









2

144

87

71865-



47

THE
VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY—VOL. XXX.
PLATES.

Great Britain. Challenger Office.

9561

APR 1858

834

6 QL
384
A8678
1889
INVZ

CARDED

REPORT

ON THE
SCIENTIFIC RESULTS
OF THE

VOYAGE OF H.M.S. CHALLENGER

DURING THE YEARS 1873-76

UNDER THE COMMAND OF
CAPTAIN GEORGE S. NARES, R.N., F.R.S.
AND THE LATE
CAPTAIN FRANK TOURLE THOMSON, R.N.

PREPARED UNDER THE SUPERINTENDENCE OF
THE LATE
Sir C. WYVILLE THOMSON, Knt., F.R.S., &c.
REGIUS PROFESSOR OF NATURAL HISTORY IN THE UNIVERSITY OF EDINBURGH
DIRECTOR OF THE CIVILIAN SCIENTIFIC STAFF ON BOARD
AND NOW OF
JOHN MURRAY, LL.D., PH.D., &c.
ONE OF THE NATURALISTS OF THE EXPEDITION

ZOOLOGY—VOL. XXX.
PLATES

Published by Order of Her Majesty's Government

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE
AND SOLD BY
LONDON:—EYRE & SPOTTISWOODE, EAST HARDING STREET, FETTER LANE
EDINBURGH:—ADAM & CHARLES BLACK
DUBLIN:—HODGES, FIGGIS, & CO.

1889

LIBRARY OF CONGRESS
193.036
SMITHSONIAN DEPOSIT

194973



PRINTED BY
BALLANTYNE, HANSON AND CO., EDINBURGH AND LONDON,
FOR HER MAJESTY'S STATIONERY OFFICE.

508.2
, C437
copy 2
§ Mar. Inv.

CONTENTS.

REPORT on the ASTEROIDEA collected by H.M.S. CHALLENGER during the years
1873-1876.

By W. PERCY SLADEN, F.L.S., &c.

*(The Manuscript was received in Instalments between 15th March 1886
and 21st January 1889.)*

EDITORIAL NOTE.

THE collection of ASTEROIDEA is one of the most important made during the voyage of the Challenger. The late Sir C. Wyville Thomson paid considerable attention to these organisms, and at one time had the intention of describing the new species discovered during the Expedition; with this end in view, indeed, he had a few of the specimens figured and lithographed.

Eventually, however, the whole collections were handed over to Mr. W. Percy Sladen for examination and description. The result of Mr. Sladen's work, extending over many years, is now presented in this magnificent Report, which forms Part LI. and Volume XXX. of the Zoological series of Reports, the text and plates being bound up in separate parts.

Not only on account of the large number of forms, but also on account of their representative character, the Challenger collection is unquestionably the most important contribution to this group of animals that has ever been made.

In the Report, supplementary to the treatment of the Challenger material, a compact account of the whole group has been aimed at. Thus (1) under each family an account of all the genera included therein, whether Challenger or not, has been given, and where necessary the grounds on which the classification has been adopted are discussed; (2) under each genus there is a statement of all the known species which are recognised as belonging to that genus, with an account of their geographical distribution: this presents a compact idea of the composition and distribution of each genus; (3) a complete list of all the known species of

THE VOYAGE OF H.M.S. CHALLENGER.

recent Asteroidea, with their geographical and bathymetrical distribution, and a full account of all synonyms and changes of name are given; every known starfish is believed to be included, and the recognition of "good species" and "synonyms" is based on personal observation (except in the case of some American types and a few recently described from the French dredgings).

The Report may be considered a monograph on the group, though of course it need hardly be said that previously described and recognised species are not re-described. An entirely new classification of the Asteroidea has been given—it was very unsatisfactory and quite unworkable previously.

All naturalists who appreciate careful and accurate work will join with me in congratulating Mr. Sladen on the completion of his valuable memoir, which extends to 935 pages, and is illustrated by 118 lithographic plates and a map.

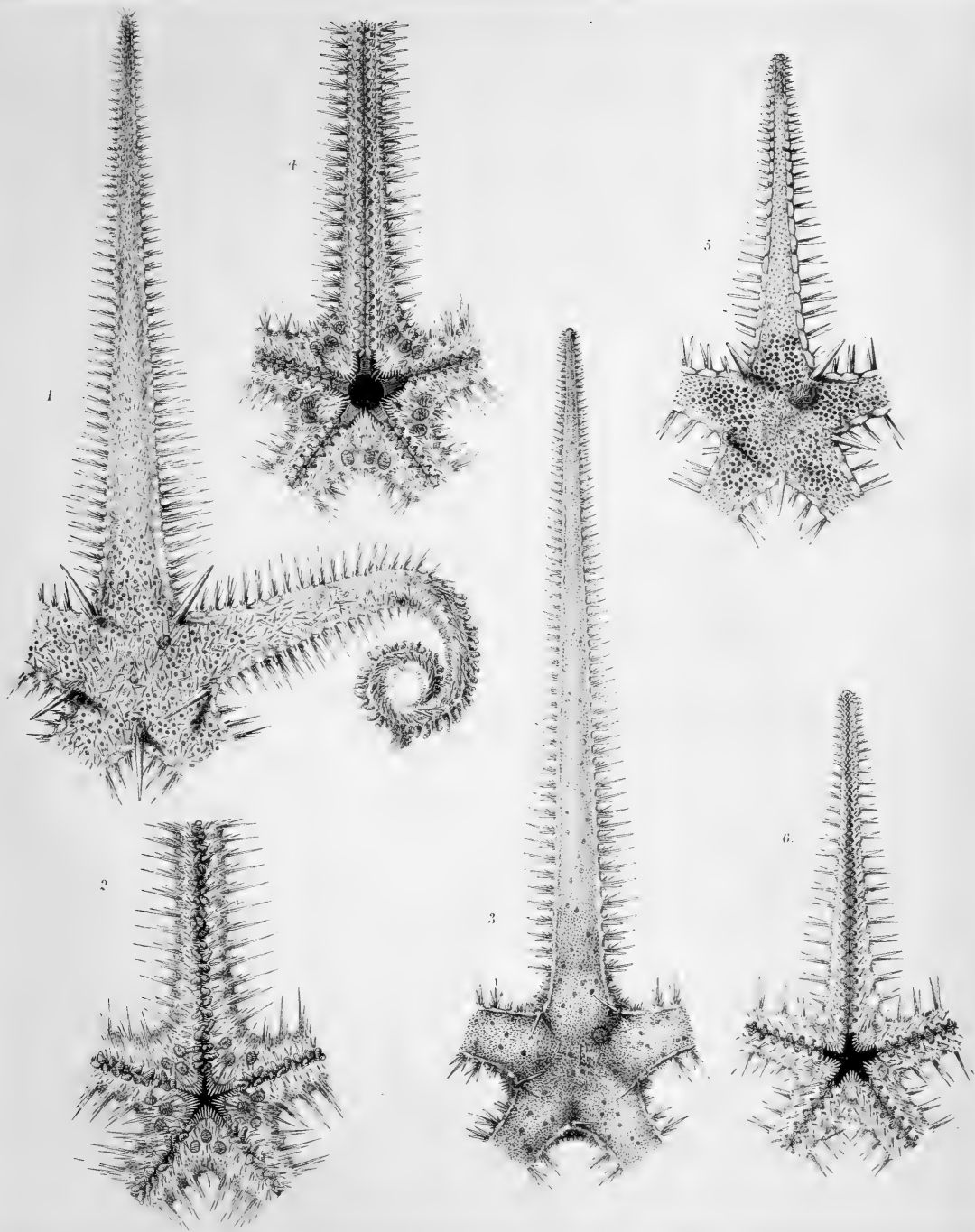
JOHN MURRAY.

CHALLENGER OFFICE, 32 QUEEN STREET,
EDINBURGH, *January 23, 1889.*

PLATE I.

PLATE I.

	Page
Figs. 1, 2. <i>PARARCHASTER SPINOSISSIMUS</i> , n. sp.	12
Fig. 1. Abactinal aspect ; magnified 2 diameters.	
Fig. 2. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. IV. figs. 1, 2.]	
Figs. 3, 4. <i>PARARCHASTER PEDICIFER</i> , n. sp.	15
Fig. 3. Abactinal aspect ; natural size.	
Fig. 4. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. IV. figs. 3, 4.]	
Figs. 5, 6. <i>PARARCHASTER ARMATUS</i> , n. sp.	19
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. IV. figs. 5, 6.]	



1-2. PARARCHASTER SPINOSISSIMUS, n. sp.

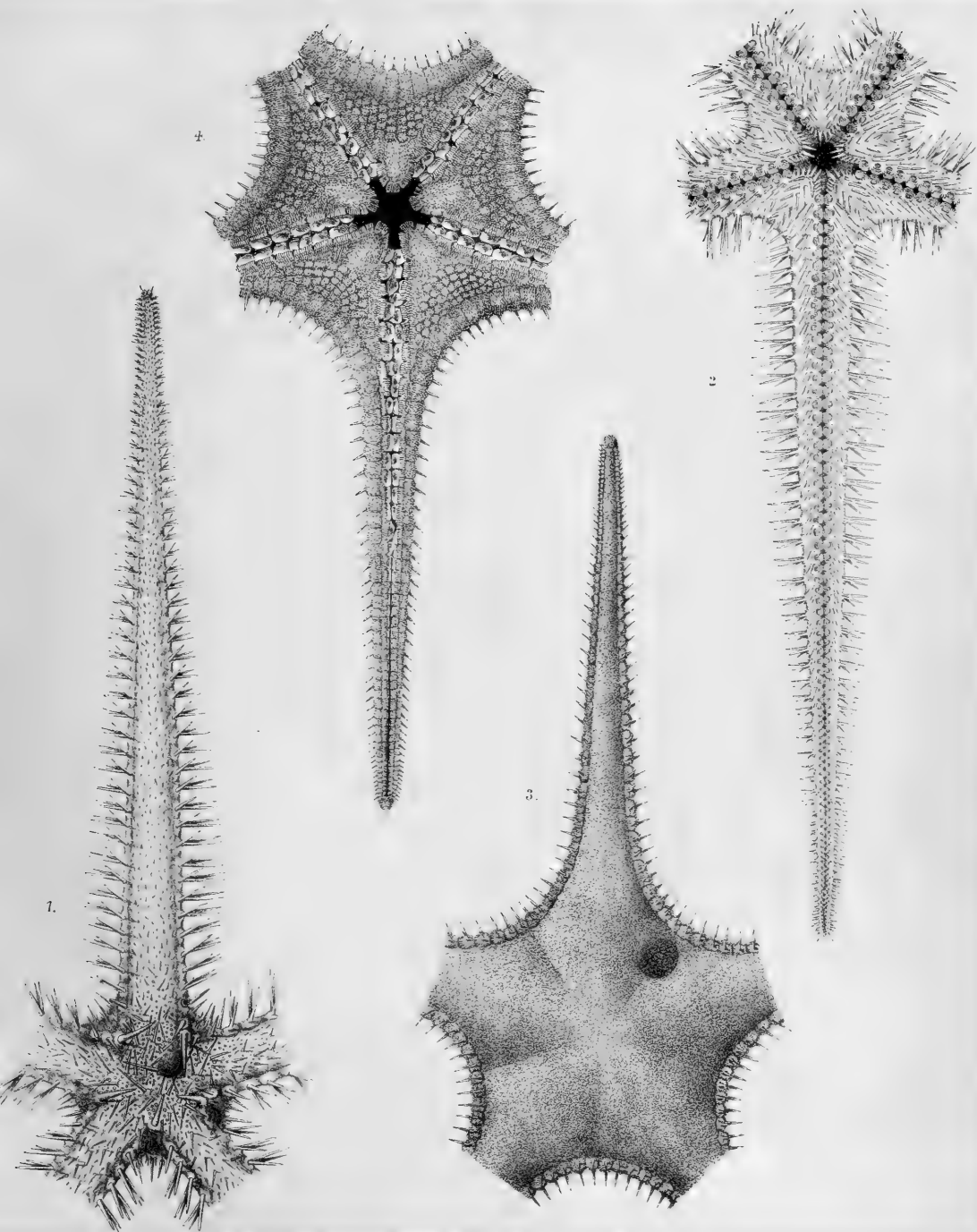
3-4. PARARCHASTER PEDICIFER, n. sp.

5-6. PARARCHASTER ARMATUS, n. sp.

PLATE II.

PLATE II.

	Page
Figs. 1, 2. <i>PARARCHASTER SEMISQUAMATUS</i> , n. sp.	7
Fig. 1. Abactinal aspect ; natural size.	
Fig. 2. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. IV. figs. 7, 8.]	
Figs. 3, 4. <i>DYTASTER EXILIS</i> , var. <i>GRACILIS</i> , nov.	68
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. IV. figs. 9, 10.]	



Crowther del.

Mintern. Bros. lith.

1-2. PARARCHASTER SEMISQUAMATUS, n. sp. 3-4. DYTASTER EXILIS, n. sp. (var. GRACILIS).

PLATE III.

PLATE III.

	Page
Figs. 1, 2. <i>DYTASTER NOBILIS</i> , n. sp.	73

Fig. 1. Abactinal aspect ; natural size.

Fig. 2. Actinal aspect ; natural size.

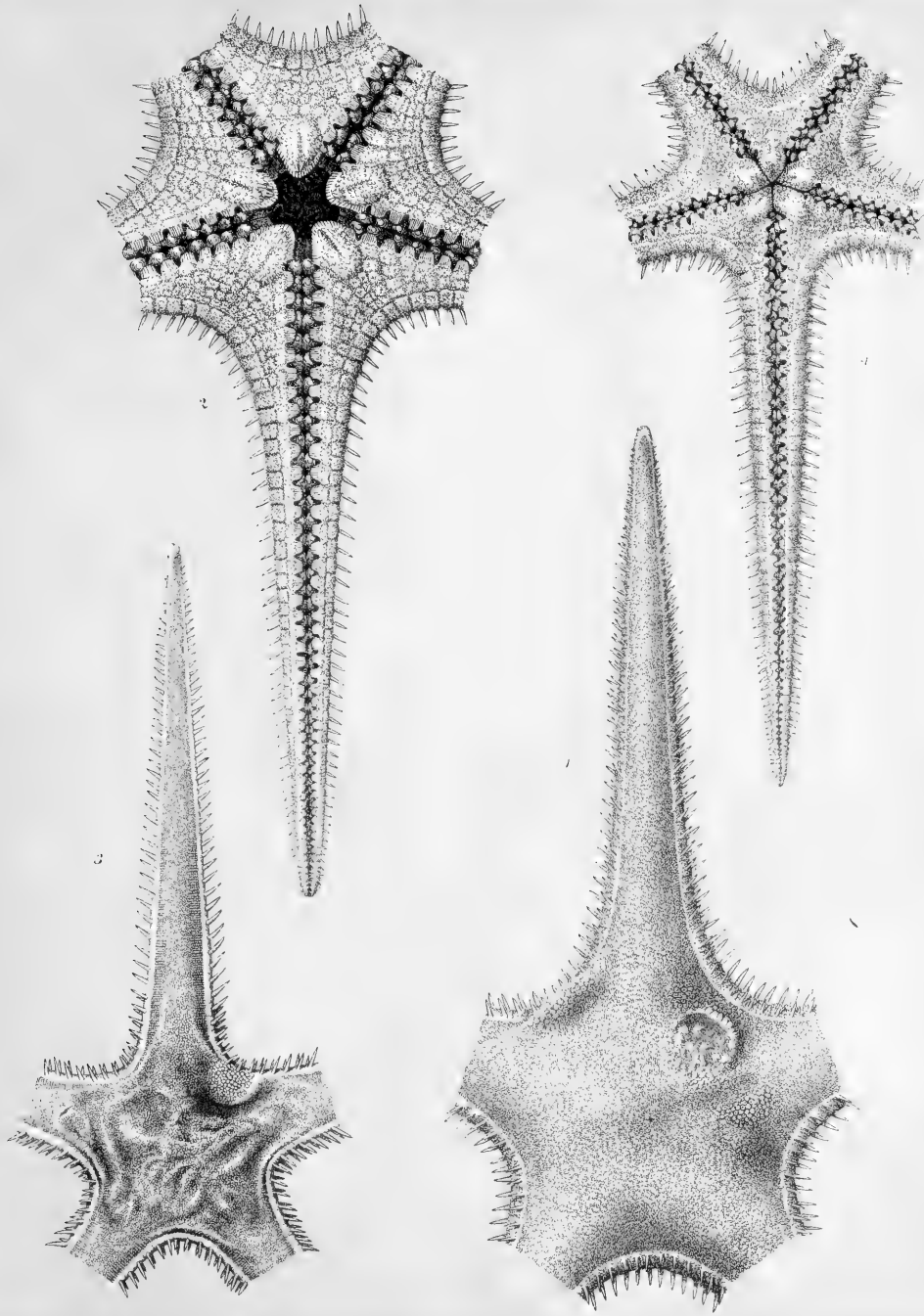
[For magnified details of this species see Pl. XXXII. figs. 3, 4.]

Figs. 3, 4. <i>DYTASTER MADREPORIFER</i> , n. sp.	70
---	----

Fig. 3. Abactinal aspect ; natural size.

Fig. 4. Actinal aspect ; natural size.

[For magnified details of this species see Pl. XXXII. figs. 5, 6.]



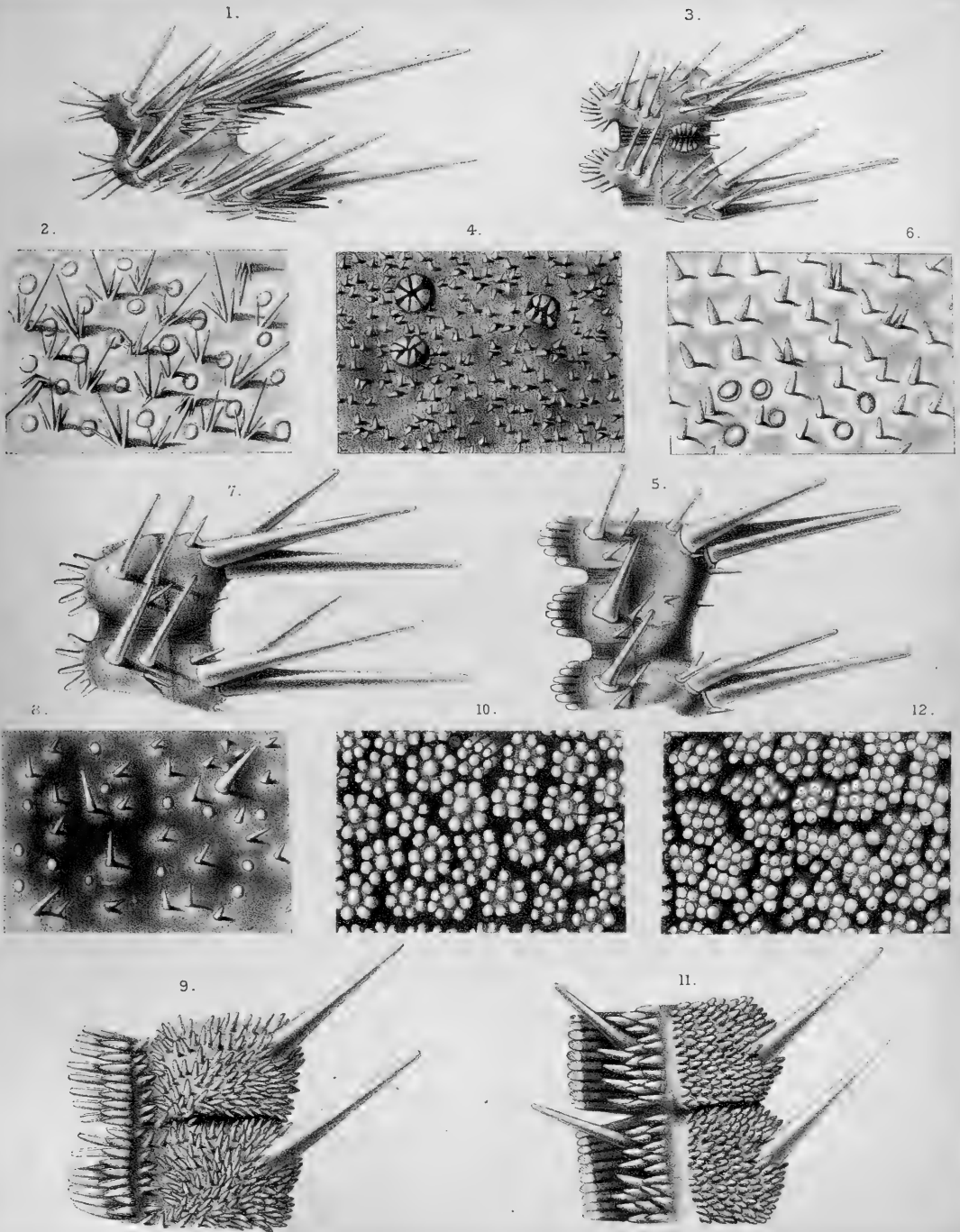
1-2. DYTASTER NOBILIS, n. sp.

3-4. DYTASTER MADREPORIFER, n. sp.

PLATE IV.

PLATE IV.

	Page
Figs. 1, 2. <i>PARARCHASTER SPINOSISSIMUS</i> , n. sp.	12
Fig. 1. Adambulacral and infero-marginal plates; magnified 10 diameters.	
Fig. 2. A portion of the abactinal surface, showing the armature of the abactinal plates, and the papulæ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. I. figs. 1, 2.]	
Figs. 3, 4. <i>PARARCHASTER PEDICIFER</i> , n. sp.	15
Fig. 3. Adambulacral and infero-marginal plates; magnified 5 diameters.	
Fig. 4. A portion of the abactinal surface; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. I. figs. 3, 4.]	
Figs. 5, 6. <i>PARARCHASTER ARMATUS</i> , n. sp.	19
Fig. 5. Adambulacral and infero-marginal plates; magnified 15 diameters.	
Fig. 6. A portion of the abactinal surface, showing the spinelets on the abactinal plates, and the papulæ; magnified 20 diameters.	
[For macroscopic figures of this species see Pl. I. figs. 5, 6.]	
Figs. 7, 8. <i>PARARCHASTER SEMISQUAMATUS</i> , n. sp.	7
Fig. 7. Adambulacral and infero-marginal plates; magnified 5 diameters.	
Fig. 8. A portion of the abactinal surface; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. II. figs. 1, 2.]	
Figs. 9, 10. <i>DYTASTER EXILIS</i> , n. sp.	65
Fig. 9. Adambulacral and infero-marginal plates; magnified 15 diameters.	
Fig. 10. A portion of the abactinal surface; magnified 30 diameters.	
[For macroscopic figures of this species see Pl. II. figs. 3, 4.]	
Figs. 11, 12. <i>DYTASTER SPINOSUS</i> , n. sp.	63
Fig. 11. Adambulacral and infero-marginal plates; magnified 5 diameters.	
Fig. 12. A portion of the abactinal surface; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. V. figs. 1, 2.]	



W H Crowther del.

