

among the rocks of their native country. This supposition is strengthened by the fact that they were acquainted with the art of navigation long before any other European nation, or were at least more practised seamen; and from the daring they evinced it may be supposed, without misapplying facts, that they were acquainted with the directive power of the magnet. It is, however, a matter of little importance, whether the discovery was made in Europe, Asia, or Africa; for, although we should honour the memory of the discoverer, did we but know his name, and perhaps speak of him as "the immortal," he would be nothing the better for our admiration, and we should derive no practical advantage.

The magnetic iron ore, or loadstone, consists of the protoxyde and peroxyde of iron, with a small proportion of silica and alumina. In the iron mines of Sweden and Norway it is very abundant, and is found in Arabia, China, and other Asiatic countries. The appearance of the ore varies according to its composition. When two or more substances are chymically united together, the properties and appearances by which they are individually known are generally lost, and the combination has characters peculiarly its own. It may therefore be anticipated that the appearance of the magnetic iron ore is regulated by the proportional quantities of the several mineral substances which compose it, though a practised mineralogist may generally detect it by its dark gray colour and peculiar lustre. All iron ores are under the control of the magnetic principle; but while some only obey its influence, others are the local habitation of the principle itself. All ferruginous substances are attracted by the magnetic agent, but the magnetic iron ore possesses in itself the attractive power. If we had only two ores of iron, one magnetic, the other not, it would be impossible to determine which possessed the magnetic principle; as soon as they were brought within the sphere of attraction, they would be drawn towards each other; but there would be no means of determining which was the attractive and which the attracted. But, supply us with a second magnet, or fragment of iron, and this is easily determined. If we take the piece of iron and bring it near to the magnet, it is immediately attracted; but if it be brought into contact with the unmagnetized iron, no such force will be in activity. If, instead of the piece of iron, we are furnished with a magnet, an entirely different course