

CORRESPONDENCE.

“STEM-OSSICLES” OF CRINOIDEA, IN THE LEPTÆNA-KALK
(UPPER ORDOVICIAN) DALECARLIA, SWEDEN.

SIR,—A reviewer (F.A.B.) of my notice “Om förekomsten af en *Caryocrinus* i Sverige” has said in the *GEOLOGICAL MAGAZINE*, December, 1890, p. 570: “The rock is filled with stem-ossicles which Dr. Holm, after the curious custom of collectors, thinks it necessary to ascribe to Crinoidea.” What I regard as stems of at least two species of Crinoids, the reviewer says are stems of Cystidea without his having seen a single one of them. But the real fact is that these stems in consequence of their structure must have belonged to Crinoids. One of the supposed species has left fragments of stems 45 mm. in length by 16 mm. in breadth. These show the starting-points where strong cirrhi originated, and as far as known cirrhi have not been found in the Cystidea. Thick and expanded rootlets of Crinoids are also not rare. To this must be added, that all known Cystidea from this same locality, with the exception of *Caryocrinus* *cf. ornatus*, Say, are devoid of a stem. According to Angelin the genera *Sphæronis*, *Encystis* and *Caryocystis* are sessile, having the basis of the perisome itself directly affixed to foreign bodies without the mediation of a stem, and several of the specimens observed by me of *Sphæronis oblonga*, Ang., and *Encystis* *sp.*, either show the surface by which they were attached, or are even yet affixed to Bryozoans or other marine Silurian fossils. Of *Caryocystis* I have seen only a single specimen, and this does not show the basis of the perisome clearly. A species of *Encystis* is numerically by far the most predominant form. This is the cause why I have, with full intention, referred the stems to Crinoids.

STOCKHOLM,
15th January, 1891.

GERHARD HOLM.

THE DENUDATION AND ELEVATION OF THE WEALD.

SIR,—In the December Number of the *GEOLOGICAL MAGAZINE*, Dr. Irving states that in my sketch in the September Number I reproduced partly some arguments which he put before the Geological Society in June (May 21st, 1890?), and published in the September Number of the *GEOLOGICAL MAGAZINE*. I applied to Dr. Irving for particulars, and he informed me “that the argument from the raised beaches and the reference to the crag at Lenham were the points referred to.”

Now, Sir, as to the argument from the raised beaches, mine is quite a different argument from that used by Dr. Irving. I use it in the course of a criticism on Sir A. Ramsay’s diagram (*Geol. and Geog. of Gt. Brit.* 1878, p. 343, fig. 73) as a local and recent example of elevation turning a horizontal beach-line into a curve. Dr. Irving omits the fall to the west, and uses it to prove western elevation of the Wealden area.

As to the Lenham beds, I have the right to refer to them without obtaining leave.