Y. Min. Lith. Edin'

1-2. PARARCHASTER SPINOSISSIMUS, n. sp. 3-4. PARARCHASTER PEDICIFER, n. sp.
 5-6. PARARCHASTER ARMATUS, n. sp. 7-8. PARARCHASTER SEMISQUAMATUS, n. sp.
 9-10. DYTASTER EXILIS, n. sp. 11-12. DYTASTER SPINOSUS, n. sp.

PLATE V.

PLATE V.

Figs. 1, 2. <i>DYTASTER SPINOSUS</i> , n. sp.	Page 63
---	------------

Fig. 1. Abactinal aspect ; natural size.

Fig. 2. Actinal aspect ; natural size.

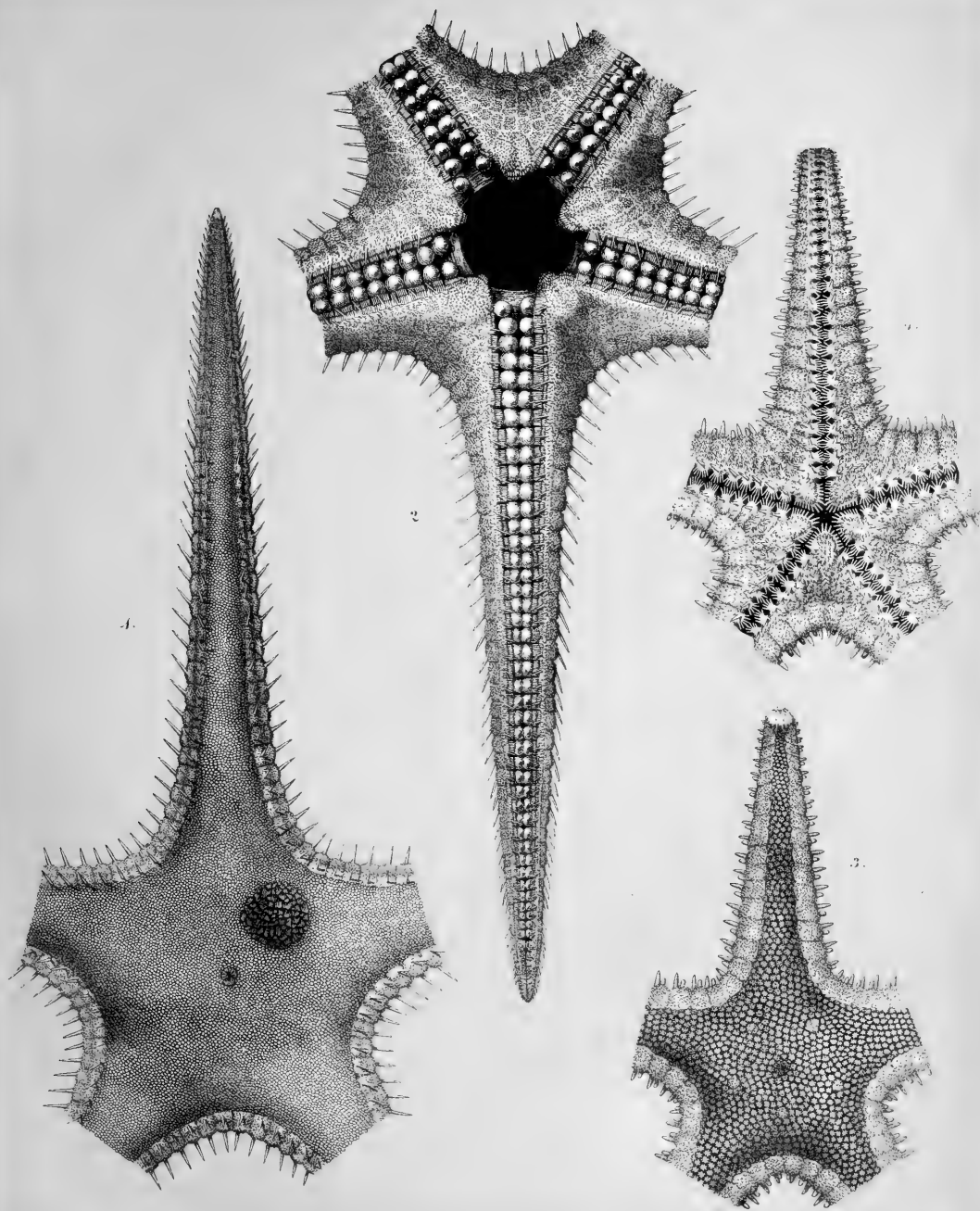
[For magnified details of this species see Pl. IV. figs. 11, 12.]

Figs. 3, 4. <i>PONTASTER SUBTUBERCULATUS</i> , n. sp.	58
---	----

Fig. 3. Abactinal aspect ; magnified 3 diameters.

Fig. 4. Actinal aspect ; magnified 3 diameters.

[For magnified details of this species see Pl. XIII. figs. 7, 8.]



W.H. Crowther del. Hollick lith.

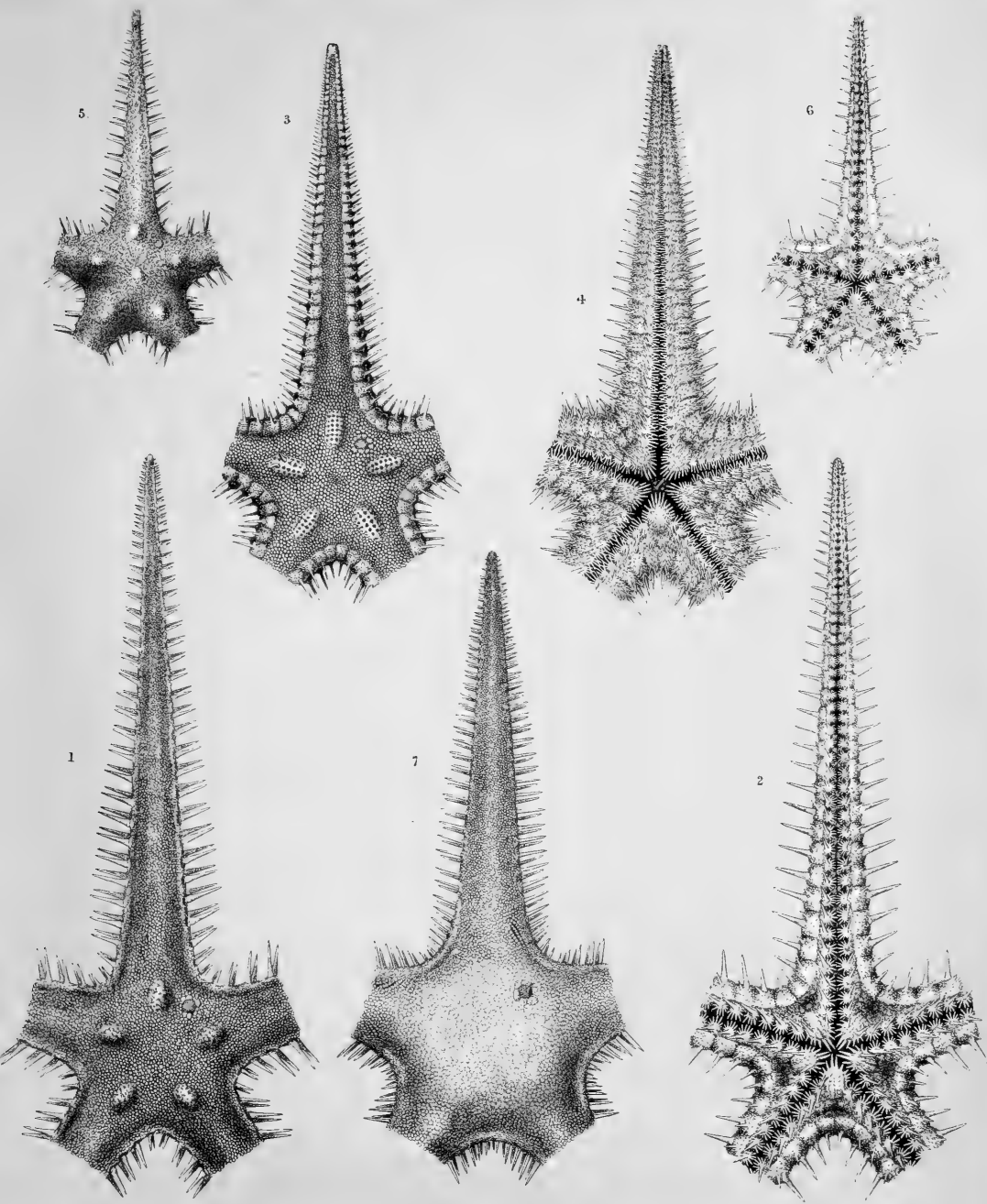
1-2. DYTASTER SPINOSUS, n. sp.

3-4. PONTASTER SUBTUBERCULATUS, n. sp.

PLATE VI.

PLATE VI.

	Page
Figs. 1, 2. <i>PONTASTER MIMICUS</i> , n. sp.	48
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. VII. figs. 5, 6.]	
Figs. 3, 4. <i>PONTASTER LIMBATUS</i> , n. sp.	35
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. VII. figs 1, 2.]	
Figs. 5, 6. <i>PONTASTER PRISTINUS</i> , n. sp.	50
Fig. 5. Abactinal aspect ; magnified 3 diameters.	
Fig. 6. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. VII. figs. 7, 8.]	
Fig. 7. <i>PONTASTER TENUISPINUS</i> , var. <i>PLATYNOTA</i> , nov.	29
Fig. 7. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this variety see Pl. VII. figs. 3, 4.]	



Crowther del et lith

Mixterri Broc. imp.

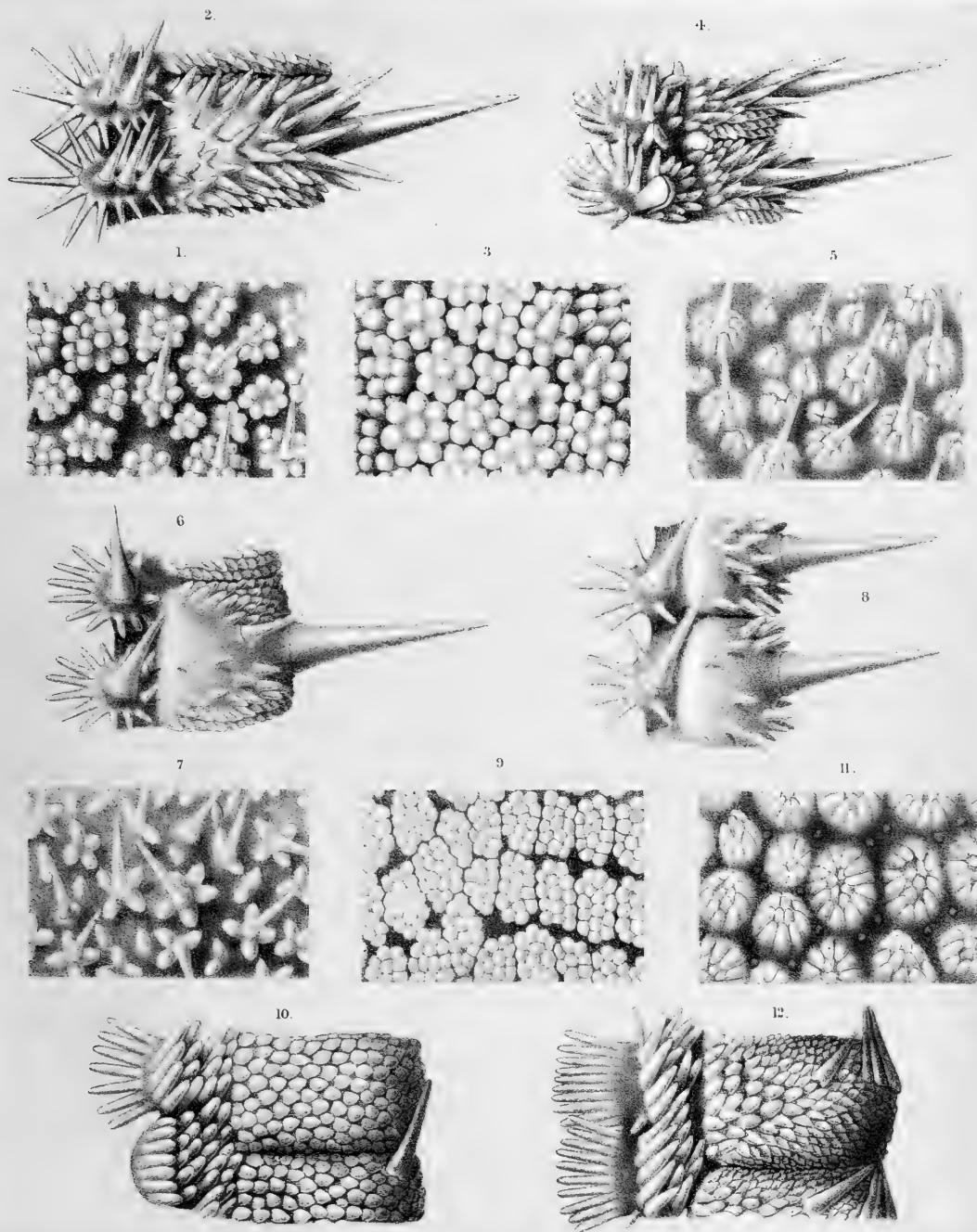
1-2. *PONTASTER MIMICUS*, n. sp.
5-6. *PONTASTER PRISTINUS*, n. sp.

3-4. *PONTASTER LIMBATUS*, n. sp.
7. *PONTASTER TENUISPINUS*, var. *PLATYNOTA*, nov.

PLATE VII.

PLATE VII.

	Page
Figs. 1, 2. <i>PONTASTER LIMBATUS</i> , n. sp.	35
Fig. 1. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 2. Adambulacral and infero-marginal plates ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. VI. figs. 3, 4.]	
Figs. 3, 4. <i>PONTASTER TENUISPINUS</i> , var. <i>PLATYNOTA</i> , nov.	29
Fig. 3. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 4. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
[For a macroscopic figure of this variety see Pl. VI. fig. 7.]	
Figs. 5, 6. <i>PONTASTER MIMICUS</i> , n. sp.	48
Fig. 5. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. VI. figs. 1, 2.]	
Figs. 7, 8. <i>PONTASTER PRISTINUS</i> , n. sp.	50
Fig. 7. A portion of the abactinal surface ; magnified 30 diameters.	
Fig. 8. Adambulacral and infero-marginal plates ; magnified 25 diameters.	
[For macroscopic figures of this species see Pl. VI. figs. 5, 6.]	
Figs. 9, 10. <i>PSILASTER CASSIOPE</i> , n. sp.	228
Fig. 9. A portion of the abactinal surface ; magnified 16 diameters.	
Fig. 10. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLI. figs. 1, 2.]	
Figs. 11, 12. <i>PSILASTER PATAGIATUS</i> , n. sp.	232
Fig. 11. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 12. Adambulacral and infero-marginal plates ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XLI. figs. 3, 4.]	



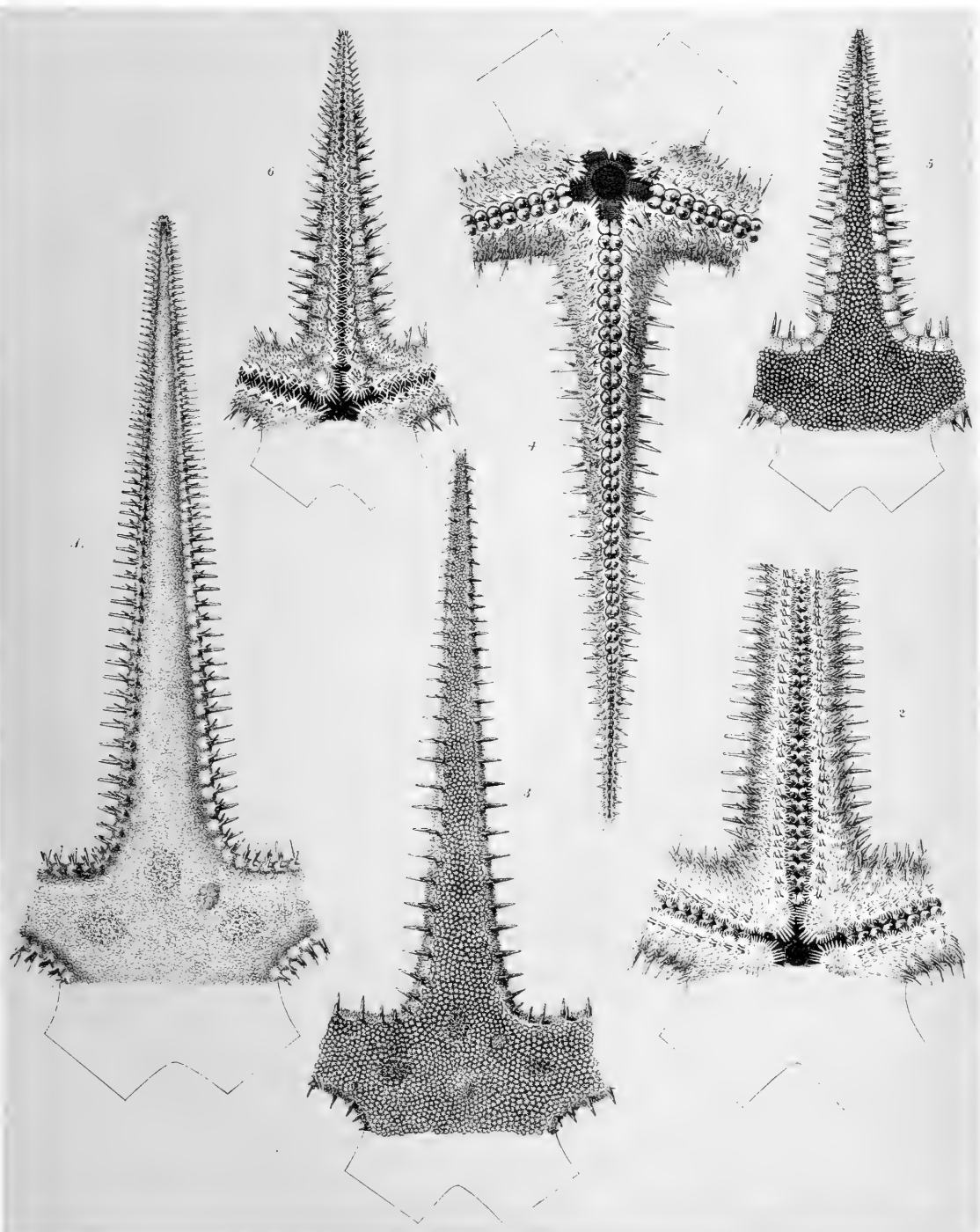
1-2. PONTASTER LIMBATUS, n.sp.
 5-6. PONTASTER MIMICUS, n.sp.
 9-10. PSILASTER CASSIOPE, n.sp.

3-4 PONTASTER TENUISPINUS, var. PLATYNOTA, nov.
 7-8 PONTASTER PRISTINUS, n.sp.
 11-12 PSILASTER PATAGIATUS, n.sp.

PLATE VIII.

PLATE VIII.

	Page
Figs. 1, 2. <i>PONTASTER HEBITUS</i> , n. sp.	33
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XII. figs. 1, 2.]	
Figs. 3, 4. <i>PONTASTER FORCIPATUS</i> , n. sp.	43
Fig. 3. Abactinal aspect; magnified 2 diameters.	
Fig. 4. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XII. figs. 3, 4.]	
Figs. 5, 6. <i>PONTASTER VENUSTUS</i> , n. sp.	52
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XII. figs. 5, 6.]	



W.H. Cresswell del. W. Wick lit.

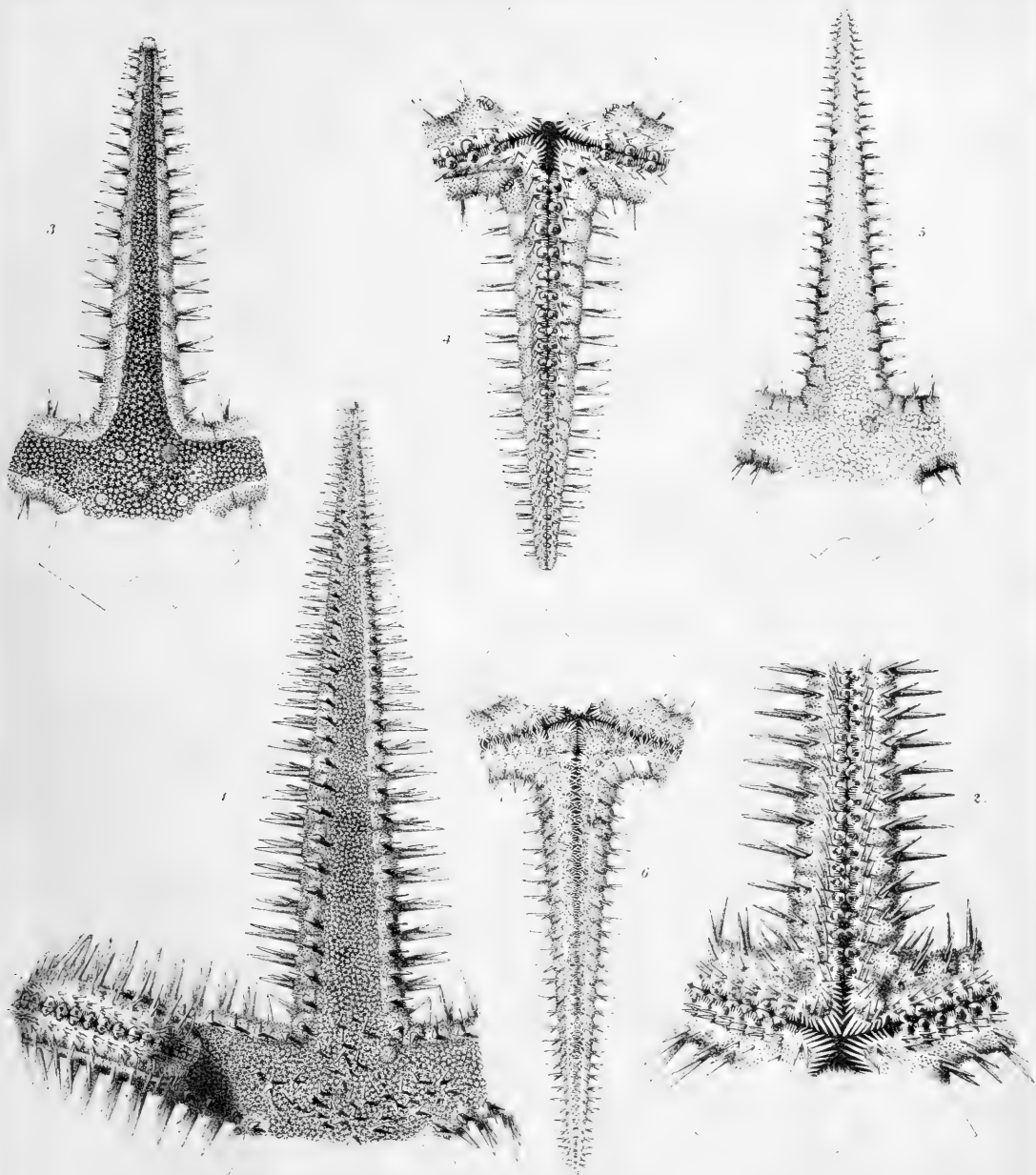
H. Hartt imp.

