

SIMPLE METHOD OF CONVERTING IRON INTO STEEL.—After many years of trials and experiments to convert iron into steel by a short and simple process, the endeavour has been crowned by success. In Cleveland, that north-eastern corner of Yorkshire, where iron ore is as abundant as salt in the sea, excitement prevails, and years of prosperity are anticipated; and it may fairly be assumed that all ironstone districts will be stimulated into activity by this last metallurgical discovery. As is pretty well known, the long-standing difficulty had been to get rid of the phosphorus present in the iron, and many were the ingenious devices put in practice to overcome it. At length Mr. Sidney G. Thomas, F.C.S., commenced a series of experiments on the effect of different materials as a lining for the 'converter'—the receptacle in which the molten metal is subjected to the blast. Experience had demonstrated that the usual siliceous lining favoured retention of the phosphorus; but what other could be devised that would resist the intense heat? By perseverance the alternative—a mixture of limestone and silicate of soda—was discovered. This expelled the phosphorus. The preliminary results, necessarily on a small scale, were confirmed by large experiments made at the Blaenavon Iron works, in Wales; and now the process has been adopted by one of the leading firms in the Cleveland district, by whom it will be fully developed, and the conversion of 'pig' into good steel, free from phosphorus, will become an everyday operation. Shall we see as a consequence modification and quickening in the manufacture of machinery and ships; and will cheap steel have any effect on the trade of Sheffield and Birmingham?—*Ibid.*

GEOLOGICAL DISCOVERY AT CHARING CROSS, LONDON.—An interesting geological discovery has just been made in the heart of London. In making the excavations at Charing Cross for Messrs. Drummoud's new bank, the workmen, at depths varying from fifteen to thirty feet, came upon the fossil remains of several extinct animals. They include elephant tusks and molars (probably the mammoth *Elephas primigenius*), a portion of what appears to be the horn of the great extinct Irish deer (*Megaceros Hibernicus*), along with other remains of ruminating animals not identified. All the remains are those of herbivorous quadrupeds, but there is among them no bone or tooth of hippopotamus