## APPENDIX

TO

## THE ZOOLOGIST

FOR 1851.

ART. XVIII.—Descriptions of some New Species of British Hymenoptera. By Frederick Smith, Esq., Assistant in the Zoological Department of the British Museum.

Family—Chrysididæ.

Genus-Chrysis, Linnæus.

CHRYSIS ORNATUS.

Male: length 4½ lines. Head golden green, violet-blue at the vertex; antennæ nigro-piceous, the scape golden-green: thorax above rich crimson, intermixed with gold on the prothorax, and on the sides of the mesothorax; a square patch on the disk golden green; the post-scutellum and metathorax are also green; the thorax beneath is blue, dashed with green; the legs blue, the tibia above having a golden refulgence, the apical joints of the tarsi piceous: the first and second segment of the abdomen is of a rich carmine; the basal half of the third segment is blue, the apical half golden green; beneath metallic blue dashed with green: the head and thorax are closely and rather coarsely punctured, but the abdomen very closely and delicately so: the apex of the abdomen is not toothed.

A single specimen in my own collection.

This very beautiful species, which I believe to be undescribed, was captured by W. Hewitson, Esq., in the vicinity of Bristol, who kindly presented it to me. This insect might without examination be mistaken for a large variety of bidentata; it is, however very distinct from that species, the sculpture at once separates it, the abdomen being as finely punctured as in C. neglecta, and the margin of the third segment is entire as in that species; but independently of the colour of the third segment of the abdomen, the prothorax is proportionably one-third longer than that of C. neglecta. It is a valuable addition to our native Fauna.

Family-Crabronidæ.

Genus-Ceratophorus, Shk.

CERATOPHORUS ANTHRACINUS.

Female:  $3\frac{1}{2}$  lines. Black, head subquadrate, not narrowing towards the thorax, punctured rather deeply and distantly, thinly pubescent; in the centre of the face just above the insertion of the antennæ an obtuse tubercle, pear-shaped; its base being the narrowest end; the clypeus bidentate: the labrum triangular, prominent, smooth and shining, and grooved down the centre; the mandibles bidentate: the thorax shining and pubescent, with scattered punctures on the disk, the metathorax rugose, excepting a broad, half-circular, shining space, which encloses a subcordiform one: the wings fusco-hyaline, the nervures black: the abdomen very smooth and shining, pubescent towards the apex; the apical segment coarsely punctured and deeply grooved down the centre.

A single specimen in my own collection.

The species of this genus, as well as those belonging to the genera Diodontus and Passalœcus, are extremely difficult to determine, but the excellent descriptions of Mr. Shuckard, in his 'Essay on the Fossorial Hymenoptera,' have in a great measure removed the difficulties, still they require very careful examination. The present species, which was captured by Mr. S. Stevens, in Devonshire, I have hesitated in describing until I could satisfy myself of its distinctness from C. morio: the above description will, I trust, enable the student to recognize its specific differences; which, independently of its large size, preclude, I think, the possibility of its being a variety of morio. The species of this genus are rare.

Genus-CRABRO, Fab.

CRABRO INTERSTINCTUS.

Male: length 3 lines. Black, head subquadrate, minutely and closely punctured, the stemmata placed in a triangle on the vertex; a smooth, impressed line running from the anterior stemma to the deep canaliculation of the face, the clypeus carinated in the centre, and covered with silvery pile; the scape of the antennæ yellow towards the apex, the third and fourth joints beneath deeply emarginate, and produced into a tooth at their apex; the thorax closely covered with minute, elongate punctures; the metathorax rugose, and having seven or eight short, elevated lines, running down from the post-scutellum, and also a longitudinal incisure, the posterior portion is transversely striated: the wings hyaline, their nervures and tegulæ piceous; the anterior tibia in front, the posterior pair above, and the anterior and intermediate tarsi yellow: the second, third, fourth and fifth segments of the abdomen have on each side an ovate, yellow spot, and the basal margin of the sixth is yellow.

In my own collection.

This insect is extremely distinct from any hitherto described British species of the genus: it was captured by W. Hewitson, Esq., at Weybridge, and I am indebted to his liberality for its possession. This season, he informs me, he again observed the species in the same locality, but had not at the time the means of capturing it.

Family-APIDÆ.

Genus-Nomada, Scop.

NOMADA MISTURA.

Male: length 3½ lines. Black, the mandibles ferruginous, with a spot at their base, and the margin of the clypeus yellow; the labrum has a minute tooth in the centre; the antennæ ferruginous beneath, and the three or four apical segments entirely so; the scape black: the thorax has a spot on each side of the collar, and the tubercles yellow; the apex of the femora, the tibia, and tarsi yellow-ferruginous; the anterior and intermediate tibiæ have a black stain above; the posterior pair black, excepting their base and apex: the tegulæ and nervures of the wings piceous, the apical margins fuscous: the abdomen has the margin of the basal segment rufopiceous, and a band of the same colour across the other segments; the second and third segments have on each side an oblong, yellow macula, acute within: a very minute spot on the sides of the third, and the margins of the fifth and sixth yellow; beneath, the margins of the segments are rufopiceous; and the third and fourth have on each side a narrow, yellow line, curving upwards towards the centre, and terminating in a round spot.

In my own collection.

The only described species, with which I am acquainted, that appears to resemble ours is the N. melanostoma of Herrich-Schäffer, but his description is too recondite to be satisfactory; it agrees, however, with mistura in having a black scape, scutellum, clypeus and labrum; but he does not mention the tooth with which the labrum is armed. This insect was captured by W. Hewitson, Esq., at Weybridge, and kindly presented by him to my collection.

FREDERICK SMITH.

ART. XIX.—Description of a New British Species of the Genus Actinia.

By William Thompson, Esq.

Natural Order-Polypes Charnus, Cuvier.

Genus-Actinia, Linneus.

## ACTINIA CLAVATA.

Body subcylindrical, a quarter of an inch in diameter; tentacula placed in two series, one being much longer than the other, club-shaped, larger at the top than the bottom, and ending abruptly; twenty-five longitudinal raised lines are placed at regular intervals round the body, the top of each produced into a wart at the edge of the disk, giving the margin a scalloped appearance; the length of the longest tentacula about half the diameter of the disk, the shorter ones a third of the length of the longer ones; all the tentacula are retractile: skin warty: ground-colour straw, or yellowish pink, profusely covered with innumerable small, puce-coloured specks, which become scarcer towards the apex, and where they form five or six circles; the