1-2. PONTASTER HEBITUS, n. sp. 3-4. PONTASTER FORCIPATUS, n. sp.
5-6. PONTASTER VENUSTUS, n. sp.

PLATE IX.

PLATE IX.

	Page
Figs. 1, 2. <i>PONTASTER OXYACANTHUS</i> , n. sp.	38
Fig. 1. Abactinal aspect ; magnified 2 diameters.	
Fig. 2. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XII. figs. 7, 8.]	
Figs. 3, 4. <i>PONTASTER TRULLIPES</i> , n. sp.	55
Fig. 3. Abactinal aspect ; magnified 3 diameters.	
Fig. 4. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. XII. figs. 9, 10.]	
Figs. 5, 6. <i>PONTASTER TERES</i> , n. sp.	41
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XII. figs. 11, 12.]	

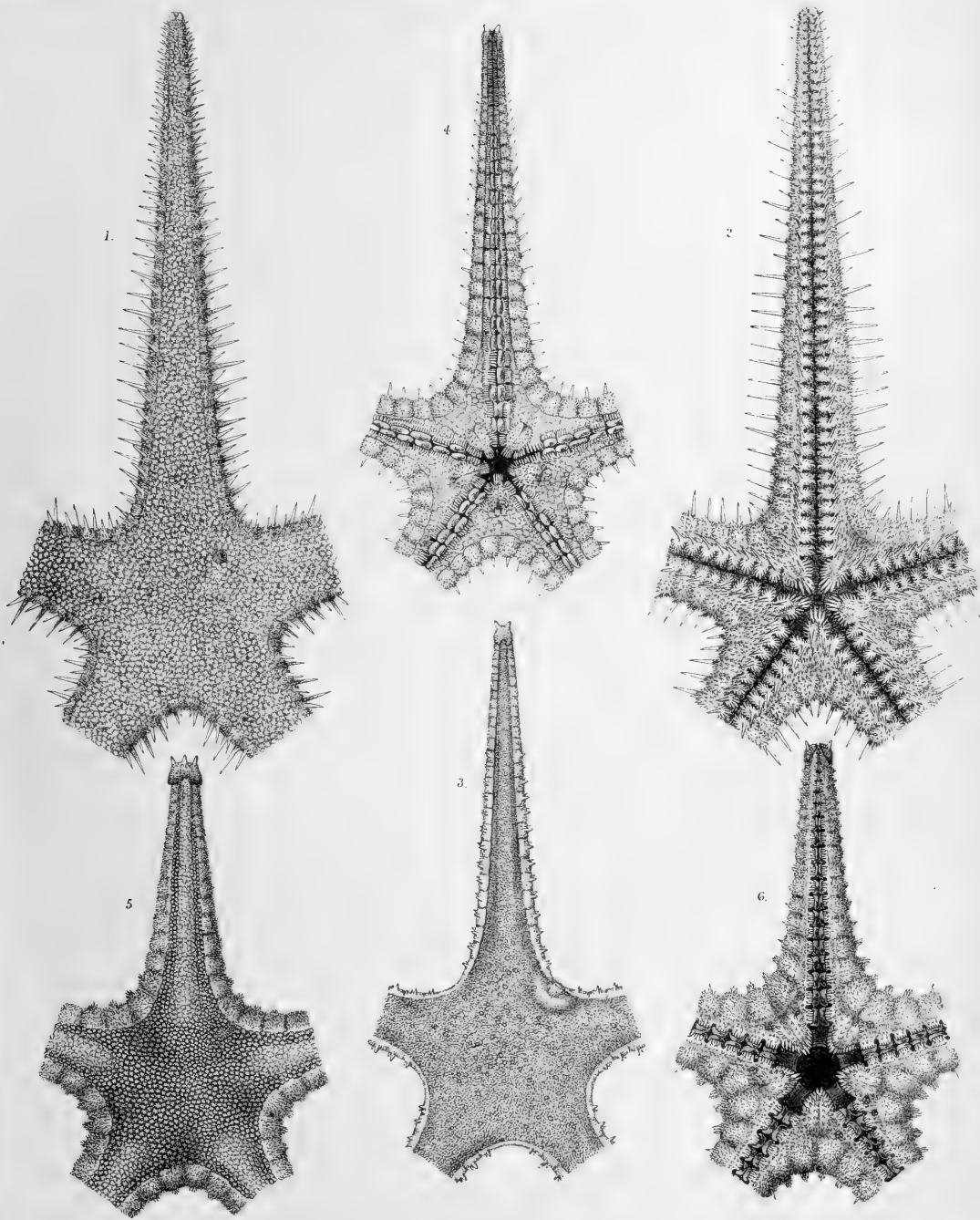


1-3. PONTASTER OXYACANTHUS, n. sp. 3-4. PONTASTER TRULLIPES, n. sp.
 5-6. PONTASTER TERES, n. sp.

PLATE X.

PLATE X.

	Page
Figs. 1, 2. <i>PONTASTER PLANETA</i> , n. sp.	30
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. XIII. figs. 1, 2.]	
Figs. 3, 4. <i>DYTASTER BISERIALIS</i> , n. sp.	77
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XIII. figs. 3, 4.]	
Figs. 5, 6. <i>DYTASTER INERMIS</i> , n. sp.	79
Fig. 5. Abactinal aspect ; magnified 4 diameters.	
Fig. 6. Actinal aspect ; magnified 4 diameters.	
[For magnified details of this species see Pl. XIII. figs. 5, 6.]	



1-2. PONTASTER PLANETA, n.sp. 3-4. DYTASTER BISERIALIS, n.sp.
5-6. DYTASTER INERMIS, n.sp.

PLATE XI.

PLATE XI.

Figs. 1-4. *PLUTONASTER BIFRONS*, Wyville Thomson, sp. Page
84

Fig. 1. Abactinal aspect; magnified 2 diameters.

Fig. 2. Actinal aspect; magnified 2 diameters.

Fig. 3. A young example, abactinal aspect; magnified 6 diameters.

Fig. 4. A young example, actinal aspect; magnified 6 diameters.

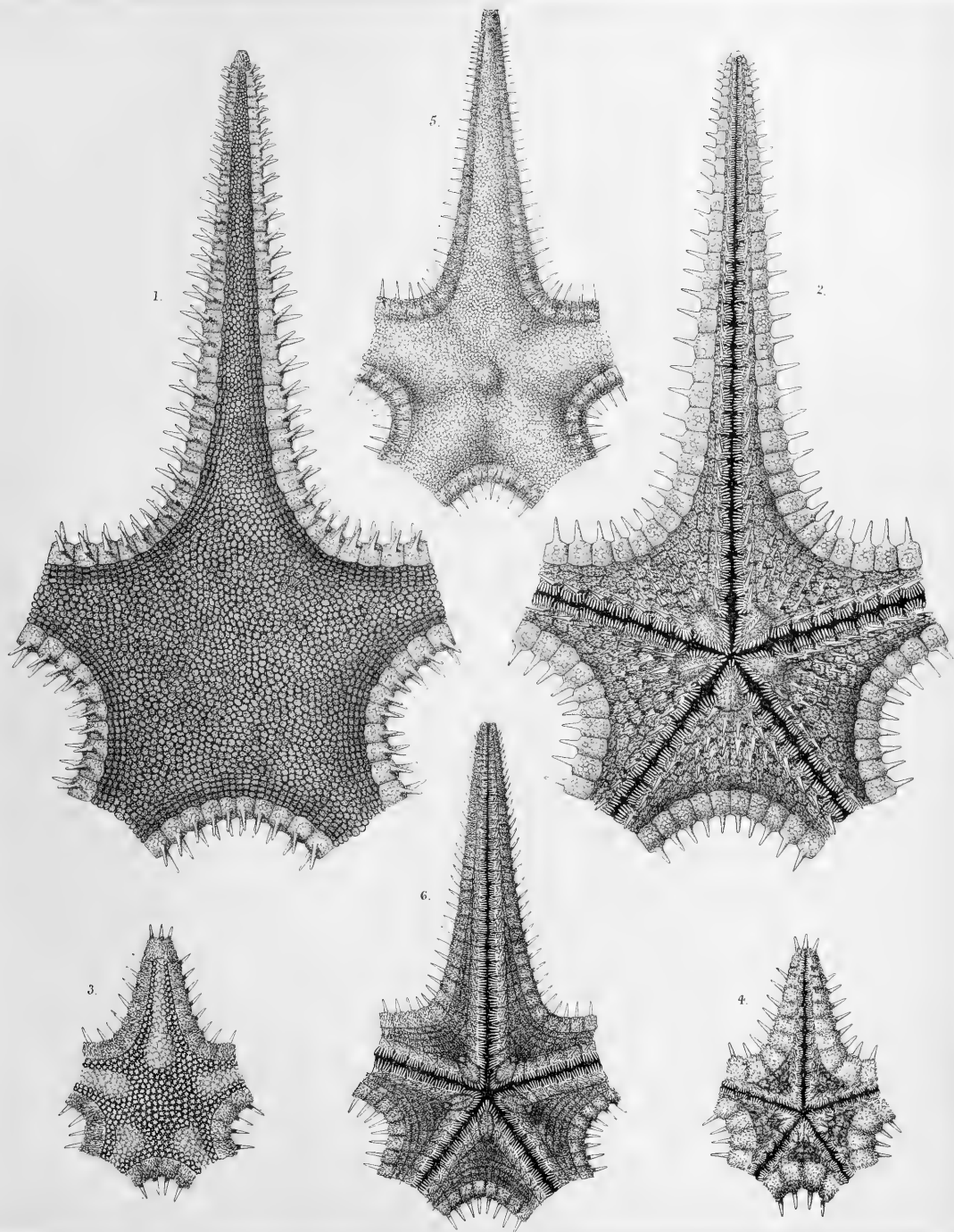
[For magnified details of this species see Pl. XIII. figs. 9, 10.]

Figs. 5, 6. *PLUTONASTER AMBIGUUS*, n. sp. 95

Fig. 5. Abactinal aspect; magnified 3 diameters.

Fig. 6. Actinal aspect; magnified 3 diameters.

[For magnified details of this species see Pl. XIII. figs. 11, 12.]



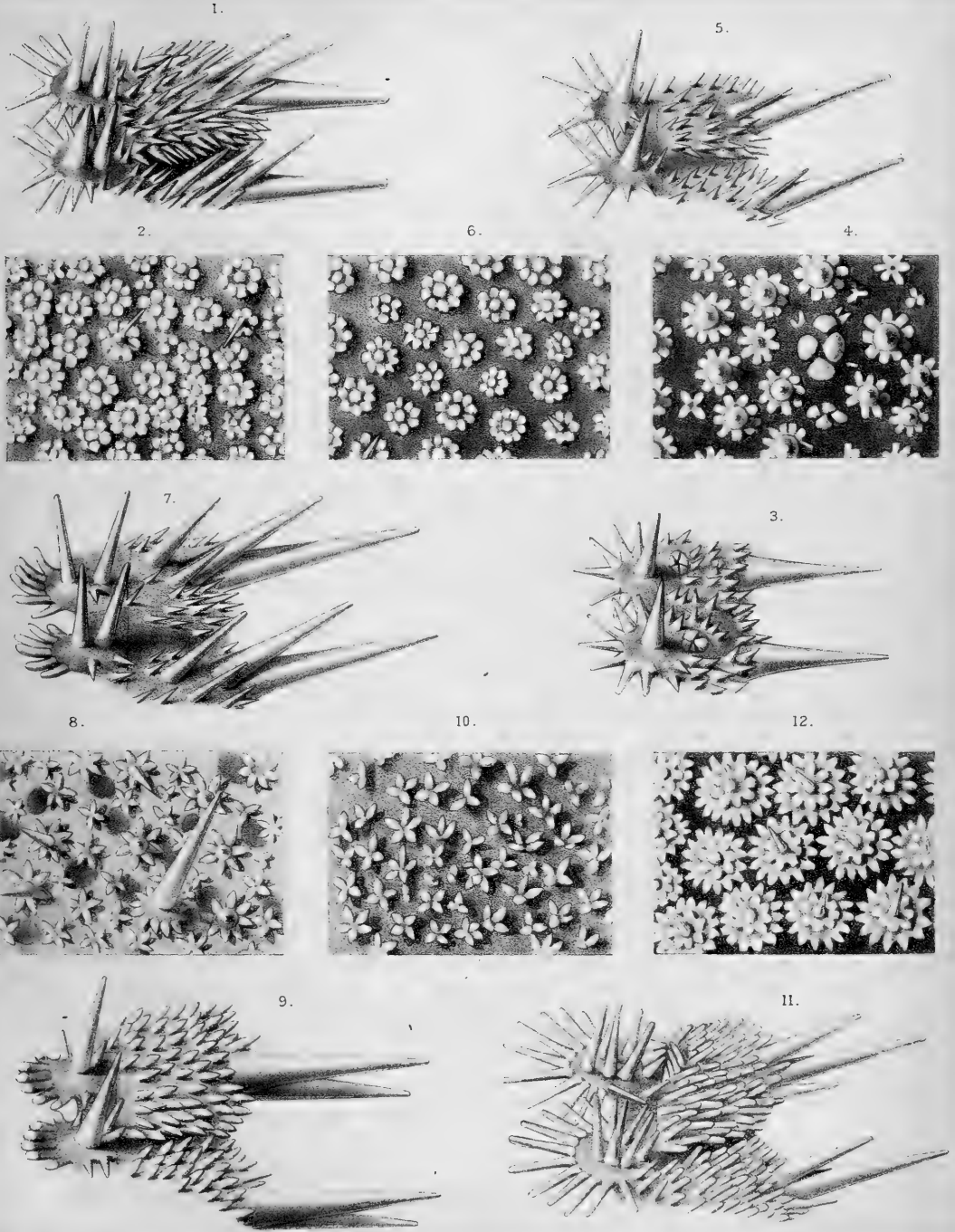
1-4. PLUTONASTER BIFRONS, Wyville Thomson, sp.

5-6. PLUTONASTER AMBIGUUS, n.sp.

PLATE XII.

PLATE XII.

	Page
Figs. 1, 2. <i>PONTASTER HEBITUS</i> , n. sp.	33
Fig. 1. Adambulacral and infero-marginal plates; magnified 8 diameters.	
Fig. 2. A portion of the abactinal surface; magnified 25 diameters. [For macroscopic figures of this species see Pl. VIII. figs. 1, 2.]	
Figs. 3, 4. <i>PONTASTER FORCIPATUS</i> , n. sp.	43
Fig. 3. Adambulacral and infero-marginal plates; magnified 10 diameters.	
Fig. 4. A portion of the abactinal surface; magnified 20 diameters. [For macroscopic figures of this species see Pl. VIII. figs. 3, 4.]	
Figs. 5, 6. <i>PONTASTER VENUSTUS</i> , n. sp.	52
Fig. 5. Adambulacral and infero-marginal plates; magnified 12 diameters.	
Fig. 6. A portion of the abactinal surface; magnified 18 diameters. [For macroscopic figures of this species see Pl. VIII. figs. 5, 6.]	
Figs. 7, 8. <i>PONTASTER OXYACANTHUS</i> , n. sp.	38
Fig. 7. Adambulacral and infero-marginal plates; magnified 8 diameters.	
Fig. 8. A portion of the abactinal surface; magnified 15 diameters. [For macroscopic figures of this species see Pl. IX. figs. 1, 2.]	
Figs. 9, 10. <i>PONTASTER TRULLIPES</i> , n. sp.	55
Fig. 9. Adambulacral and infero-marginal plates; magnified 20 diameters.	
Fig. 10. A portion of the abactinal surface; magnified 25 diameters. [For macroscopic figures of this species see Pl. IX. figs. 3, 4.]	
Figs. 11, 12. <i>PONTASTER TERES</i> , n. sp.	41
Fig. 11. Adambulacral and infero-marginal plates; magnified 15 diameters.	
Fig. 12. A portion of the abactinal surface; magnified 20 diameters. [For macroscopic figures of this species see Pl. IX. figs. 5, 6.]	



W.R. Crowther del.

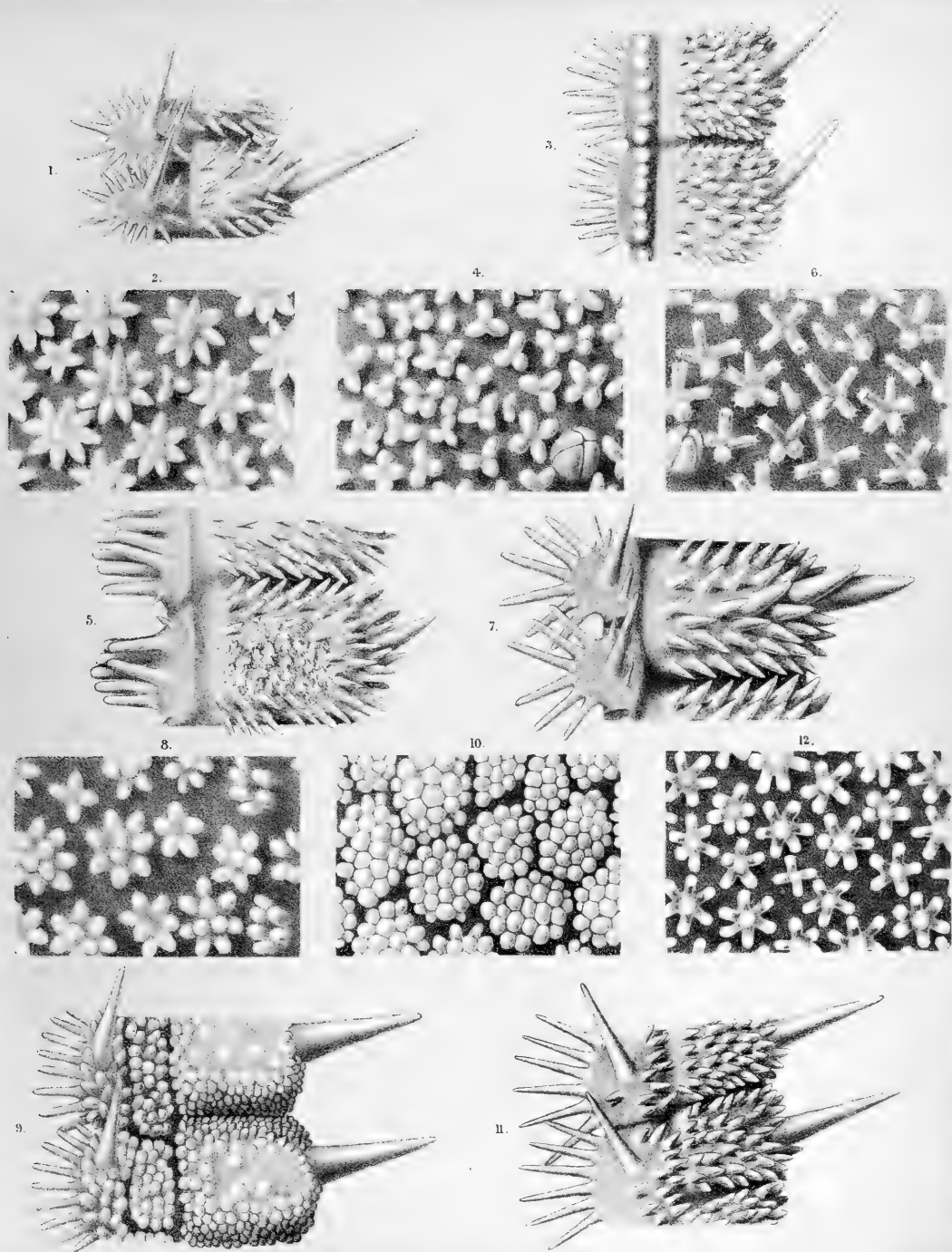
F. Hub. Int. W. P. 47

1-2. *PONTASTER HEBITUS*, n. sp. 3-4. *PONTASTER FORCIPATUS*, n. sp. 5-6. *PONTASTER VENUSTUS*, n. sp.
 7-8. *PONTASTER OXYACANTHUS*, n. sp. 9-10. *PONTASTER TRULLIPES*, n. sp. 11-12. *PONTASTER TERES*, n. sp.

PLATE XIII.

PLATE XIII.

	Page
Figs. 1, 2. <i>PONTASTER PLANETA</i> , n. sp.	30
Fig. 1. Adambulacral and infero-marginal plates ; magnified 15 diameters.	
Fig. 2. A portion of the abactinal surface ; magnified 40 diameters.	
[For macroscopic figures of this species see Pl. X. figs. 1, 2.]	
Figs. 3, 4. <i>DYTASTER BISERIALIS</i> , n. sp.	77
Fig. 3. Adambulacral and infero-marginal plates ; magnified 12 diameters.	
Fig. 4. A portion of the abactinal surface ; magnified 30 diameters.	
[For macroscopic figures of this species see Pl. X. figs. 3, 4.]	
Figs. 5, 6. <i>DYTASTER INERMIS</i> , n. sp.	79
Fig. 5. Adambulacral and infero-marginal plates ; magnified 30 diameters.	
Fig. 6. A portion of the abactinal surface ; magnified 50 diameters.	
[For macroscopic figures of this species see Pl. X. figs. 5, 6.]	
Figs. 7, 8. <i>PONTASTER SUBTUBERCULATUS</i> , n. sp.	58
Fig. 7. Adambulacral and infero-marginal plates ; magnified 20 diameters.	
Fig. 8. A portion of the abactinal surface ; magnified 35 diameters.	
[For macroscopic figures of this species see Pl. V. figs. 3, 4.]	
Figs. 9, 10. <i>PLUTONASTER BIFRONS</i> , Wyville Thomson, sp.	84
Fig. 9. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
Fig. 10. A portion of the abactinal surface ; magnified 30 diameters.	
[For macroscopic figures of this species see Pl. XI. figs. 1-4.]	
Figs. 11, 12. <i>PLUTONASTER AMBIGUUS</i> , n. sp.	95
Fig. 11. Adambulacral and infero-marginal plates ; magnified 20 diameters.	
Fig. 12. A portion of the abactinal surface ; magnified 35 diameters.	
[For macroscopic figures of this species see Pl. XI. figs. 5, 6.]	



1-2. PONTASTER PLANETA, n. sp.

3-4. DYTASTER BISERIALIS, n. sp.

5-6. DYTASTER INERMIS, n. sp.

7-8. PONTASTER SUBTUBERCULATUS, n. sp.

9-10. PLUTONASTER BIFRONS, Wyville Thomson, sp.

