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reduced to a ring of bristles, and the stigma is also small; but by the remarkable arrangements above noticed in the hard and completely syngenesious anthers (syngenesious from an early stage in the bud) and in the style, the pollen is ejected in small quantities at a time on the exact spot in the insect on which it should be placed for transportation to the stigma of another flower, and is swept with equal precision from that spot by the stigma of the next flower he visits.

XXXI.—*Note on a new Japanese Coral (Isis Gregorii), and on Hyalonema.* By Dr. J. E. GRAY, F.R.S. &c.

MR. BRADLEY GREGORY, the Surgeon of H.M.S. 'Rattler,' has sent to Mr. Carruthers, for the British Museum, a fragment of a coral which appears to be new to science. Mr. Gregory observes:—"The man who was sent to procure specimens of the *Hyalonema* from Inosima brought back in addition a large branch of what at first appeared like the plant that grows in the marshes, called *Equisetum*; but on close inspection it was found solid and smooth like glass, with joints and secondary branches coming from it. The gentleman who was kind enough to show me this thing tore off a small branch, which I have sent to you lashed on to a piece of bamboo."

The specimen sent indicates a new species of *Isidinae*. The branch is very long, slender, of nearly equal thickness almost throughout the whole of its length, only very slightly and gradually tapering just at the tip. It is formed of about fifty or fifty-one elongated slender joints united by a short but distinct pale brown articulation. The joints are very similar in length, being rather more than half an inch long; but sometimes there is a shorter one interjected in various parts of the series. The branch is about 27 inches long, and $\frac{1}{8}$ inch in diameter; the horny internodes are very much shorter than the joint, and about the same diameter.

Unfortunately the specimen does not show what was the general distribution of the branches. This may be verticillate, as Mr. Gregory compares the coral to an *Equisetum*; and the elongated branches are like the slender ones of some of the species of that genus. The specimen does not afford any means of determining if the branches arise from the calcareous joints, or from the horny internodes of the stem, which distinguishes the two genera *Isis* and *Mopsea*.

Waiting the receipt of more perfect specimens, I propose to call the coral, provisionally, *Isis Gregorii*, after the gentleman who so liberally sent it to the British Museum.

Mr. Gregory sent with this coral a very interesting specimen of *Hyalonema Sieboldii*. It is attached to a sponge which shows on the surface the numerous circular and oblong (this form being perhaps produced by compressing the open mouths) oscula, surrounded by a slightly raised edge, which are figured in Professor Schultze's plate. The presence of these oscules shows that the prominences in the bark cannot be "the oscule" as Dr. Bowerbank supposes.

The coil is very short, very thick, and formed of a large number of short spicules. These spicules, though short, are complete; for they taper at the tip, and exhibit the usual appearance of perfect spicules; otherwise it might have been supposed that this was only the base of a longer coil. The coil is a full inch in circumference at the base, and spread out towards the end. It has unfortunately been entirely deprived of its bark, except just where it emerges from the sponge, where there is a narrow imperfect ring of the bark, with small-sized circular prominences, being the contracted polypes, which are raised considerably above the surface, and have a small central impression. The coil is about 8 inches long; but one or two of the spicules are nearly one inch longer.

Every specimen that I see of this production more and more confirms my first idea that the coil and bark constitute a coral which is connected with a parasitic sponge.

XXXII.—*On a new Free Form of Hyalonema Sieboldii, and its manner of growth.* By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S.

MR. W. CUTTER has most kindly sent to me for examination a series of seventeen specimens of *Hyalonema Sieboldii*, which he had just received from Japan. They are all in good condition, better than most specimens when they arrive. The bark in all but one is decidedly in its natural state; this, on the other hand, certainly has been entirely stripped of its bark, and fresh bark recently stripped from some other specimen has been artificially put on to it; it would almost appear as if the coil of two specimens had been twisted together into one.

The series shows two very distinct varieties—one the kind hitherto known, which is found affixed to a sponge, and the other a free form of the coral, which is covered with bark to the very base of the coil. Of the sixteen specimens in their natural state, nine belong to the first, and six to the latter or free variety.