

lope successfully. The crustaceous covering of the carapace and claws adheres firmly to the chalk by the rough external coat, while the inner, smooth, glossy surface as readily separates. Hence, upon breaking a block of chalk containing portions of these crustaceans, we find one piece exhibiting a chalk cast of the claw or carapace, covered with tubercles, or papillæ, that have been moulded in the bases of the spines of the crust; and on the other portion, the crustaceous shell imbedded by its outer surface, and presenting the internal glossy lining, beset with circular depressions, which are the bases of the spines. This crust is exceedingly friable, and will flake off by a very slight touch. To obtain specimens with the external characters, it is necessary to proceed with great caution; and when indications of a crustacean is observed in a block, the chalk should be chiselled or sawn off to within half an inch of the surface of the fossil, and the remainder of the stone be cleared away, piece by piece, by means of a penknife, or graver. By this process the fossils, figured *Foss. South D.* (Pl. XXIX., XXX., XXXI.) were developed. When a fine specimen has been broken, and the shell is attached to one piece of the stone, and the cast to the other, it is possible to obtain an illustrative example of the external surface, by cementing the pieces accurately together with very thin hot glue; and, when firmly consolidated, the chalk may be removed, and the spines, tubercles, and papillæ of the crustaceous covering be