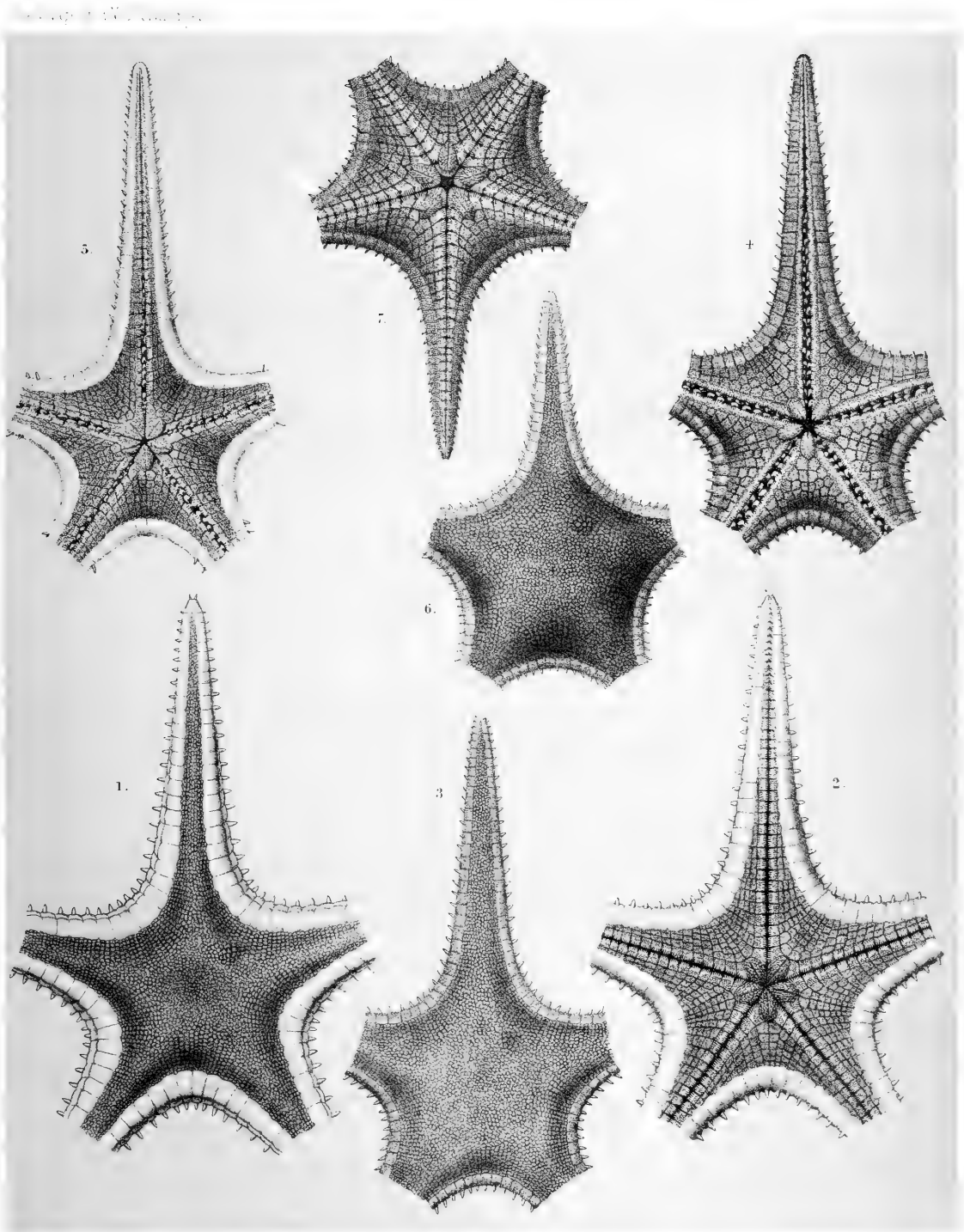
11-12. PLUTONASTER AMBIGUUS, n. sp.

Mintern Bros., imp.

PLATE XIV.

PLATE XIV.

	Page
Figs. 1, 2. <i>PLUTONASTER MARGINATUS</i> , n. sp.	88
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XV. figs. 1, 2.]	
Figs. 3, 4. <i>PLUTONASTER RIGIDUS</i> , n. sp.	91
Fig. 3. Abactinal aspect; natural size.	
Fig. 4. Actinal aspect; natural size.	
[For magnified details of this species see Pl. XV. figs. 3, 4.]	
Fig. 5. <i>PLUTONASTER RIGIDUS</i> , var. <i>SEMIARMATA</i> , nov.	94
Fig. 5. Actinal aspect; natural size.	
Figs. 6, 7. <i>PLUTONASTER NOTATUS</i> , n. sp.	97
Fig. 6. Abactinal aspect; magnified 2 diameters.	
Fig. 7. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XV. figs. 5, 6.]	



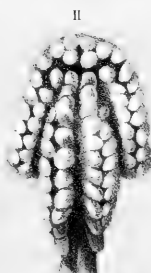
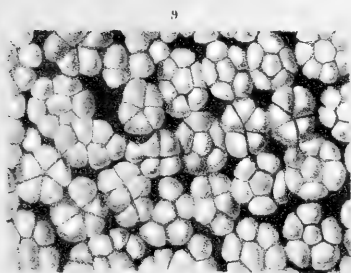
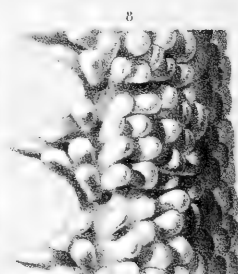
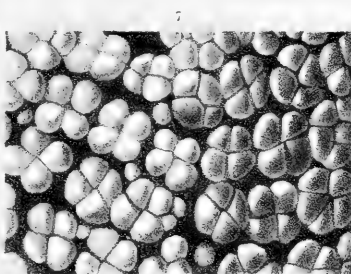
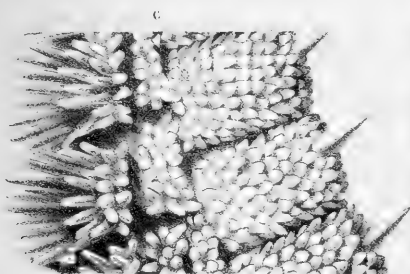
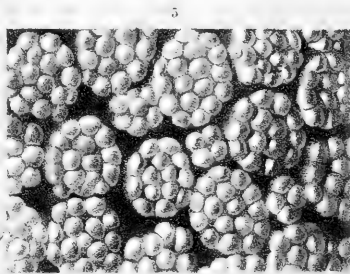
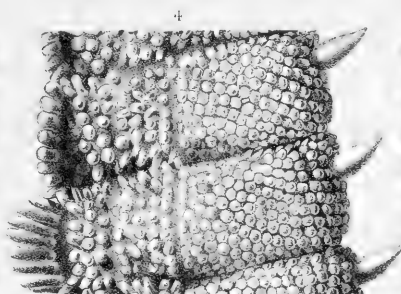
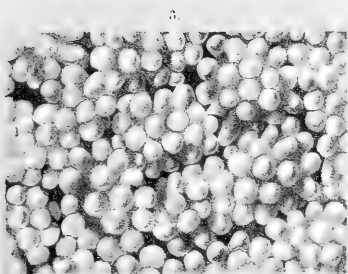
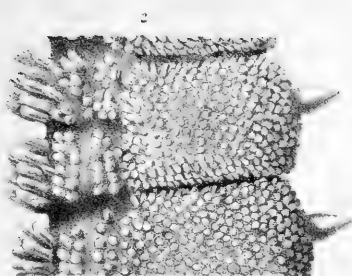
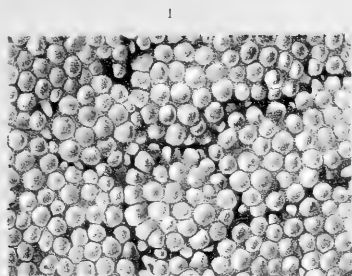
1-2. *PLUTONASTER MARGINATUS*, n.sp.
 5. *PLUTONASTER RIGIDUS*, var. *SEMIARMATA* nov.

3-4. *PLUTONASTER RIGIDUS*, n.sp.
 6-7. *PLUTONASTER NOTATUS*, n.sp.

PLATE XV.

PLATE XV.

	Page
Figs. 1, 2. <i>PLUTONASTER MARGINATUS</i> , n. sp.	88
Fig. 1. A portion of the abactinal surface ; magnified 30 diameters.	
Fig. 2. Adambulacral and infero-marginal plates ; magnified 9 diameters.	
[For macroscopic figures of this species see Pl. XIV. figs. 1, 2.]	
Figs. 3, 4. <i>PLUTONASTER RIGIDUS</i> , n. sp.	91
Fig. 3. A portion of the abactinal surface ; magnified 18 diameters.	
Fig. 4. Adambulacral and infero-marginal plates ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XIV. figs. 3, 4.]	
Figs. 5, 6. <i>PLUTONASTER NOTATUS</i> , n. sp.	97
Fig. 5. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 16 diameters.	
[For macroscopic figures of this species see Pl. XIV. figs. 6, 7.]	
Figs. 7-11. <i>PHOXASTER PUMILUS</i> , n. sp.	236
Fig. 7. A portion of the abactinal surface of a young example ; magnified 30 diameters.	
Fig. 8. Adambulacral and infero-marginal plates of a young example ; magnified 25 diameters.	
Fig. 9. A portion of the abactinal surface of an adult example ; magnified 25 diameters.	
Fig. 10. Adambulacral and infero-marginal plates of an adult example ; magnified 20 diameters.	
Fig. 11. Mouth-plates and armature ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XL. figs. 3-6.]	



1-2. PLUTONASTER MARGINATUS, n. sp.
5-6. PLUTONASTER NOTATUS, n. sp.

3-4. PLUTONASTER RIGIDUS, n. sp.
7-11. PHOXASTER PUMILUS, n. sp.

PLATE XVI.

PLATE XVI.

Figs. 1-5. LONCHOTASTER TARTAREUS, n. sp.

Page
104

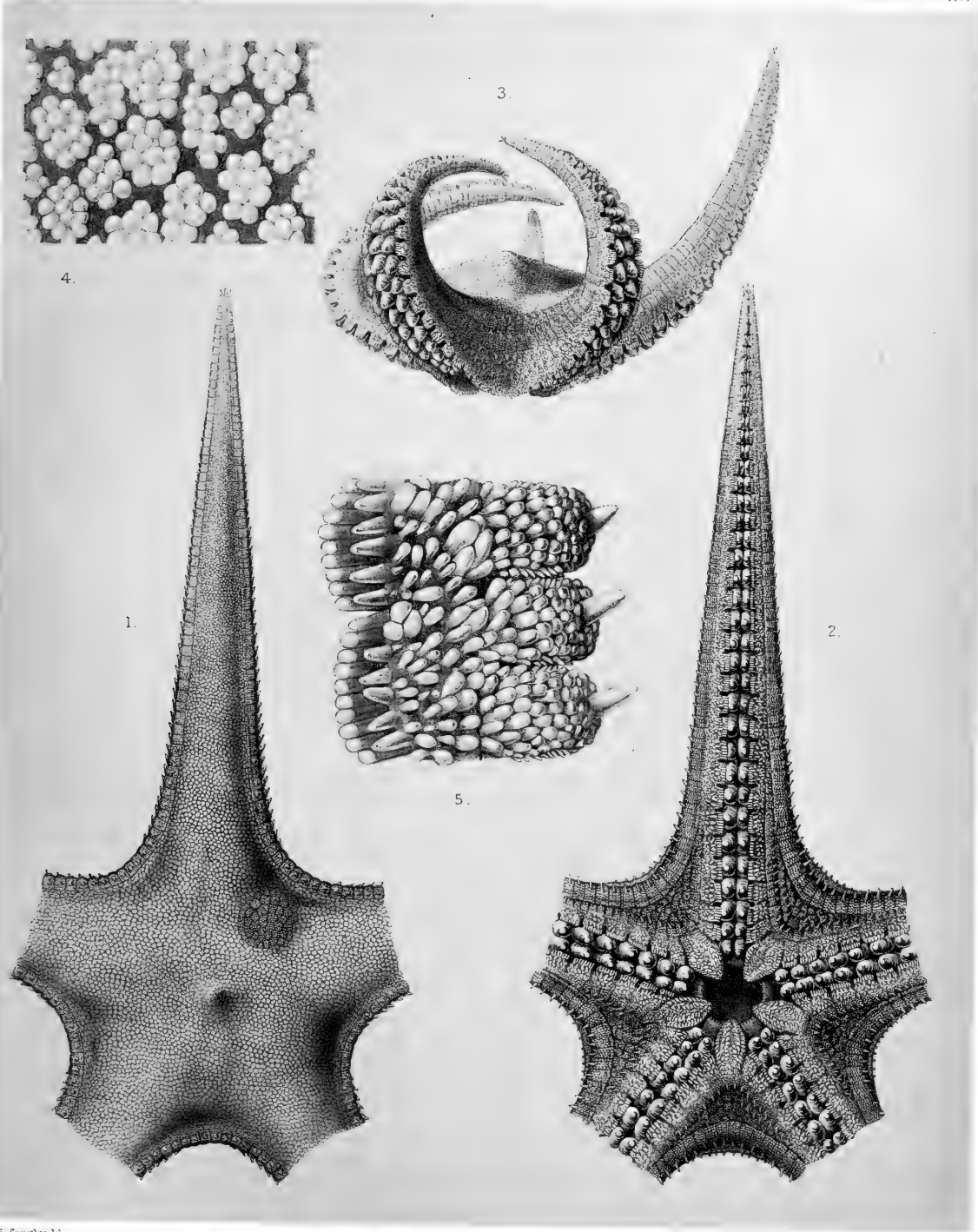
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.

Fig. 3. Profile view ; magnified 2 diameters.

Fig. 4. A portion of the abactinal surface ; magnified 20 diameters.

Fig. 5. Adambulacral and infero-marginal plates ; magnified 10 diameters.

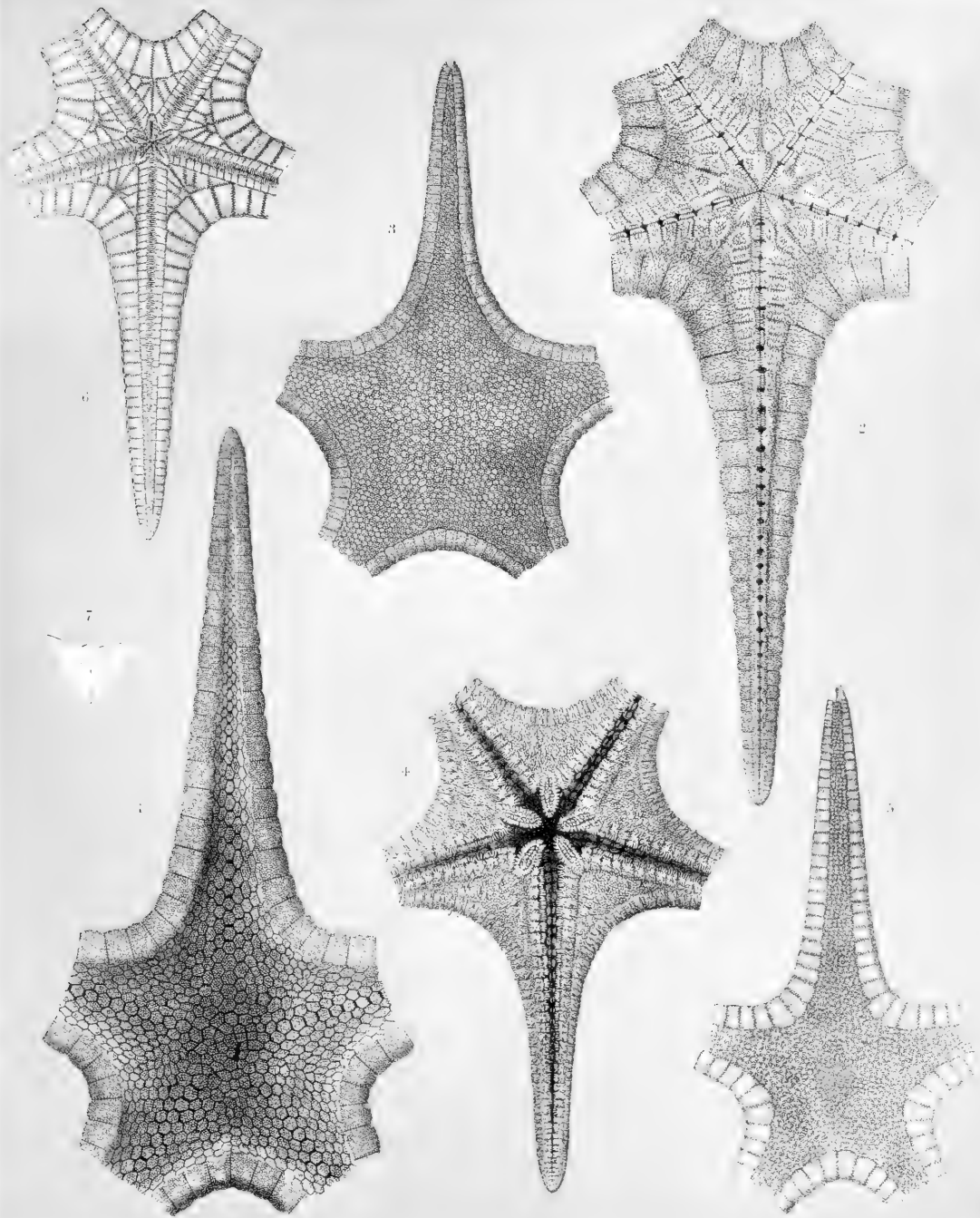


LONCHOTASTER TARTAREUS, n. sp.

PLATE XVII.

PLATE XVII.

	Page
Figs. 1, 2. <i>APHRODITASTER GRACILIS</i> , n. sp.	117
Fig. 1. Abactinal aspect; magnified 2 diameters.	
Fig. 2. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XVIII. figs. 7, 8.]	
Figs. 3, 4. <i>PSEUDARCHASTER TESSELLATUS</i> , n. sp.	112
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XVIII. figs. 9-10.]	
Figs. 5-7. <i>CRASPIDASTER HESPERUS</i> , Müller and Troschel, sp.	177
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
Fig. 7. Diagram of the actinal intermediate plates of an example from Hong Kong; magnified 2 diameters.	
[For magnified details of this species see Pl. XVIII. figs. 1-4.]	



1-2. *APHRODITASTER GRACILIS*, n. sp.

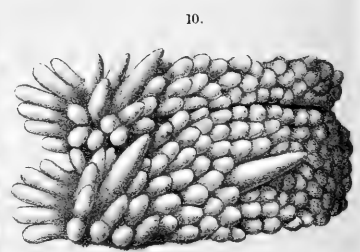
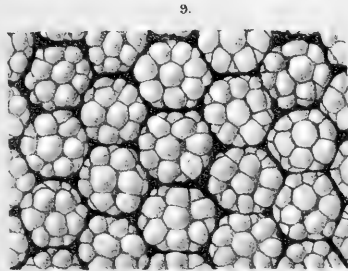
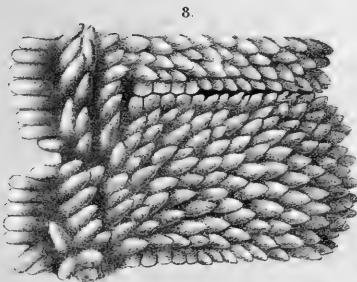
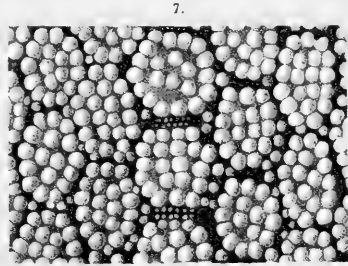
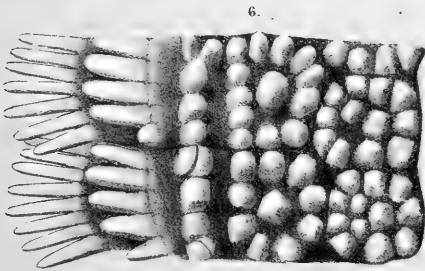
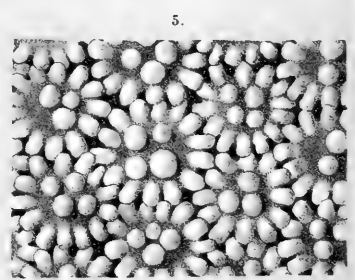
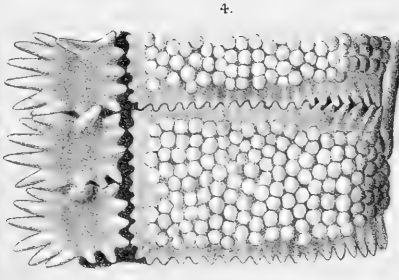
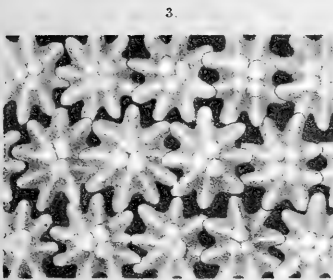
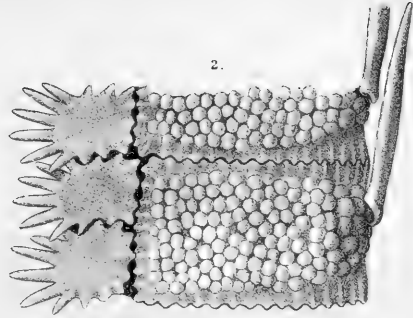
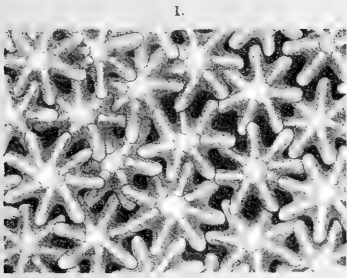
3-4. *PSEUDARCHASTER TESSELLATUS*, n. sp.

5-7. *CRASPIDASTER HESPERUS*, Müller & Troschel, -p.

PLATE XVIII.

PLATE XVIII.

