prominence situated just above the petiole, and it is upon the margin of this prominence that the stipules originate. The flower is expanded into a broad bell, with a reflected margin, which is 1 to 1\(\frac{1}{4}\) inch in diameter; the three outer sepals are 10 lines long and 5 lines broad, somewhat obtuse at their summit, and narrower toward the base; the three inner sepals are 9 lines long, 3 lines broad, more acute at the summit, and still narrower at base. The six petals are shorter, almost linear, obtusely acuminate at the summit, attenuated at the base, and nearly equal in size, 5 lines long and 1 line broad in the widest part; the stamens are 3 lines long, the filaments being slender below, swelling above into a thick, fleshy, fusiform connective, in which the two sterile anther-cells are extrorsely imbedded, the connective terminating in a curved excurrent point. The three ovaries are 7 lines long, 1\(\frac{1}{4}\) line in diameter, 1-locular, with six projecting parietal parallel placentæ, each bearing a number of minute, almost peltate ovules, supported upon a short prominent funicle, with a horizontal or sub-ascending direction. The fruit is cylindrical, torulose, six-grooved, apiculated by the persistent style, 1\(\frac{3}{4}\) inch long, 1 inch in diameter; the pericarp is thin and coriaceous, extremely friable and of granular texture when dry; it is unilocular, and filled with a mucilaginous pulp, of a pleasant, sweet, and subacid taste, which dries into a thin epidermis that invests the seeds, and leaves a vacuity in the centre, without the vestige of any division. This is contrary to the statement of Ruiz and Pavon and other authors, who describe the fruit of *L. biternata* as being 6- or 8-locular. The seeds are very numerous, ovate, somewhat compressed, often subangular by mutual pressure, and are attached to the wall of the pericarp in a somewhat horizontal position by a small hilum; they are arranged in six very distinct series; they are about 5 lines long, 4 lines broad from the hilum to the more convex side, and 3 lines broad in the other transverse direction. Their structure has been already fully described*.

XX.—Characters and Descriptions of some new British Sea-Anemones. By Philip H. Gosse, F.R.S.

Fam. Sagartiææ.

Genus Phellia (mihi).

Column pillar-like in expansion; margin tentaculate, without parapet or fosse. Surface smooth, pierced with loop-holes, partly

* A drawing of this species, with full details of the structure of its flower and seeds, is given in the 'Contributions to Botany,' plate 28.
clothed with a tough epidermis, rough externally, firmly adherent to the skin. Name from φελλων, the cork-tree; also its bark.

Sp. 1. Phellia murocincta (mihi). Epidermis free and tube-like at the upper part; its surface not warted.

**General Description.**—**Form.** Base adherent to rocks, slightly exceeding column.

Column cylindrical, pillar-like when expanded, slightly grooved longitudinally, smooth, but partly clothed with a dense, rough, membranous skin, which is firmly adherent from the base about halfway up, but there becomes free, forming a loose firm sheath or tube, from which the animal protrudes its fore parts in extension, and into which it retires, at will, more or less completely. Surface of epidermis rough, but not warted. Height, in full extension, double the diameter.

Disk a deep cup, bounded by the thick feet of the inner tentacles.

Tentacles twenty-four, in two rows, twelve in each; those of the first row twice as large as the others, with which they alternate: variable in form, sometimes strongly conical, stout at the foot, and pointed; at other times nearly cylindrical and obtuse: they have a tendency to assume a knotted appearance: they are generally carried hanging over the margin with a double curve, like the branches of a chandelier; but sometimes those of the inner row stand erect.

Mouth not raised on a cone.

Acontia (not observed).

**Colour.** Column: exposed portion having a mealy appearance produced by a number of whitish longitudinal lines and dashes, more or less speckled and interrupted by the ground-colour, which is pellucid yellowish grey. Of these lines, twelve are broader, and between these are about four slender lines in each interspace. The margin becomes deep buff, producing a depression of that hue, when in the button-state.

Epidermis pale buff, studded with dirty foreign matters.

Disk dull buff, marked with a white star, which is formed by a forked line proceeding from the front of each primary tentacle towards the mouth. A broad white gonidial band on each side.

Tentacles dark brown, pellucid, crossed by three narrow remote rings of white. Where the foot of the tentacle unites with the disk, its radius has a white patch, succeeded by two parallel, longitudinal, black dashes.

Mouth rich buff.

**Size.** Diameter of column one-eighth of an inch; height one-sixth; expanse of flower one-sixth.

**Locality.** Overhanging rocks and sides of caverns near low-water mark, around Torquay.
Specific name. From the manner in which the edge of the epidermis encircles the summit of the animal when contracted, as if protected by a wall.


*General Description.—Form.* (My observations on this species are as yet very imperfect, and insufficient for a proper diagnosis; my specimen having never expanded since it came into my possession, I have never seen its disk or tentacles.) Surface of column smooth, but by contraction becoming coarsely corrugated, so as to present large irregularly rounded knobs or warts. To this the epidermis is firmly adherent throughout, having no free margin; and being modelled on it, it is covered with coarse warts or bosses.

