expended during the next few years. India has already built lines of railway penetrating the furthest provinces. Australia has also made long strides in the same direction. Next in order is the Argentine Confederation, in South America, which is building four additional trunk lines of railroad at a cost of $28,000,000, to connect Buenos Ayres, her principal seaport, with the vast granaries opening up in the pampas of the interior. In every case the ultimate purpose is to overcome all impediments in reaching the central grain markets of Europe. And, in spite of all this, says the *British Trade Journal*, American grain speculators continue their efforts to artificially maintain the price of wheat, as though there were a great deficiency in the supply of the world, and the nations would eventually have to come to them begging the privilege of being allowed to purchase some of their surplus.