- | | Page |
|--|------|
| Figs. 1-4. <i>CRASPIDASTER HESPERUS</i> , Müller and Troschel, sp. | 177 |
| Fig. 1. A portion of the abactinal surface of an example from the Philippine Islands ; magnified 20 diameters. | |
| Fig. 2. Adambulacral and infero-marginal plates of the same ; magnified 15 diameters. | |
| Fig. 3. A portion of the abactinal surface of an example from Hong Kong ; magnified 18 diameters. | |
| Fig. 4. Adambulacral and infero-marginal plates of the same ; magnified 12 diameters. | |
| [For macroscopic figures of this species see Pl. XVII. figs. 5-7.] | |
| Figs. 5, 6. <i>PENTAGONASTER ARCUATUS</i> , n. sp. | 277 |
| Fig. 5. A portion of the abactinal surface ; magnified 8 diameters. | |
| Fig. 6. Adambulacral and adjacent intermediate plates ; magnified 12 diameters. | |
| [For macroscopic figures of this species see Pl. LII. figs. 1, 2.] | |
| Figs. 7, 8. <i>APHRODITASTER GRACILIS</i> , n. sp. | 117 |
| Fig. 7. A portion of the abactinal surface, showing the plates of the median radial line ; magnified 12 diameters. | |
| Fig. 8. Adambulacral and infero-marginal plates ; magnified 12 diameters. | |
| [For macroscopic figures of this species see Pl. XVII. figs. 1, 2.] | |
| Figs. 9, 10. <i>PSEUDARCHASTER TESSELLATUS</i> , n. sp. | 112 |
| Fig. 9. A portion of the abactinal surface ; magnified 12 diameters. | |
| Fig. 10. Adambulacral and infero-marginal plates ; magnified 12 diameters. | |
| [For macroscopic figures of this species see Pl. XVII. figs. 3, 4.] | |

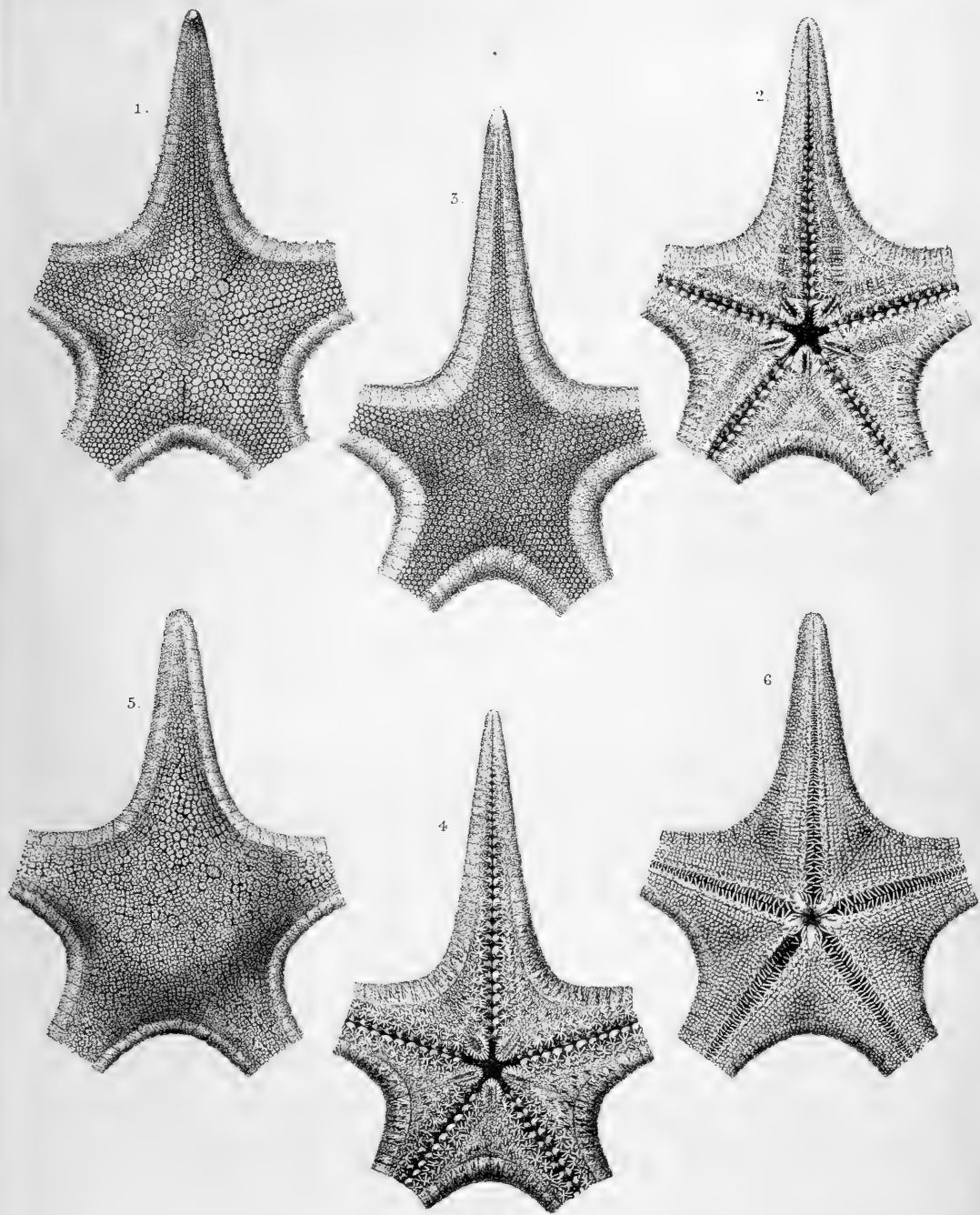


1-4. CRASPIDASTER HESPERUS, Müller & Troschel, sp. 5-6. PENTAGONASTER ARCUATUS, n. sp.
 7-8. APHRODITASTER GRACILIS, n. sp. 9-10. PSEUDARCHASTER TESSELLATUS, n. sp.

PLATE XIX.

PLATE XIX.

	Page
Figs. 1, 2. <i>PSEUDARCHASTER DISCUS</i> , n. sp.	110
Fig. 1. Abactinal aspect ; magnified 2 diameters.	
Fig. 2. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XLII. figs. 3, 4.]	
Figs. 3, 4. <i>PSEUDARCHASTER INTERMEDIUS</i> , n. sp.	115
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XLII. figs. 5, 6.]	
Figs. 5, 6. <i>GNATHASTER ELONGATUS</i> , n. sp.	288
Fig. 5. Abactinal aspect of a young example ; magnified 3 diameters.	
Fig. 6. Actinal aspect of a young example ; magnified 3 diameters.	
[For figures of adult examples of this species see Pl. XLVIII. figs. 1-4 ; for magnified details see Pl. XLIX. figs. 5-10.]	



1-2. PSEUDARCHASTER DISCUS, n.sp.

3-4. PSEUDARCHASTER INTERMEDIUS, n.sp.

5-6. GNATHASTER ELONGATUS, n.sp. juv.

PLATE XX.

PLATE XX.

Figs. 1-7. PORCELLANASTER CÆRULEUS, Wyville Thomson, . . . Page
134

Fig. 1. Abactinal aspect ; magnified 3 diameters.

Fig. 2. Actinal aspect ; magnified 3 diameters.

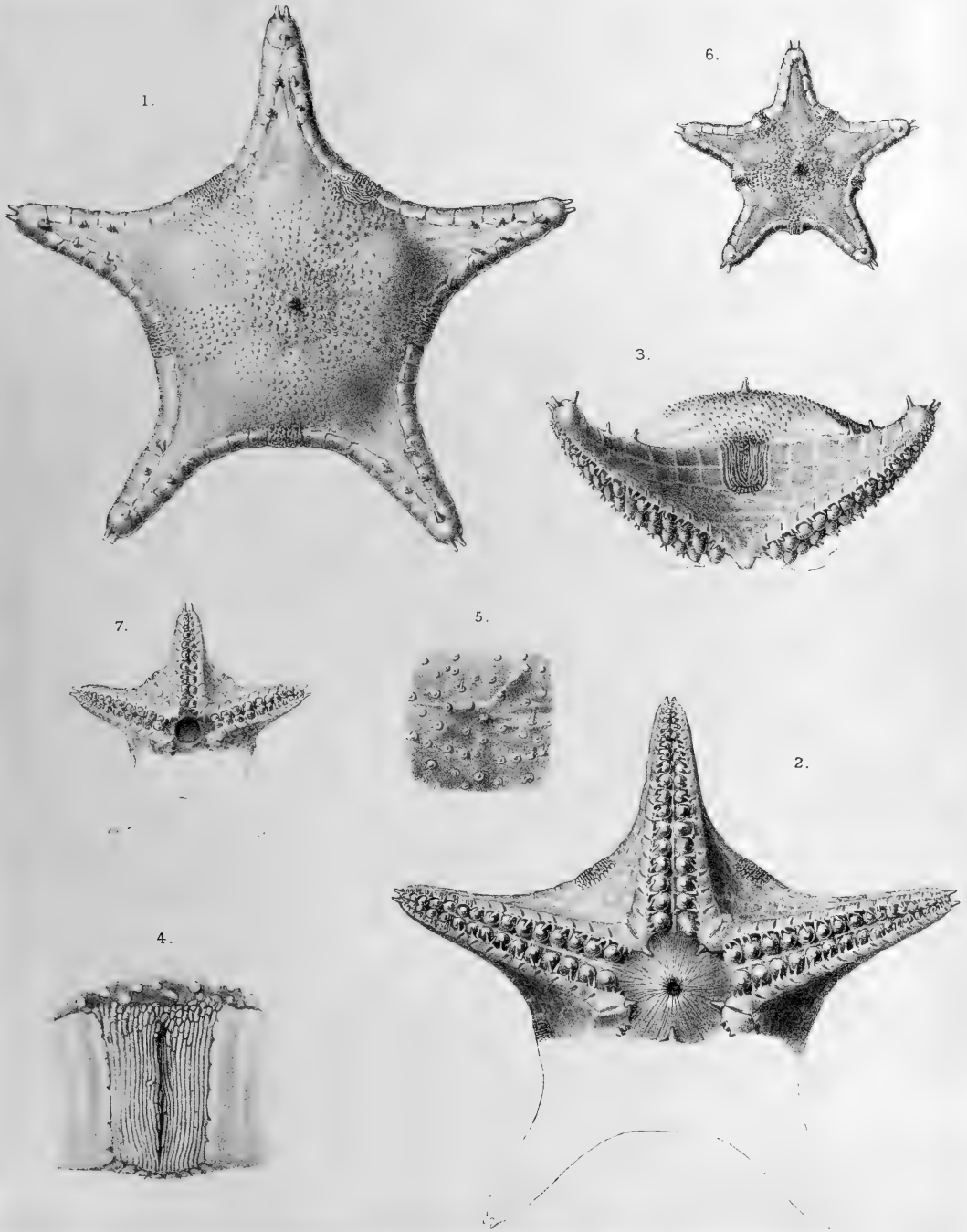
Fig. 3. Profile view ; magnified 3 diameters.

Fig. 4. A cribriform organ ; magnified 10 diameters.

Fig. 5. A portion of the abactinal surface ; magnified 20 diameters.

Fig. 6. Abactinal aspect of a young example ; magnified 3 diameters.

Fig. 7. Actinal aspect of a young example ; magnified 3 diameters.



F. H. Michael del.

F. H. M. Ed. et.

PORCELLANASTER CÆRULEUS, Wyville Thomson

PLATE XX^A.

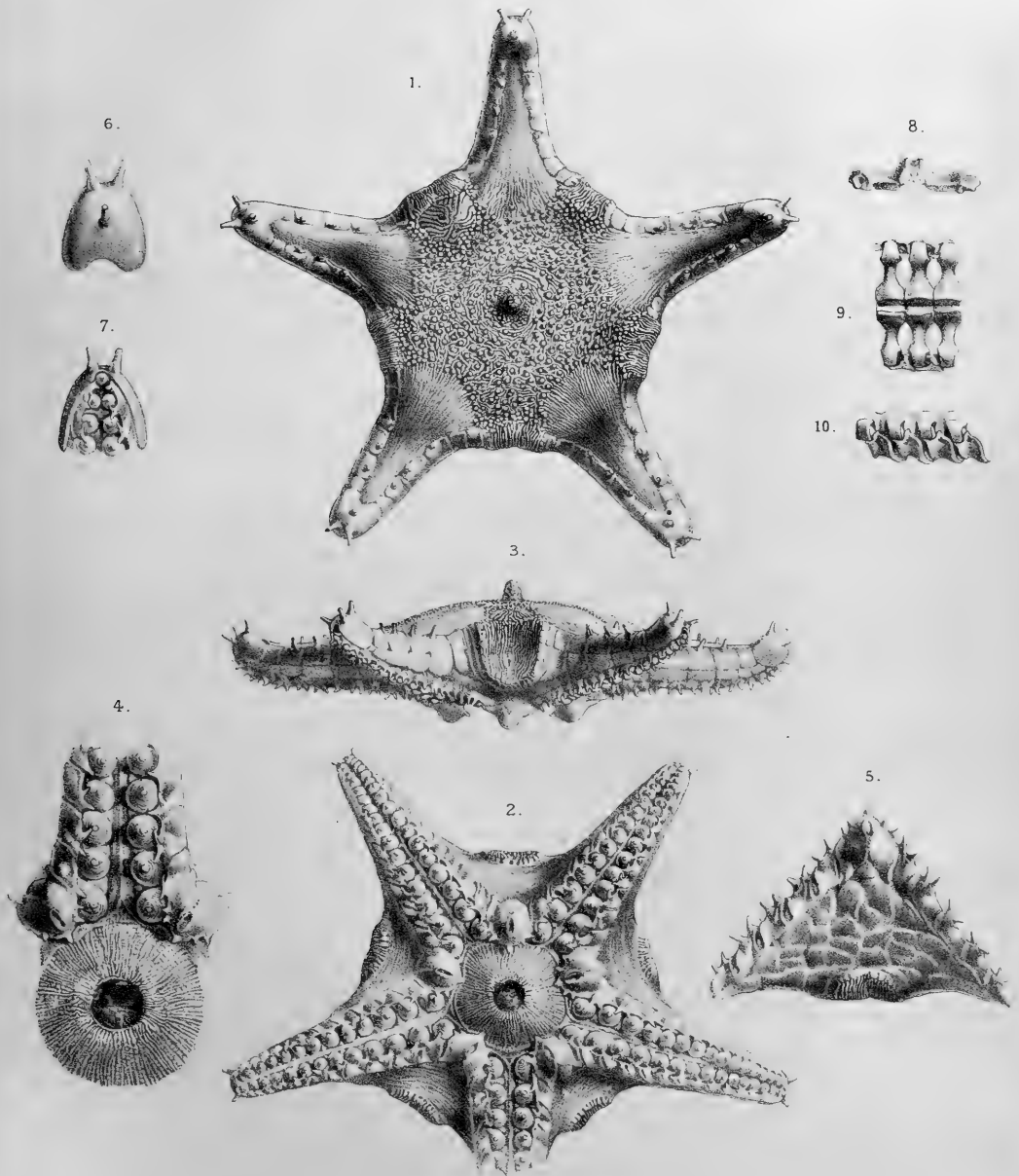
PLATE XX^A.

Figs. 1-10. PORCELLANASTER CÆRULEUS, Wyville Thomson, . . . Page
134

- Fig. 1. Abactinal aspect; magnified 3 diameters.
Fig. 2. Actinal aspect; magnified 3 diameters.
Fig. 3. Profile view; magnified 3 diameters.
Fig. 4. A portion of the actinostome, showing the buccal membrane, and an adjacent radial area; magnified 5 diameters.
Fig. 5. An actinal interradial area; magnified 6 diameters.
Fig. 6. A terminal plate, abactinal aspect; magnified about 7 diameters.
Fig. 7. Actinal aspect of the same; magnified about 7 diameters.
Fig. 8. A pair of ambulacral plates, seen in profile; magnified 5 diameters.
Fig. 9. Ambulacral plates seen from above; magnified 5 diameters.
Fig. 10. Lateral view of the same, showing the adambulacral plates; magnified 5 diameters. [The character of the latter is somewhat exaggerated.]

[These figures appear to have been drawn from a dried or shrunken example.

The plate was prepared under the direction of Sir Wyville Thomson, and I was unfortunately not aware of its existence until the greater part of the text and nearly all the plates had been printed off.]

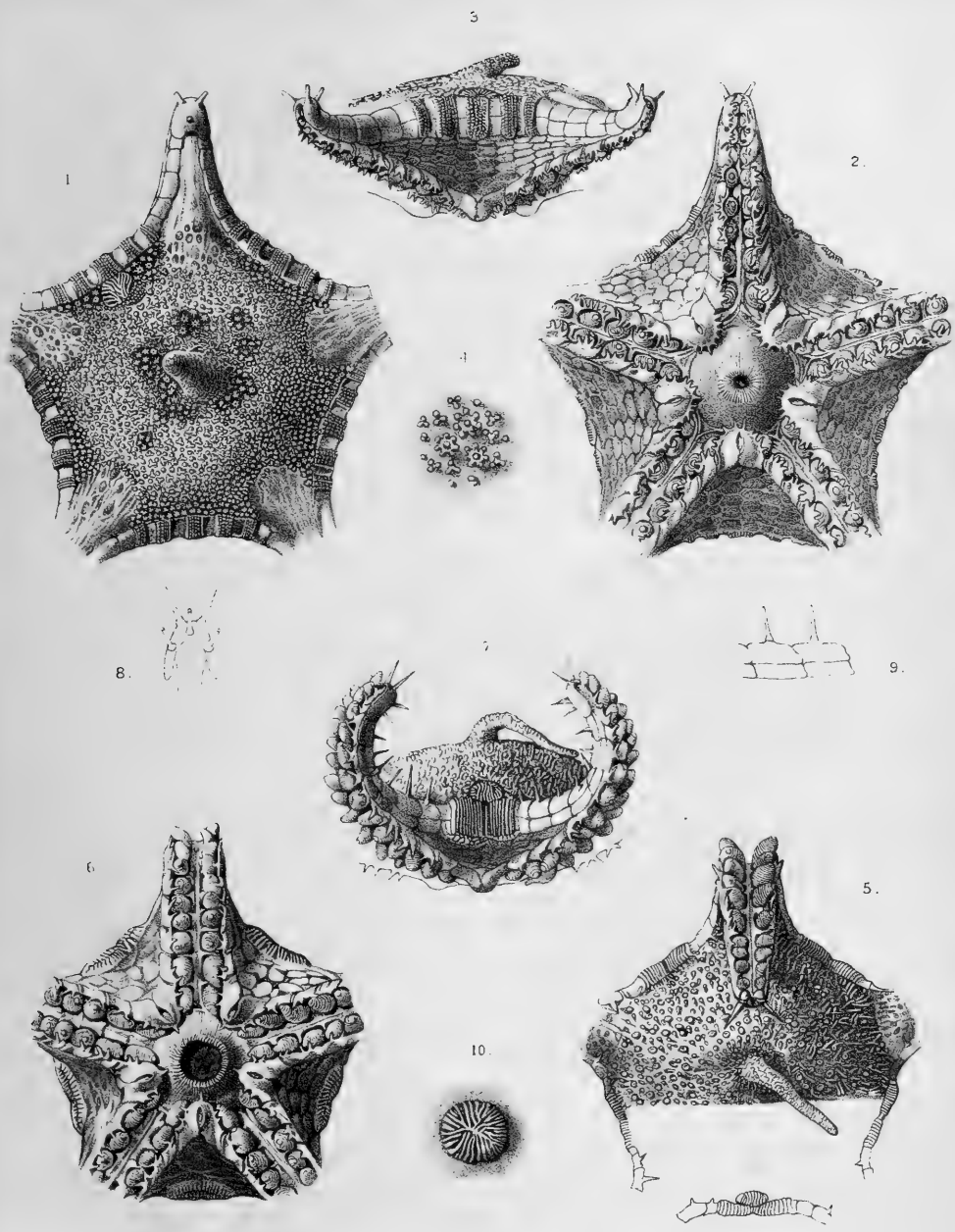


PORCELLANASTER CÆRULEUS, Wyville Thomson.

PLATE XXI.

PLATE XXI.

	Page
Figs. 1-4. <i>HYPHALASTER DIADEMATUS</i> , n. sp.	159
Fig. 1. Abactinal aspect; magnified 4 diameters.	
Fig. 2. Actinal aspect; magnified 4 diameters.	
Fig. 3. Profile view; magnified 4 diameters.	
Fig. 4. A portion of the abactinal surface; magnified about 14 diameters.	
[For magnified details of this species see Pl. XXVIII. figs. 17-20.]	
Figs. 5-10. <i>PORCELLANASTER CAULIFER</i> , n. sp.	138
Fig. 5. Abactinal aspect; magnified 4 diameters.	
Fig. 6. Actinal aspect; magnified 4 diameters.	
Fig. 7. Profile view; magnified 4 diameters.	
Fig. 8. Diagram of the terminal plate; magnified.	
Fig. 9. Diagram of the marginal plates; magnified.	
Fig. 10. The madreporiform body; magnified 8 diameters.	
[For magnified details of this species see Pl. XXVII. figs. 9-12.]	



W. S. Pilsbry

F. Hub. Intef. E.S.M.

1-4. HYPHALASTER DIADEMATUS, n. sp.

5-10. PORCELLANASTER CAULIFER, n. sp.

PLATE XXII.

PLATE XXII.

Figs. 1-3. *PORCELLANASTER GRACILIS*, n. sp. Page
143

Fig. 1. Abactinal aspect; magnified 5 diameters.

Fig. 2. Actinal aspect; magnified 5 diameters.

Fig. 3. Profile view; magnified 5 diameters.

[For magnified details of this species see Pl. XXVII. figs. 5-8.]

Figs. 4-7. *PORCELLANASTER CRASSUS*, n. sp. 141

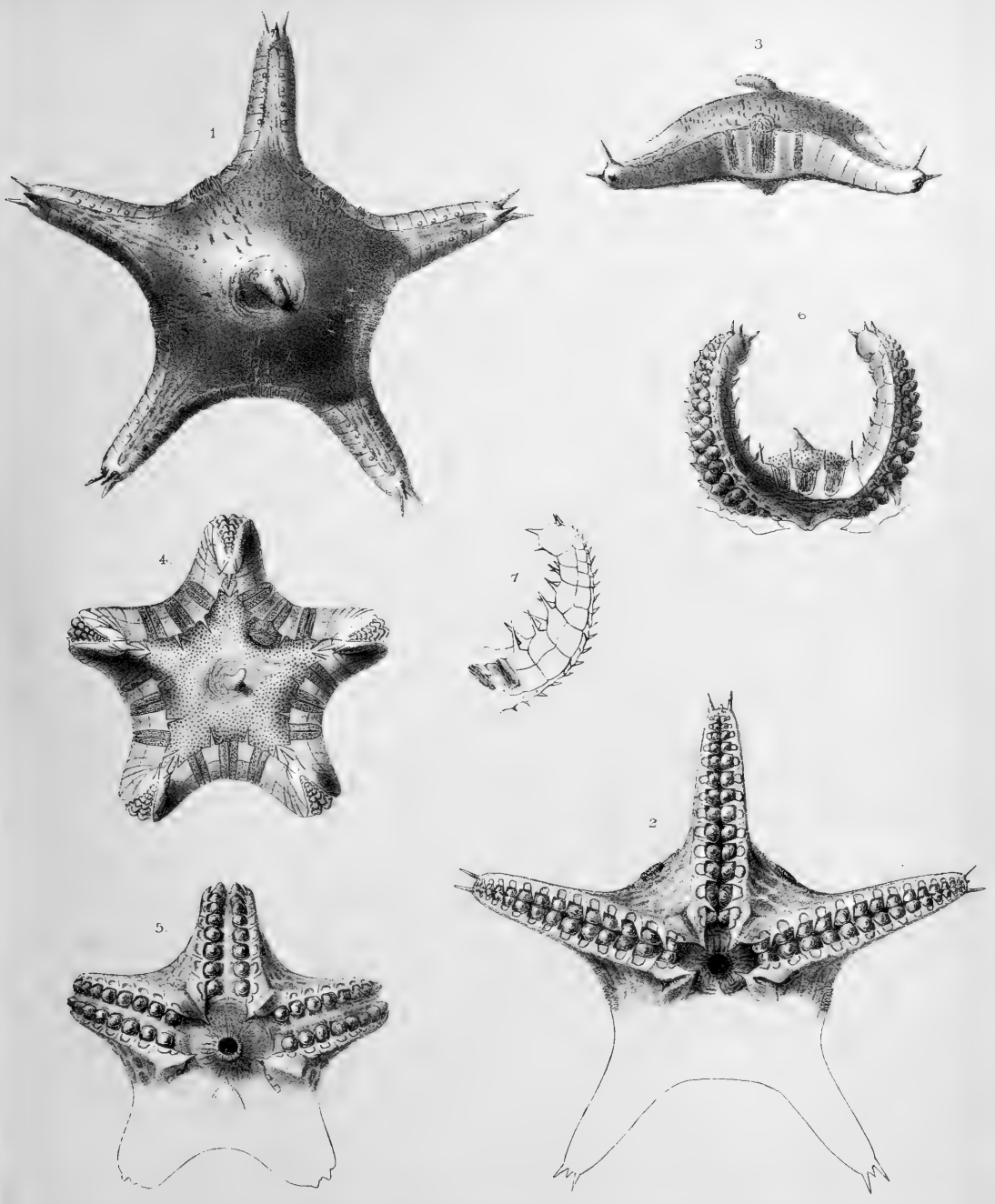
Fig. 4. Abactinal aspect; magnified 2 diameters.