Acontia protruded from basal region of column, on irritation.

*Colour.* Yellowish brown.

*Size.* Diameter of column half an inch; height three-fourths.

*Locality.* A rock on the coast of Caithness, whence it was obtained and sent to me by Mr. C. W. Peach.

*Specific name.* From the *gausape*, or rough frieze coat, which the Roman soldiers wore in cold weather.

**Fam. Bunodidae.**

**Genus Bunodes.**

Sp. 3. *Bunodes coronata* (mihi). Warts in lines, and irregularly scattered, subequal, small: body scarlet.

*General Description.—Form.* Base adherent to shells, scarcely exceeding column: its outline often irregularly lobulate.

Column cylindrical in expansion, much higher than wide: covered on the upper two-thirds with moderately numerous small warts, neither perforate nor excavate; they are arranged in twelve longitudinal rows, with irregularly scattered ones between. Skin between the warts smooth, and when distended having a satiny lustre. Whole column invested with a thin drab epidermis, deciduous in ragged shreds, but adhering pretty firmly. A distinct parapet, with a smooth sharp edge, but no appreciable fosse.

Disk circular, flat, but often protruded so as to be convex, or to form a low cone; radii distinct.

Tentacles in four rows, of which the first contains 12; the second, 12; the third, 24; the fourth, 48; = 96. They are submarginal, the first row springing at about three-quarter radius; they are shorter than radius, diminishing outwardly, conical, subacute.
Mouth large, protrusile: lip sharp: throat evertile, coarsely furrowed.

Colour. Column a rich orange, or orange-scarlet, with the warts either paler or darker than the ground-colour. Edge of parapet cream-white, immediately below which the margin is marked alternately with square patches of dark purplish chocolate, and narrower spaces of whitish (twelve marks of each colour in adults, six of each in young); these, from the fine contrasts of colour, when the button is not quite closed, have a very striking and characteristic effect, as if the animal were surmounted by an elegant coronet. Hence I have selected the nomen triviale.

Disk red, varying from pellucid scarlet to a reddish chocolate; each radius bearing a longitudinal central streak of white, which does not reach either tentacle or lip, and bounded by a very fine white line on each side; thus is produced a pattern of fine radiating lines of white on red. Sometimes the lines are irregularly blotched and dilated, with ragged edges.

Tentacles pellucid, nearly colourless, crossed by three dim subopake white bars, of which the middle one is most distinct; near the base are two chocolate bars, generally divided by a central longitudinal line of pellucid white, giving the appearance of four dark spots set in square. Sometimes one bar is nearly or quite obliterated.

Lip whitish. Throat rich orange-scarlet; the furrows darker than the ridges.

Size. Diameter of column in button, one and a quarter inch; height two inches; expanse of flower one inch.

Locality. Off Berry Head, Devon; in twenty fathoms. Several specimens dredged, adhering to the shells of living Turritella terebra.

A very fine and showy species.

Fam. Ilyanthidae.

Genus Halcampa.


General Description. — Form. Column cylindrical; 8-invected, the tegumental insertions of the septa being the boundaries of the swellings; hinder extremity inflatable, protrusile, adhesive: skin minutely granular, enveloped in a thin mucus which entangles foreign matters; ordinarily covered with minute, close-set, transverse wrinkles.

Disk the rounded anterior extremity of the column, around
which the tentacles are planted in two contiguous circles (though those of each row are remote inter se). Sometimes this rounded form is not observed, and then the disk is flat.

Tentacles in two rows; the first of eight, about 0.014 inch long, and 0.0045 inch in medium diameter; the second also of eight, marginal, remote, alternate with the former, papilliform, their length not exceeding their diameter, or 0.005 inch. When expanded, those of the first row either stand erect, or arch slightly outward: their movements are rather sudden; their form quite cylindrical, with round ends; their walls thick, apparently imperforate; a few cnidse scattered in their substance.

Mouth elevated on a small abrupt papilla.

**Colour.** Pellucid yellowish white, positive in the ratio of opacity of the parts; without markings.

**Size.** Column when moderately extended about 0.025 inch in diameter, to a point about halfway down its length; diameter of posterior inflation at the same time, 0.065 inch. Total length in this condition 0.3 inch. *The smallest Anemone known.*

**Locality and Habits.** I found it in much eroded limestone from a cavern at Oddicome, Devon, associated with *Edwardsia carnea*, in June 1858. Having chiselled off many fragments of the rock, I put them into glass jars of sea-water; and in a day or two found *Halcampa microps* crawling up the side of the jar, adhering by its inflated skin. In the course of a day or two more, another and another appeared, until five or six had come under my notice, most of them adhering to the glass. They were active and locomotive, moving along the surface with ease and comparative quickness (at least ten times their length in a night), adhering by any part of the hinder moiety of the column. Very frequently they threw the anterior portion suddenly round, like an irritated caterpillar; and almost continually constrictions were passing down in succession from head to tail.

**Specific Name.** From μακρός, small, and ὀψ, the face.

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