THE SEE-THROUGH LOOK THESE NAMED TO START THE SEE PARCENCY MOULES OF THE AREA PARCENCY MOULES OF THE AREA PARCENCY OF THE AREA PARCENC

New Nalgene® Laboratory Bottles molded of transparent polyvinyl chloride! Unaffected by salts, vegetable or mineral oils, excellent for shipping liquids. PVC bottles are the latest addition to our extensive bottle line. Available in stock from 4-32 oz.

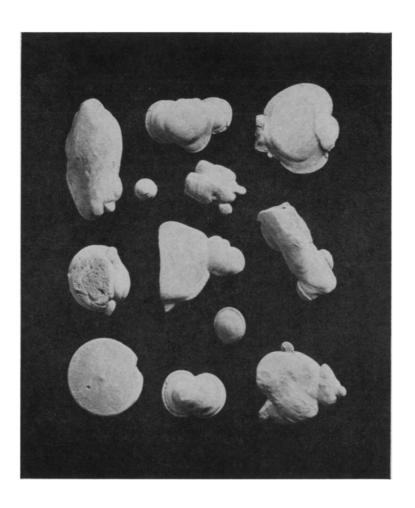
The Nalgene name is molded right in —your assurance of highest quality. More labs specify Nalgene Labware than all other brands of plastic labware combined. How about you? Specify Nalgene Labware from your lab supply dealer. Ask for our 1967 catalog, or write Dept. 2808, Nalgene Labware Division, Rochester, N.Y. 14603.



196

Science News / Vol. 92 / 26 August 1967

Nature Note



Concretions

Strange, nobby lumps of minerals are found imbedded in rock. They fall out like marbles when the rock is broken or weathers away. Known as concretions, these nodules have different shapes. Some are round as a pellet, some shaped like dumbbells, some are flat and button-shaped. Some even resemble a plant or an animal. But they all are formed of mineral rock that has "grown," molecule by molecule, inside sedimentary rock.

Within layers of rock deposited throughout the world, rainwater seeping through the earth often dissolves minerals and carries them in solution. Silicon dioxide, calcium carbonate, calcium sulfate, barium sulfate, iron carbonate and iron sulfide are some of these chemicals. Slowly they start precipitating around a nucleus of some sort—a grain of sand, a shell, a piece of bone, a fossil. Once precipitation starts, the minerals continue to accumulate until the oddly shaped little concretions are

formed—quite different in composition from the main mass of rock, and deeply imbedded in it. The process of concentric growth somewhat resembles the growth of a crystal in a solution that slowly attracts to itself molecules of suitable nature from the surrounding medium.

Concretions vary in size from half an inch in breadth to several feet—as much as 10 feet in diameter, as in the Cretaceous Cannonball formations found in Kansas. Many are one to two inches. The size seems to be determined by the supply of mineral material for growth, as well as the physical character of the host rock.

Some of the commonest concretions include hard, rounded lumps found in sandstone and nodulated shapes of pyrite and marcasite found in clays and marls. Flat diskshaped nodules are found in many clays and shales, and iron sulfide concretions are common in coal beds.