Fig. 5. Actinal aspect; magnified 2 diameters.

Fig. 6. Profile view; magnified 2 diameters.

Fig. 7. Direct lateral view of a ray, in outline; magnified 2 diameters.

[For magnified details of this species see Pl. XXVII. figs. 1-4.]



F. H. Michael, del.

Geo. West & Sons lith et imp

1-3. PORCELLANASTER GRACILIS, n. sp. 4-7. PORCELLANASTER CRASSUS, n. sp.

PLATE XXIII.

PLATE XXIII.

Figs. 1-4. PORCELLANASTER TUBEROSUS, n. sp. Page
140

Fig. 1. Abactinal aspect; magnified 3 diameters.

Fig. 2. Actinal aspect; magnified 3 diameters.

Fig. 3. Profile view; magnified 3 diameters.

Fig. 4. Direct lateral view of a ray, in outline; magnified 3 diameters.

[For magnified details of this species see Pl. XXVII. figs. 13-16.]

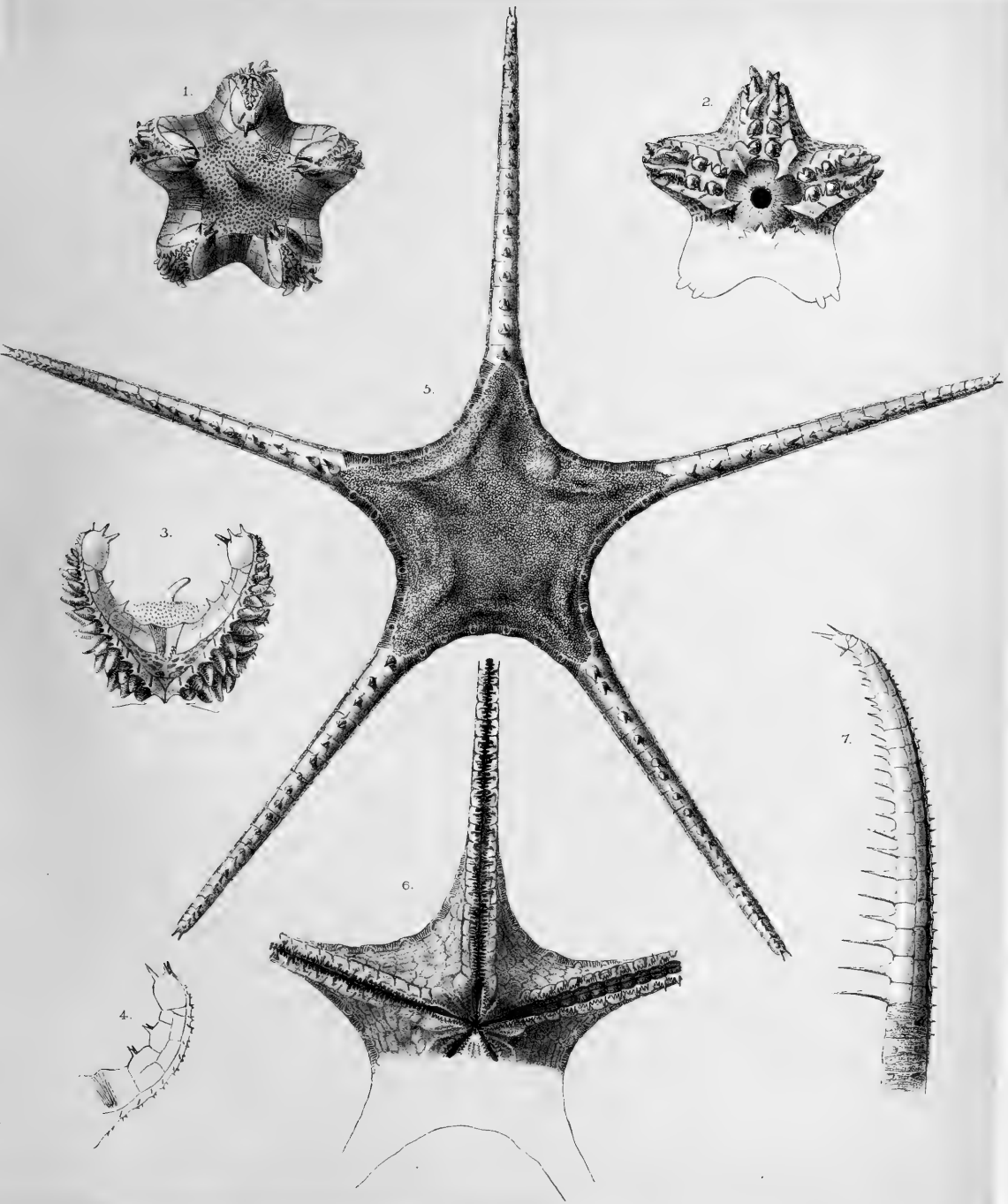
Figs. 5-7. STYRACASTER HORRIDUS, n. sp. 150

Fig. 5. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 6. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 7. Direct lateral view of a ray; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. XXVII. figs. 17-20.]



H. Michael, del.

Geo. West & Sons lith. et imp.

1-4. PORCELLANASTER TUBEROSUS, n. sp

5-7. STYRCASTER HORRIDUS, n. sp

PLATE XXIV.

PLATE XXIV.

Figs. 1-4. *STYRACASTER ARMATUS*, n. sp. Page
153

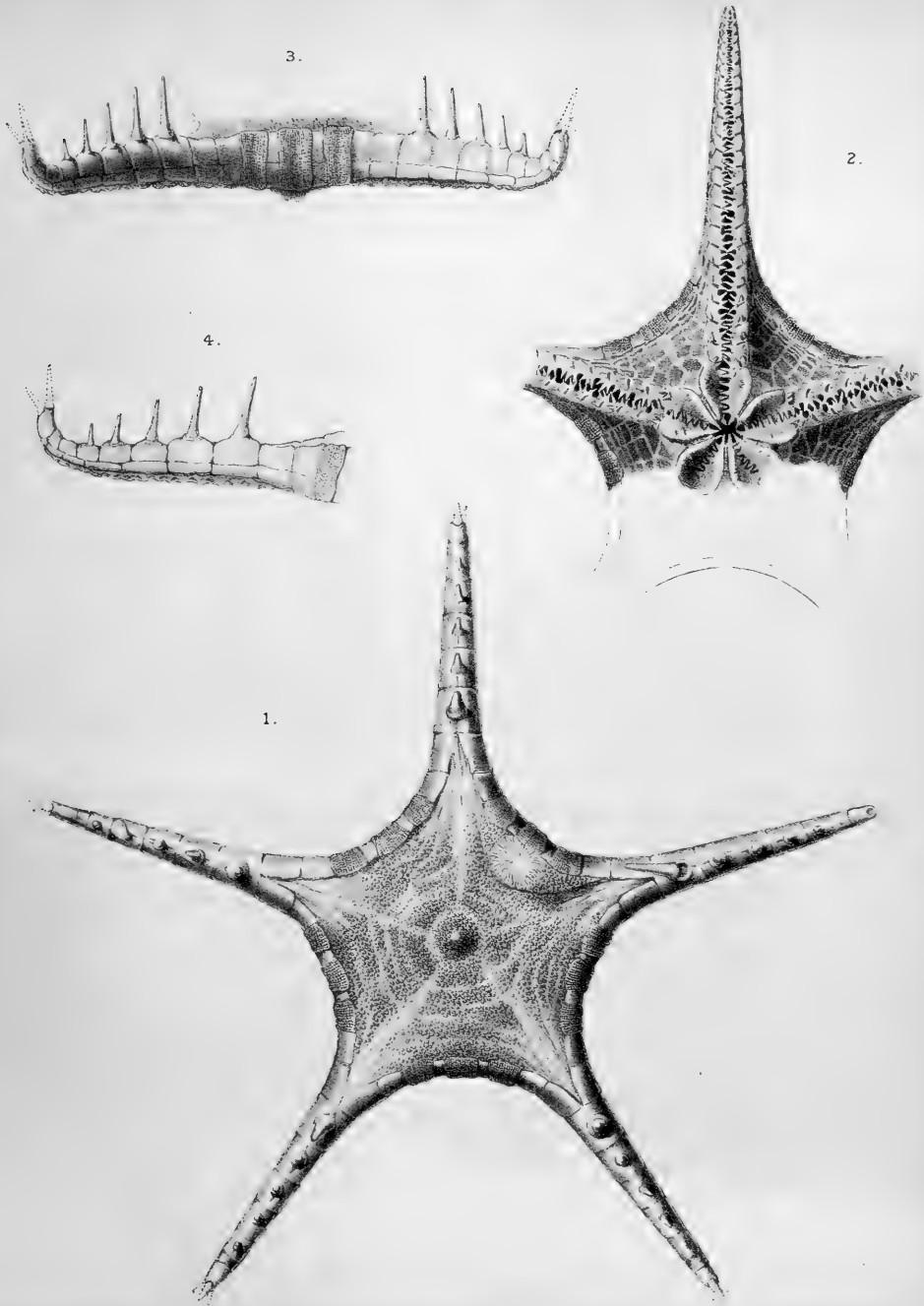
Fig. 1. Abactinal aspect; magnified 2 diameters.

Fig. 2. Actinal aspect; magnified 2 diameters.

Fig. 3. Profile view; magnified 2 diameters.

Fig. 4. Lateral view of a ray; magnified 2 diameters.

[For magnified details of this species see Pl. XXVIII. figs. 1-4.]



F. H. Michael del.

PLATE XXIV.

STYRACASTER ARMATUS, n. sp.

PLATE XXV.

PLATE XXV.

	Page
Figs. 1-3. <i>HYPHALASTER PLANUS</i> , n. sp.	165

Fig. 1. Abactinal aspect; magnified 2 diameters.

Fig. 2. Actinal aspect; magnified 2 diameters.

Fig. 3. Profile view; magnified 2 diameters.

[For magnified details of this species see Pl. XXVIII. figs 9-12.]

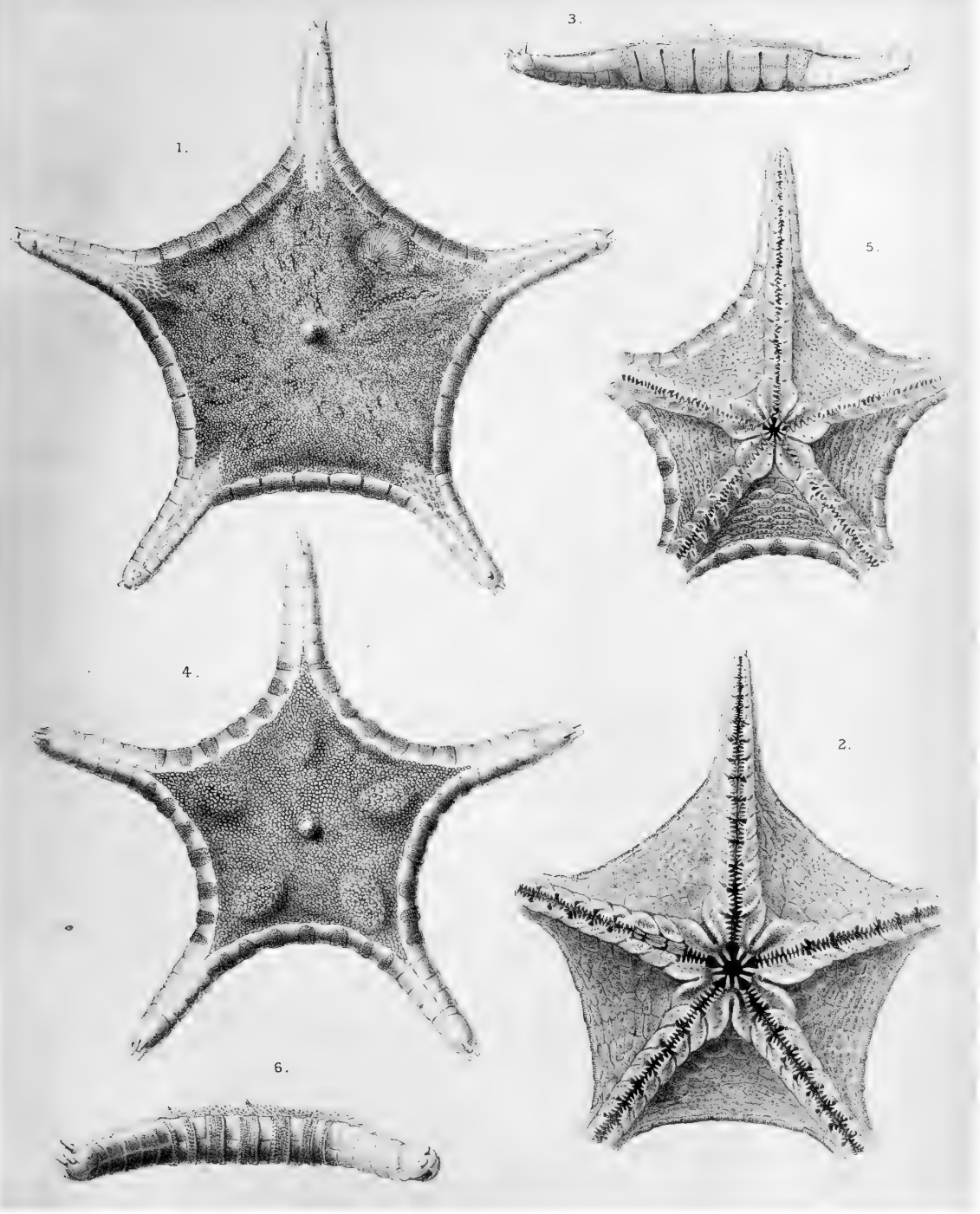
Figs. 4-6. <i>HYPHALASTER INERMIS</i> , n. sp.	162
--	-----

Fig. 4. Abactinal aspect; magnified 3 diameters.

Fig. 5. Actinal aspect; magnified 3 diameters.

Fig. 6. Profile view; magnified 3 diameters.

[For magnified details of this species see Pl. XXVIII. figs. 5-8.]



1-3. HYPHALASTER PLANUS, n. sp.

4-6. HYPHALASTER INERMIS, n. sp.

F.H. Michael, del.

F. H. M. Edin'

PLATE XXVI.

PLATE XXVI.

Figs. 1-6. *HYPHALASTER HYALINUS*, n. sp. Page
156

Fig. 1. Abactinal aspect; magnified 3 diameters.

Fig. 2. Actinal aspect; magnified 3 diameters.

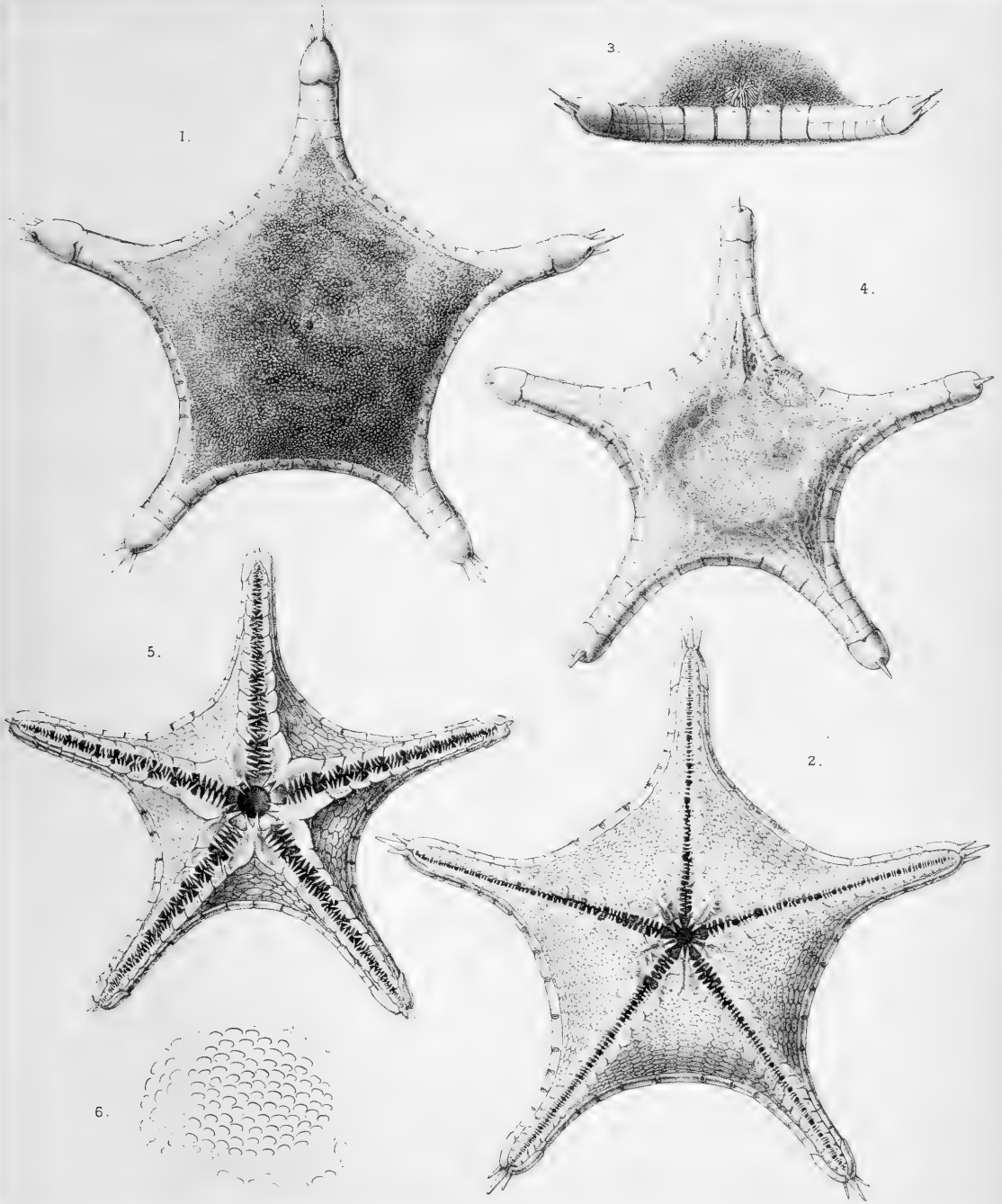
Fig. 3. Profile view; magnified 3 diameters.

Fig. 4. Abactinal aspect of a young example; magnified 4 diameters.

Fig. 5. Actinal aspect of a young example; magnified 4 diameters.

Fig. 6. An embryonic abactinal plate; magnified 54 diameters.

[For magnified details of this species see Pl. XXVIII. figs. 13-16.]



F.H. Michael del.

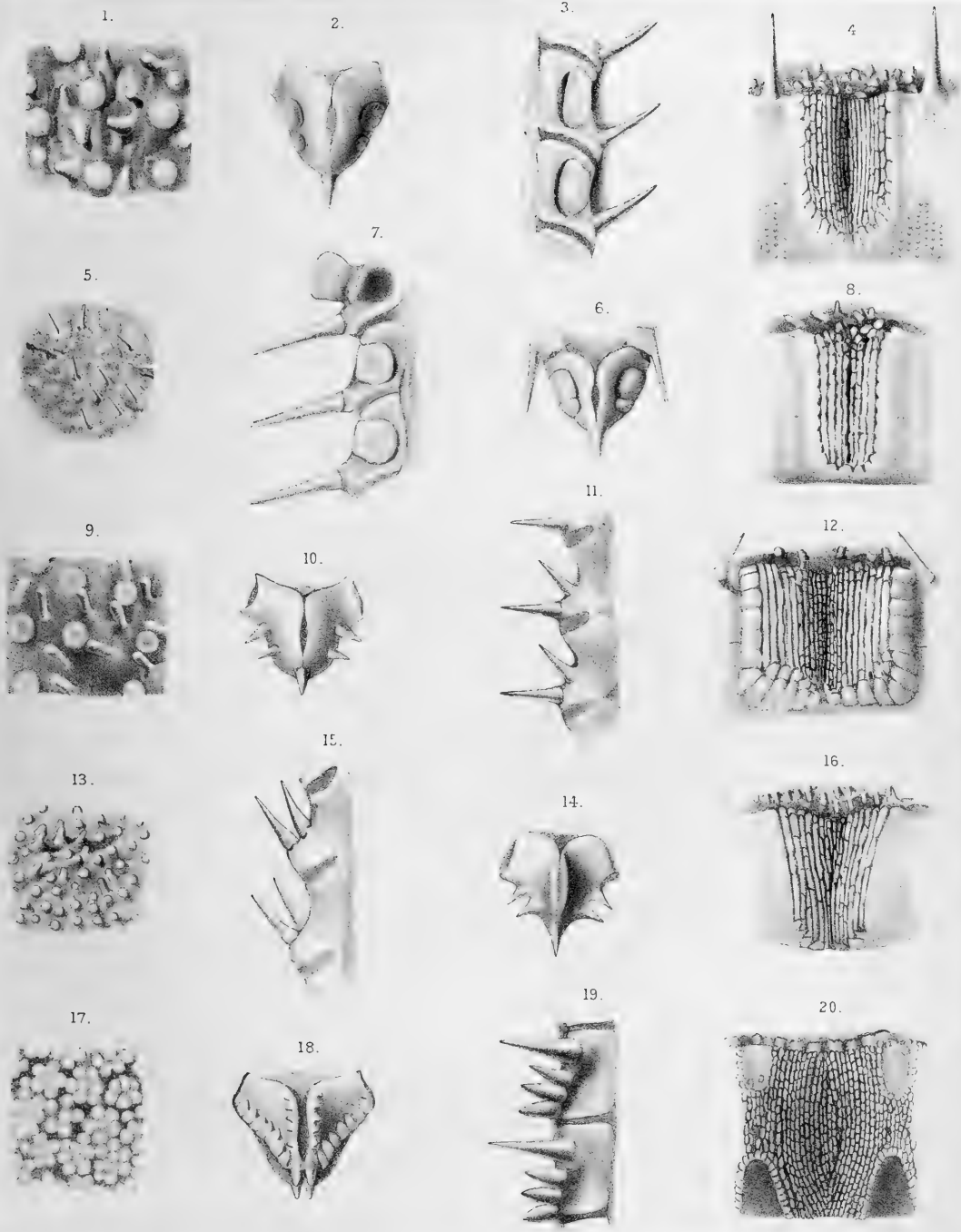
F. Hutch. Lith. Edm.

HYPHALASTER HYALINUS, n. sp.

PLATE XXVII.

PLATE XXVII.

