

The examination of the incrustation upon ancient coins showed it to consist of oxide of tin, and of carbonate and submuriate of tin, and of carbonate and submuriate of copper. It in some cases acquires a dingy hue from the prevalence of black oxide of copper, mixed with a little of its protoxide.

The author could discover no connexion between the perfect state of preservation of ancient coins, and their composition; but he observes that the manner in which the crystalline structure of the incrustation is acquired is a peculiarly interesting question. There being no reason to suspect deposition from solution, "are we not," says the author, "under the necessity of inferring, that the mineralizing process witnessed in its effects, depends on a slow motion and separation of the particles of the original compound? And must we not conclude that this motion is connected with the operation of attractions of different kinds, as chemical affinity, electro-chemical attraction, and attraction of aggregation?" If this conclusion be just, the author remarks that it opens a new field of inquiry, which may help to explain several phenomena in mineralogy and geology.

Additional Proofs of Animal Heat being influenced by the Nerves. By Sir Everard Home, Bart. V.P.R.S. Read November 16, 1825. [*Phil. Trans.* 1826, Part II. p. 60.]

In this communication Sir Everard gives an account of a repetition of his former experiments upon the effect of dividing the nerves that supply the velvet of the deer's horns, and in which some sources of error have been avoided. The general results are the same as those formerly obtained; the temperature of the horn, the nerves of which were divided, was diminished to the amount of 7° ; and, as before, the disparity of temperature gradually decreased until, after the lapse of about twelve days, the temperatures of the two horns were the same. Upon examining the structure of the parts after the animal's death, it was found that the interval between the divided ends of the nerves was filled up by a newly-formed connecting substance, capable of restoring their action.

In further illustration of the effect of the nerves in producing heat, independent of mere circulation of blood, the author mentions a case of aneurism, in which the femoral artery was tied without occasioning any diminution in the temperature of the foot.

The Croonian Lecture. On the Structure of a muscular Fibre from which is derived its Elongation and Contraction. By Sir Everard Home, Bart. V.P.R.S. Read December 15, 1825. [*Phil. Trans.* 1826, Part II. p. 64.]

In this paper, after attending to the striking analogy between the structure of a nervous and of a muscular fibre, as demonstrated by Mr. Bauer's microscopical observations, Sir Everard adverts to an error into which he had fallen, in his former examination of the