on cables and in calking vessels : it is used as well as the patroleum, to protect iron from rusting, and sometimes forms an ingredient in black scaling-wax,-Elastic Bitumen yields easily to pressure, is flexible and elastic. It emits a strong bituminous odour, and is about the weight of water. On exposure to the air, it becomes hard, and loses its elasticity. It takes up the traces of crayons in the same minner as the caoutchoue, or Indian rubber, whence it has obtained the name of the mineral caoutchouc. It has hitherto been found only in the lead mines of Derbyshire .- Compact bitumen, or asphaltum, is of a shining black colour, solid and brittle, with a conchoidal fracture. Its specific gravity is from 1 to 1.6. Like the former varieties it burns freely, and loaves but little It is found . Judea, in the palatinate, in France, in Switzerland, residue. and in large deposits in sandstone in Albania ; but no where so largely as in the island of Trinidad, where it forms a lake three miles in circumference, and of a thickness unknown. A gentle heat renders it ductile, and, mixed with grease or common pitch, it's used for paving the bottoms of ships, and is supposed to protect them from the teredo of the West Indian seas. The ancients employed bitumen in the construction of their buildings. The bricks of weich the walls of Babylon were built were according to historians, cemented with hot bitumen. which imparted to them greater solidity.

DIGESTION.

The food being received into the stomach, is pepared for assimilation with the body by digestion. This process—to borrow the words of an accute modern writer—taken in the most general and the most proper sense, may be defined the conversion of dead into living matter; at all events, it is the conversion of dead animal and vogetable substances into an animalized fluid, qualified to enter into the current of circulation, and then to become part and parcel of the living machine. No other fluid not even milk from the living udder, can be poured into the blood-vessels without risk of life; and, therefore, we are authorised to conclude, that the chyle (that is, the digested food) is a vitalized fluid, like the blood itself.

There have been various opinions concerning the manner in which the digestive process is carried on. The ancients supposed that it was effected by heat; and this opinion was formed from a consideration of the situation of the stomach, which they thought was in the hottest part of the body, being placed in the cavity of the abdomen, and surrounded by numerous soft organs. That heat acts as an auxiliary to digestion, is not to be doubted; but it can never be considered as the principal agent in the process; for cold-blooded animals are known to digest their food sufficiently well to supply the wants of the machine; their temperature is but little higher than that of the atmosphere.

Anothe: idea was that of fermentation; but the food does not remain a sufficient time in the stomach to allow of fermentation; nay, if this process should take place it would induce disease. The best founded theory is that of solution; that is, of solution through the means of a very peculiar solvent. Rheaumur inclosed alimentary matter in tubes, which were pervious at both ends, and introduced them into the stomach of animals; when they were discharged, he found that the substances which he had inclosed in the tubes were so acted upon by the gastric juice as to become almost discolved. Sometimes a part of the stomach