	Page
Figs. 1-4. PORCELLANASTER CRASSUS, n. sp.	141
Fig. 1. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 2. Mouth-plates ; magnified 5 diameters.	
Fig. 3. Adambulacral plates, with segmental pits and papillæ ; magnified 10 diameters.	
Fig. 4. A cribriform organ ; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. XXII. figs. 4-7.]	
Figs. 5-8. PORCELLANASTER GRACILIS, n. sp.	143
Fig. 5. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 6. Mouth-plates ; magnified 10 diameters.	
Fig. 7. Adambulacral plates, with segmental pits and papillæ ; magnified 18 diameters.	
Fig. 8. A cribriform organ ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XXII. figs. 1-3.]	
Figs. 9-12. PORCELLANASTER CAULIFER, n. sp.	138
Fig. 9. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 10. Mouth-plates ; magnified 10 diameters.	
Fig. 11. Adambulacral plates ; magnified 15 diameters.	
Fig. 12. A cribriform organ ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXI. figs. 5-10.]	
Figs. 13-16. PORCELLANASTER TUBEROSUS, n. sp.	140
Fig. 13. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 14. Mouth-plates ; magnified 8 diameters.	
Fig. 15. Adambulacral plates ; magnified 16 diameters.	
Fig. 16. A cribriform organ ; magnified 9 diameters.	
[For macroscopic figures of this species see Pl. XXIII. figs. 1-4.]	
Figs. 17-20. STYRACASTER HORRIDUS, n. sp.	150
Fig. 17. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 18. Mouth-plates ; magnified 4 diameters.	
Fig. 19. Adambulacral plates ; magnified 8 diameters.	
Fig. 20. A cribriform organ ; magnified 5 diameters.	
[For macroscopic figures of this species see Pl. XXIII. figs. 5-7.]	



F. H. Michael del.

F. H. Michael del.

1-4. PORCELLANASTER CRASSUS, n. sp.

5-8. PORCELLANASTER GRACILIS, n. sp.

9-12. PORCELLANASTER CAULIFER, n. sp.

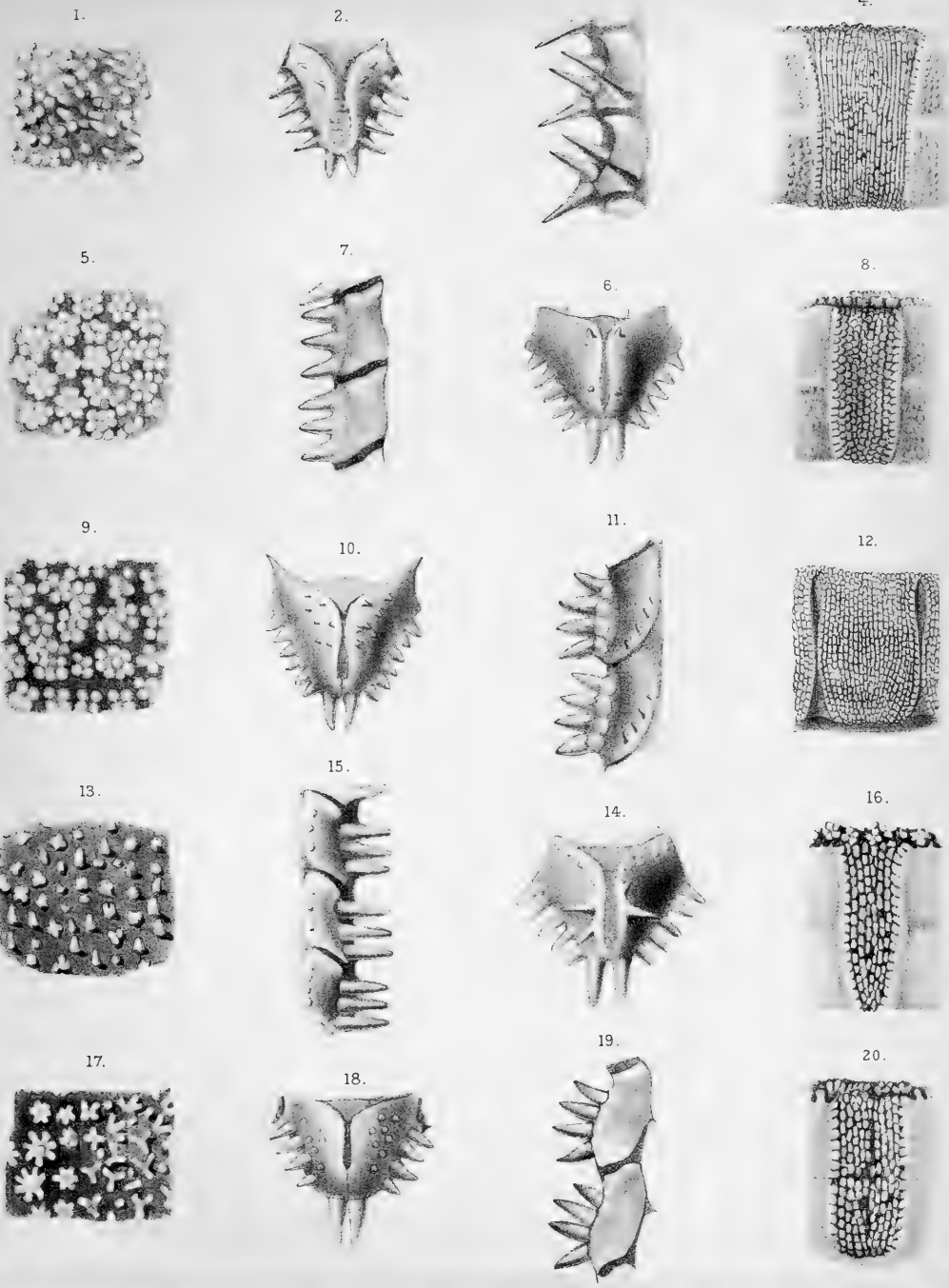
13-16. PORCELLANASTER TUBEROSUS, n. sp.

17-20. STYRACASTER HORRIDUS, n. sp.

PLATE XXVIII.

PLATE XXVIII.

	Page
Figs. 1-4. <i>STYRACASTER ARMATUS</i> , n. sp.	153
Fig. 1. A portion of the abactinal surface; magnified 18 diameters.	
Fig. 2. Mouth-plates; magnified 5 diameters.	
Fig. 3. Adambulacral plates; magnified 9 diameters.	
Fig. 4. A cribriform organ; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. XXIV. figs. 1-4.]	
Figs. 5-8. <i>HYPHALASTER INERMIS</i> , n. sp.	162
Fig. 5. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 6. Mouth-plates; magnified 9 diameters.	
Fig. 7. Adambulacral plates; magnified 12 diameters.	
Fig. 8. A cribriform organ; magnified 9 diameters.	
[For macroscopic figures of this species see Pl. XXV. figs. 4-6.]	
Figs. 9-12. <i>HYPHALASTER PLANUS</i> , n. sp.	165
Fig. 9. A portion of the abactinal surface; magnified 18 diameters.	
Fig. 10. Mouth-plates; magnified 5 diameters.	
Fig. 11. Adambulacral plates; magnified 8 diameters.	
Fig. 12. A cribriform organ; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. XXV. figs. 1-3.]	
Figs. 13-16. <i>HYPHALASTER HYALINUS</i> , n. sp.	156
Fig. 13. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 14. Mouth-plates; magnified 9 diameters.	
Fig. 15. Adambulacral plates; magnified 12 diameters.	
Fig. 16. A cribriform organ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XXVI. figs. 1-5.]	
Figs. 17-20. <i>HYPHALASTER DIADEMATUS</i> , n. sp.	159
Fig. 17. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 18. Mouth-plates; magnified 10 diameters.	
Fig. 19. Adambulacral plates; magnified 15 diameters.	
Fig. 20. A cribriform organ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXI. figs. 1-4.]	



1-4. STYRACASTER ARMATUS, n. sp. 5-8. HYPHALASTER INERMIS, n. sp.
 9-12. HYPHALASTER PLANUS, n. sp. 13-16. HYPHALASTER HYALINUS, n. sp.
 17-20. HYPHALASTER DIADEMATUS, n. sp.

PLATE XXIX.

PLATE XXIX.

Figs. 1-6. *THORACASTER CYLINDRATUS*, n. sp. Page
168

Fig. 1. Abactinal aspect; natural size.

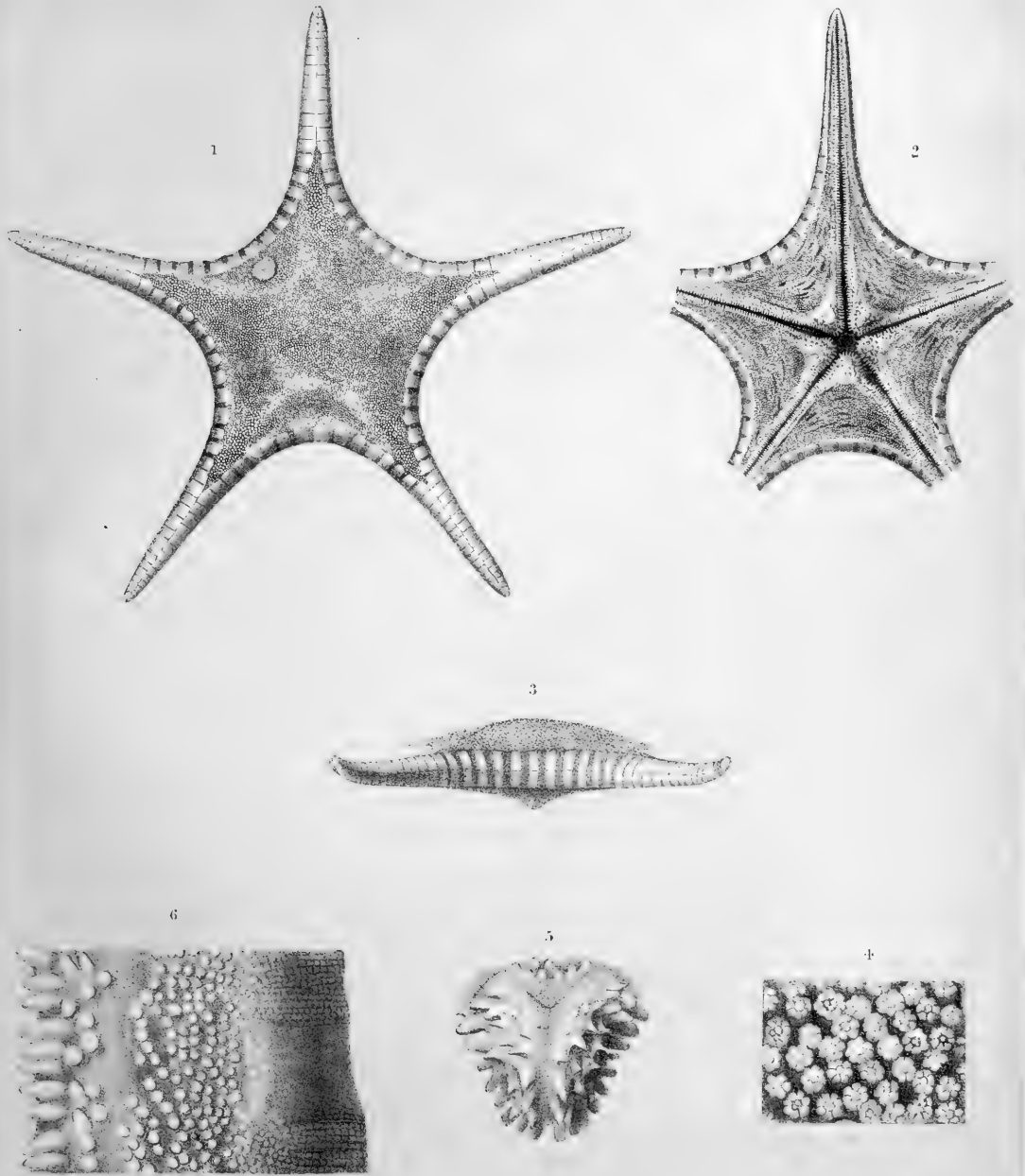
Fig. 2. Actinal aspect; natural size.

Fig. 3. Profile view; natural size.

Fig. 4. A portion of the abactinal surface; magnified 10 diameters.

Fig. 5. Mouth-plates; magnified.

Fig. 6. A portion of the actinal surface of a ray, showing adambulacral plates
and infero-marginal plates; magnified 10 diameters.



F. H. Michael del. Folieck. lith.

Harhart imp.

THORACASTER CYLINDRATUS, n. sp.

PLATE XXX.

PLATE XXX.

	Page
Figs. 1-6. CTENODISCUS AUSTRALIS, Lütken,	172
Fig. 1. Abactinal aspect; magnified 2 diameters.	
Fig. 2. Actinal aspect; magnified 2 diameters.	
Fig. 3. Profile view; magnified 2 diameters.	
Fig. 4. A portion of the abactinal surface; magnified 12 diameters.	
Fig. 5. Adambulacral plates and the adjacent portion of the actinal surface; magnified 12 diameters.	
Fig. 6. The extremity of a ray; magnified.	
Figs. 7-12. CTENODISCUS PROCURATOR, n. sp.	173
Fig. 7. Abactinal aspect; magnified 2 diameters.	
Fig. 8. Actinal aspect; magnified 2 diameters.	
Fig. 9. A portion of the abactinal surface; magnified 16 diameters.	
Fig. 10. Adambulacral plates and the adjacent portion of the actinal surface; magnified 8 diameters.	
Fig. 11. Abactinal aspect of a young example; natural size.	
Fig. 12. Mouth-plates; magnified.	



F.H. Michael del.

Engraving by G. S. S. S.

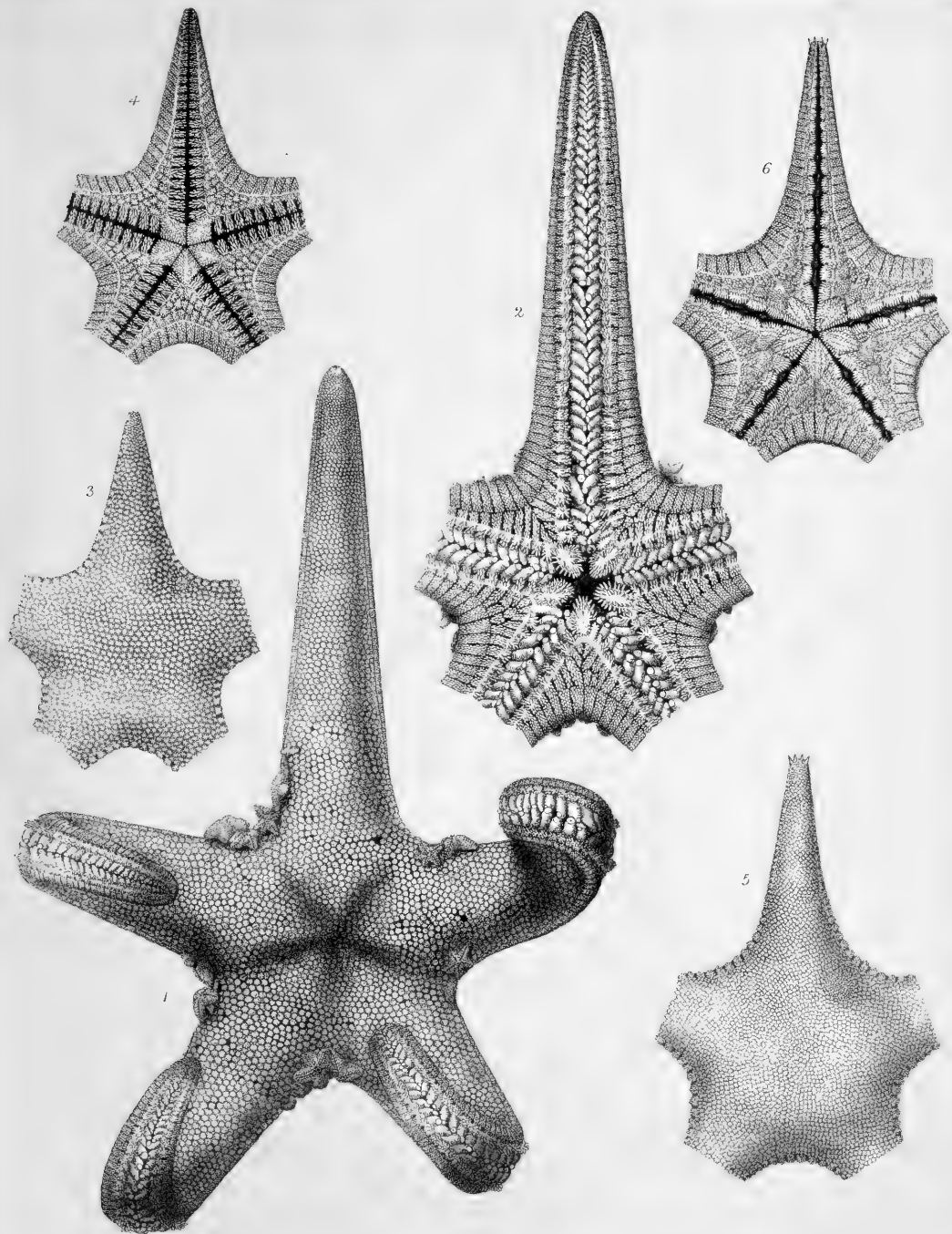
1-6. CTENODISCUS AUSTRALIS, Lütken.

7-12. CTENODISCUS PROCURATOR, n.sp.

PLATE XXXI.

PLATE XXXI.

	Page
Figs. 1, 2. LEPTOPTYCHASTER KERGUELENENSIS, Smith, . . .	184
Fig. 1. Abactinal aspect, showing immature young <i>in situ</i> ; magnified 2 diameters.	
Fig. 2. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXII. figs. 1, 2.]	
Figs. 3, 4. LEPTOPTYCHASTER ANTARCTICUS, n. sp. . . .	190
Fig. 3. Abactinal aspect; magnified 3 diameters.	
Fig. 4. Actinal aspect; magnified 3 diameters.	
[For magnified details of this species see Pl. XXXII. figs. 7, 8.]	
Figs. 5, 6. LONCHOTASTER FORCIPIFER, n. sp. * . . .	106
Fig. 5. Abactinal aspect; magnified 3 diameters.	
Fig. 6. Actinal aspect; magnified 3 diameters.	
[For magnified details of this species see Pl. XXXII. figs. 9, 10.]	



W.H. Dall, Ther. del. Hollick lith.

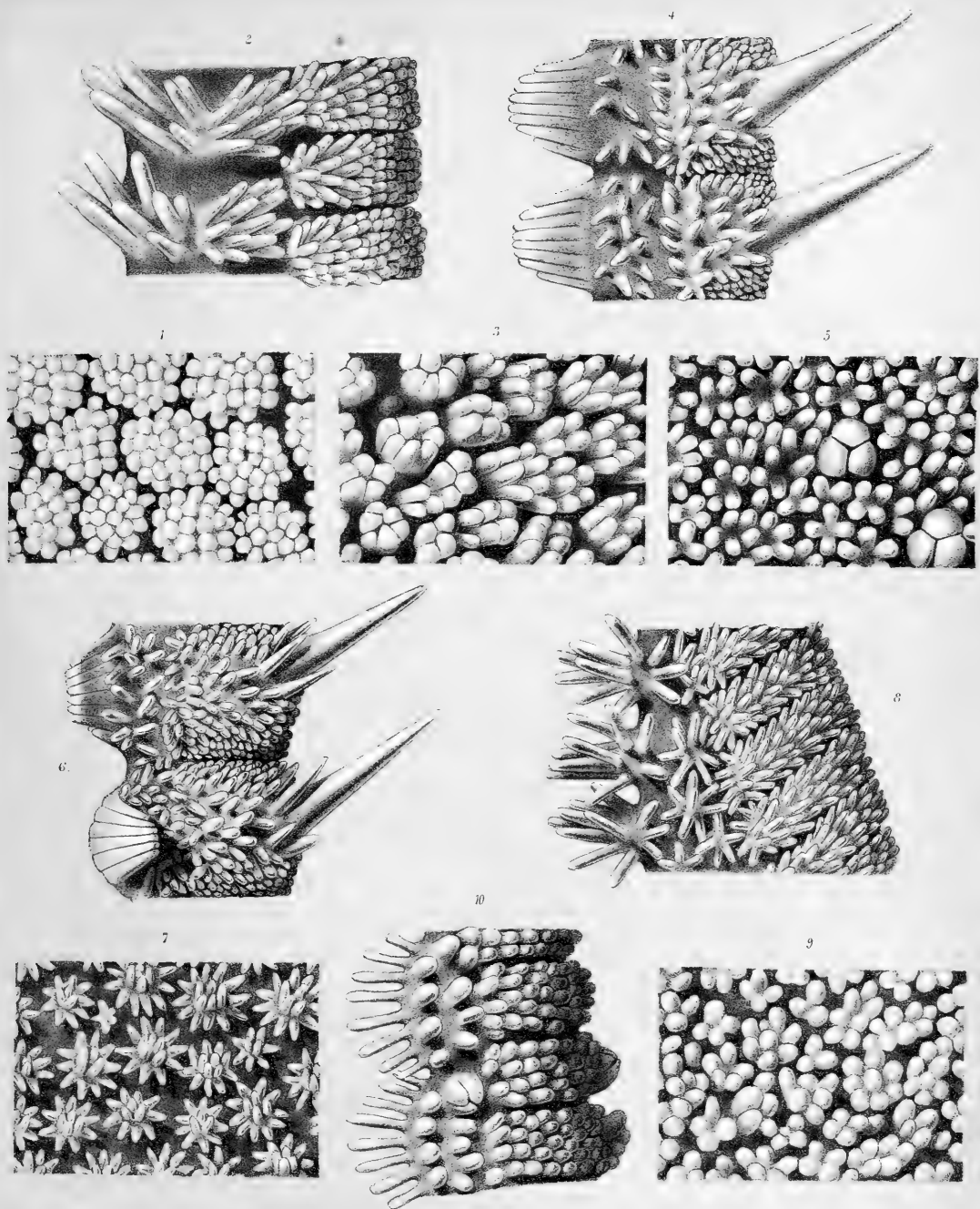
Hanbat lamp.

1-2. LEPTOPTYCHASTER KERCUELENENSIS Smith 3-4. LEPTOPTYCHASTER ANTARCTICUS, n.sp.
5-6. LONCHOTASTER FORCIPIFER, n.sp.

PLATE XXXII.

PLATE XXXII.

	Page
Figs. 1, 2. <i>LEPTOPTYCHASTER KERGUELENENSIS</i> , Smith,	184
Fig. 1. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 2. Adambulacral and infero-marginal plates ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XXXI. figs. 1, 2.]	
Figs. 3, 4. <i>DYTASTER NOBILIS</i> , n. sp.	73
Fig. 3. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 4. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. III. figs. 1, 2.]	
Figs. 5, 6. <i>DYTASTER MADREPORIFER</i> , n. sp.	70
Fig. 5. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. III. figs. 3, 4.]	
Figs. 7, 8. <i>LEPTOPTYCHASTER ANTARCTICUS</i> , n. sp.	190
Fig. 7. A portion of the abactinal surface ; magnified 35 diameters.	
Fig. 8. Adambulacral and infero-marginal plates ; magnified 20 diameters.	
[For macroscopic figures of this species see Pl. XXXI. figs. 3, 4.]	
Figs. 9, 10. <i>LONGHOTASTER FORCIPIFER</i> , n. sp.	106
Fig. 9. A portion of the abactinal surface ; magnified 35 diameters.	
Fig. 10. Adambulacral and infero-marginal plates ; magnified 20 diameters.	
[For macroscopic figures of this species see Pl. XXXI. figs. 5, 6.]	

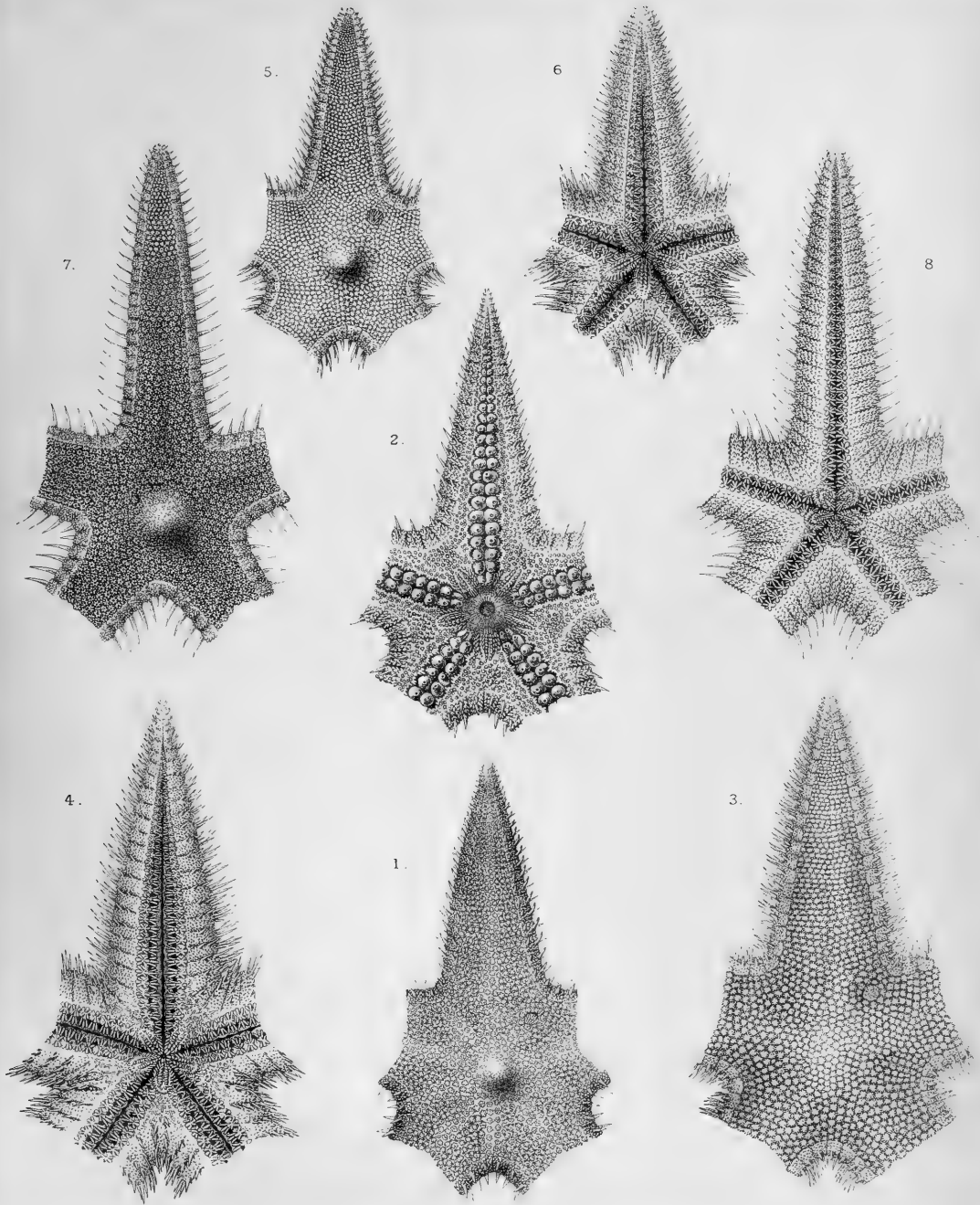


1-2. LEPTOPTYCHASTER KERQUELENENSIS, Smith, n. sp. 3-4. DYTASTER NOBILIS, n. sp.
 5-6. DYTASTER MADREPORIFER, n. sp. 7-8. LEPTOPTYCHASTER ANTARCTICUS, n. sp.
 9-10. LONCHOTASTER FORCIPIFER, n. sp.

PLATE XXXIII.

PLATE XXXIII.

	Page
Figs. 1, 2. <i>ASTROPECTEN BREVISPINUS</i> , n. sp.	198
Fig. 1. Abactinal aspect; magnified 2 diameters.	
Fig. 2. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXVII. figs. 1-3.]	
Figs. 3, 4. <i>ASTROPECTEN PECTINATUS</i> , n. sp.	202
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XXXVII. figs. 4-6.]	
Figs. 5, 6. <i>ASTROPECTEN HERMATOPHILUS</i> , n. sp.	207
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXVII. figs. 7-9.]	
Figs. 7, 8. <i>ASTROPECTEN MONACANTHUS</i> , n. sp.	216
Fig. 7. Abactinal aspect; magnified 3 diameters.	
Fig. 8. Actinal aspect; magnified 3 diameters.	
[For magnified details of this species see Pl. XXXVII. figs. 10-12.]	



W. H. Michael del.

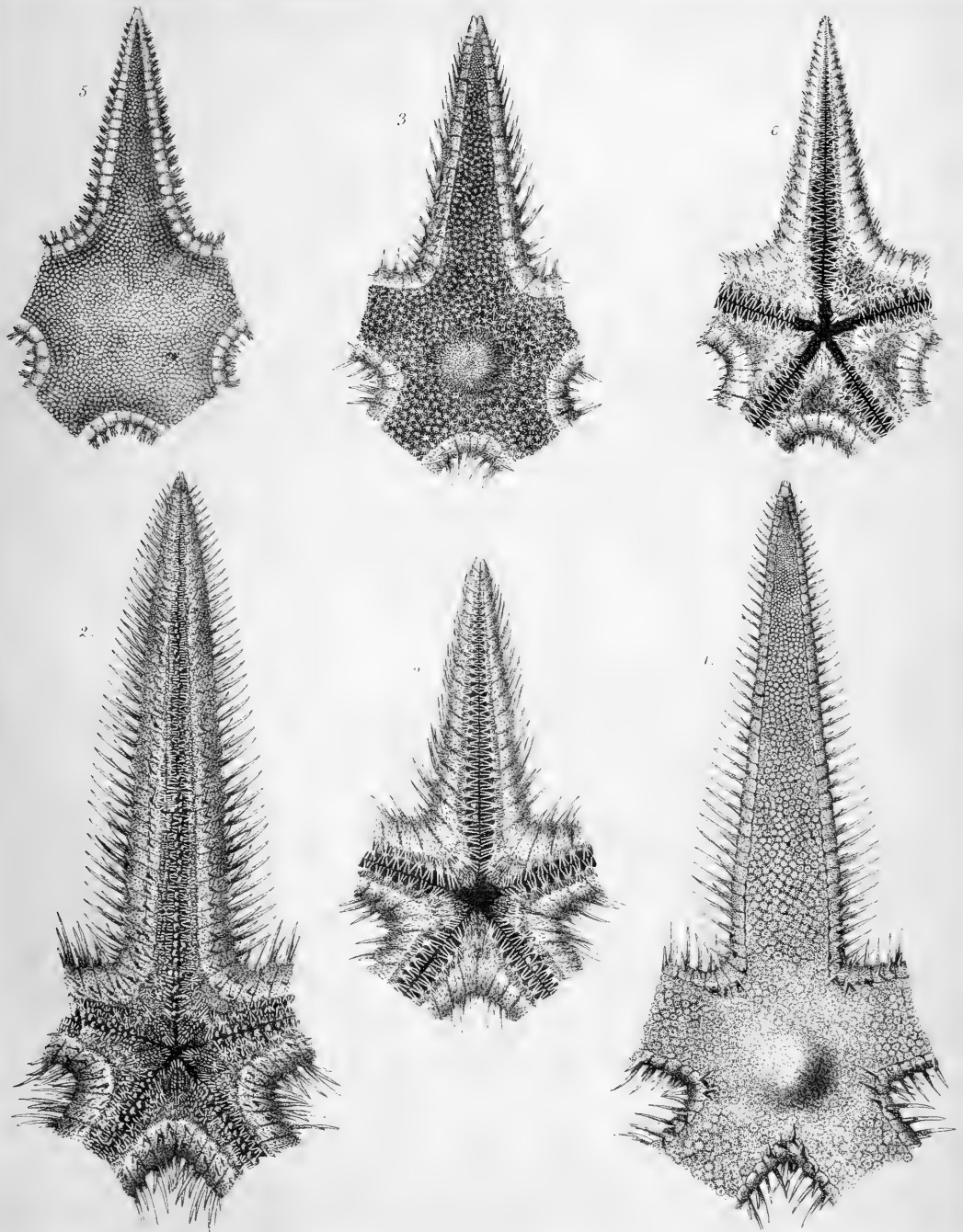
1-2. *ASTROPECTEN BREVISPINUS*, n. sp.
5-6. *ASTROPECTEN HERMATOPHILUS*, n. sp.

3-4. *ASTROPECTEN PECTINATUS*, n. sp.
7-8. *ASTROPECTEN MONACANTHUS*, n. sp.

PLATE XXXIV.

PLATE XXXIV.

	Page
Figs. 1, 2. <i>ASTROPECTEN ACANTHIFER</i> , n. sp.	203
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XXXVIII. figs. 1-3.]	
Figs. 3, 4. <i>ASTROPECTEN IMBELLIS</i> , n. sp.	206
Fig. 3. Abactinal aspect ; magnified 3 diameters.	
Fig. 4. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. XXXVIII. figs. 4-6.]	
Figs. 5, 6. <i>ASTROPECTEN MESACTUS</i> , n. sp.	219
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXVIII. figs. 7-9.]	



F.H. Michael, del. Hollick, lit.

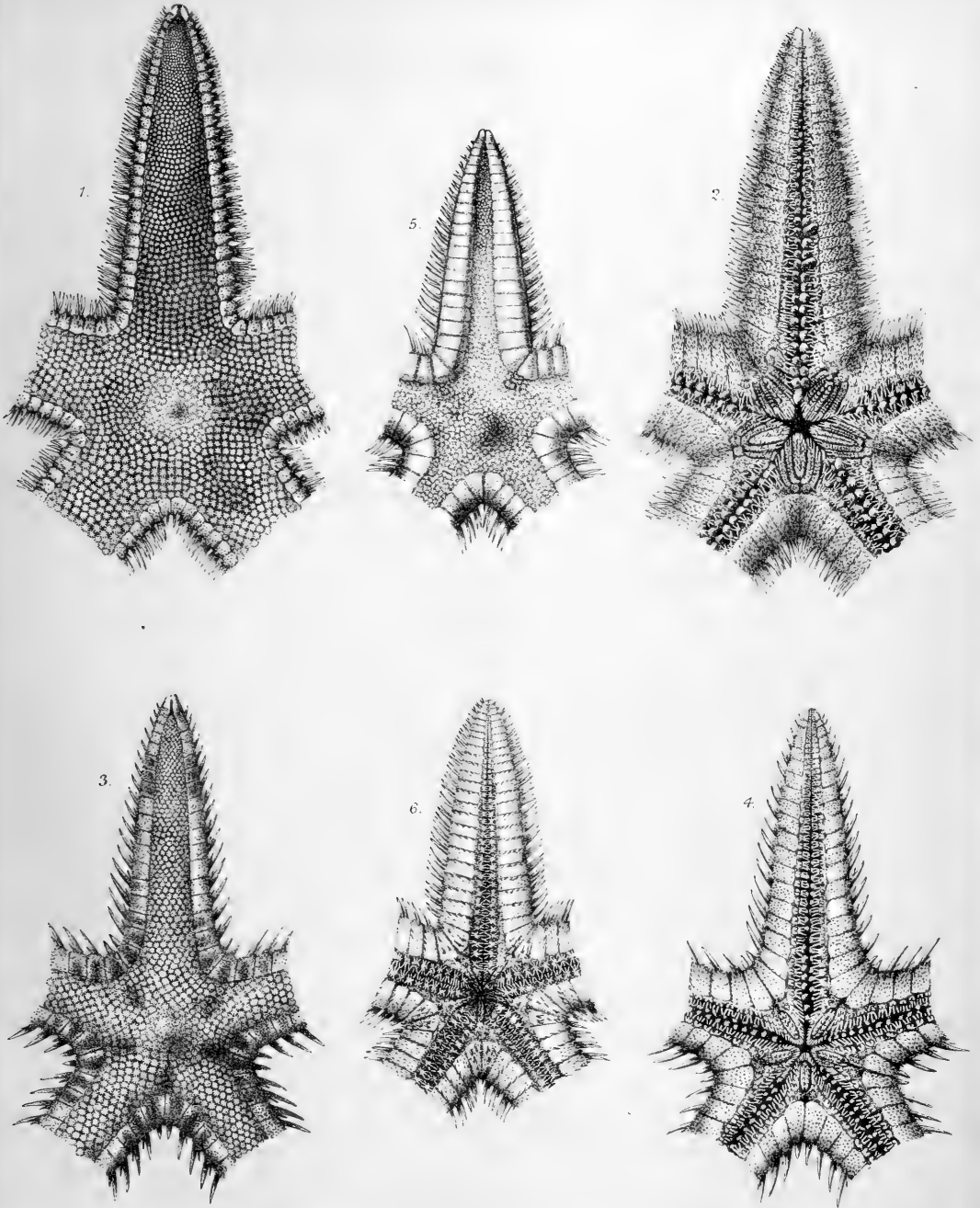
H. Kuntz, imp.

1-2. ASTROPECTEN ACANTHIFER, n. sp. 3-4. ASTROPECTEN IMBELLIS, n. sp.
5-6. ASTROPECTEN MESACTUS, n. sp.

PLATE XXXV.

PLATE XXXV.

	Page
Figs. 1, 2. <i>ASTROPECTEN PONTOPORÆUS</i> , n. sp.	210
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XXXVIII. figs. 10-12.]	
Figs. 3, 4. <i>ASTROPECTEN GRANULATUS</i> , Müller and Troschel,	215
Fig. 3. Abactinal aspect; magnified 3 diameters.	
Fig. 4. Actinal aspect; magnified 3 diameters.	
[For magnified details of this species see Pl. XXXIX. figs. 4-6.]	
Figs. 5, 6. <i>ASTROPECTEN CINGULATUS</i> , n. sp.	218
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXIX. figs. 1-3.]	



Ed. Michael del. Hollick lith.

Hanhart imp.

1-2. ASTROPECTEN PONTOPORÆUS, n. sp.

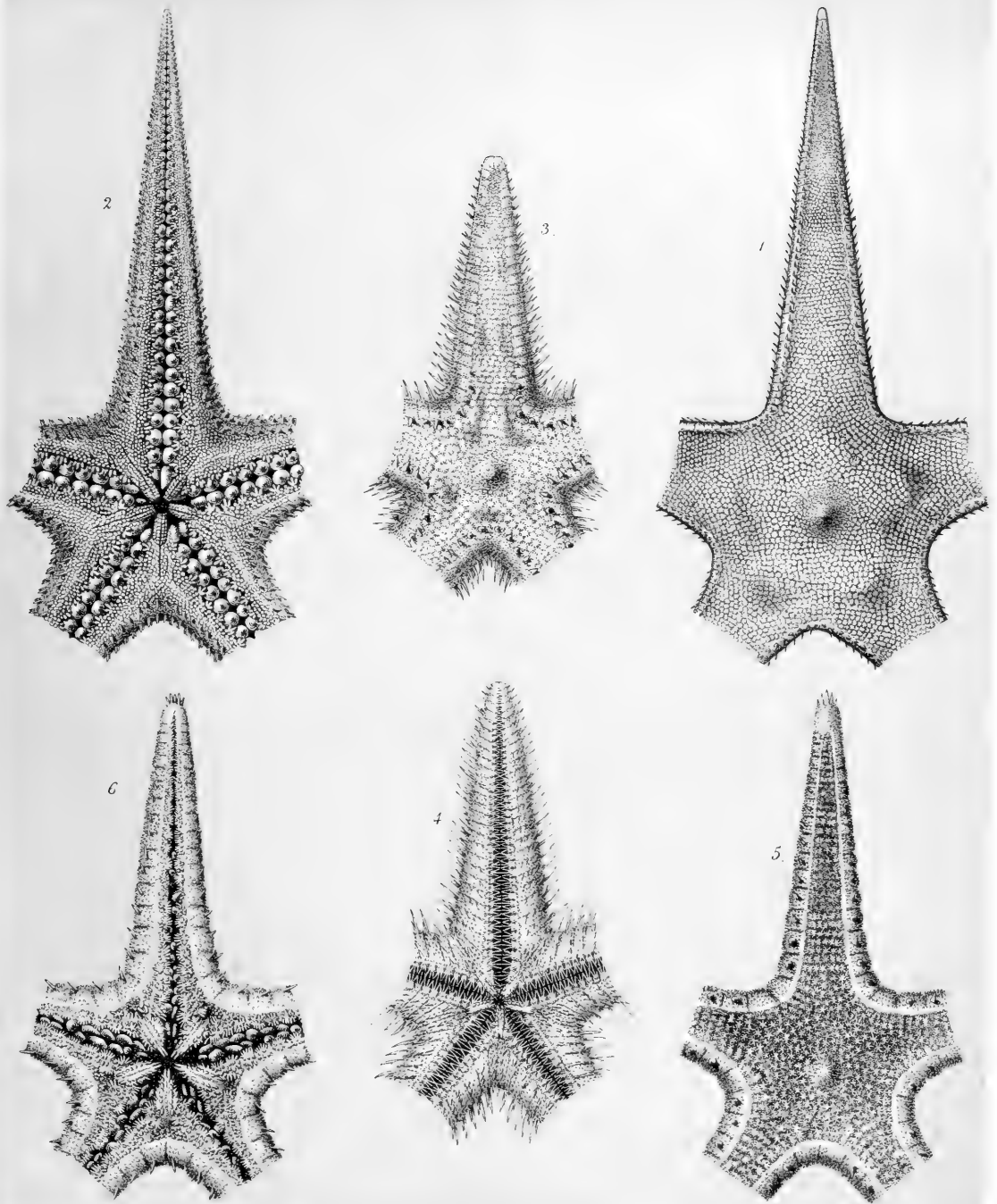
3-4. ASTROPECTEN GRANULATUS, Müller & Troschel

5-6. ASTROPECTEN GINGYLATUS, n. sp.

PLATE XXXVI.

PLATE XXXVI.

	Page
Figs. 1, 2. <i>BATHYBIASTER LORIPES</i> , n. sp.	240
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XLII. figs. 1, 2.]	
Figs. 3, 4. <i>ASTROPECTEN ZEBRA</i> , n. sp.	212
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XXXIX. figs. 7-9.]	
Figs. 5, 6. <i>DYTASTER ÆQUIVOCUS</i> , n. sp.	75
Fig. 5. Abactinal aspect ; magnified 4 diameters.	
Fig. 6. Actinal aspect ; magnified 4 diameters.	
[For magnified details of this species see Pl. XXXIX. figs. 10-12.]	

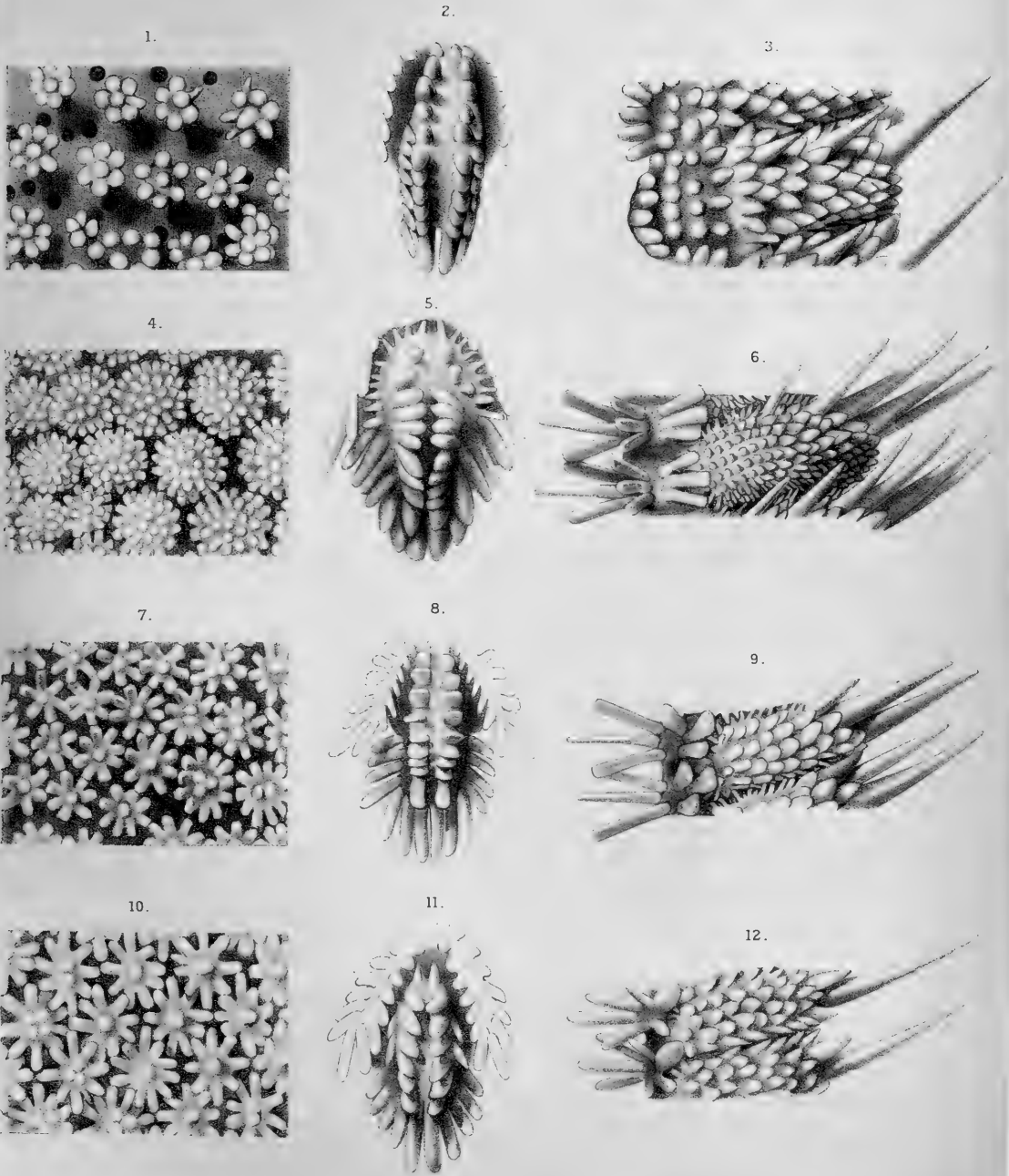


1-2. BATHYBIASTER LORIPES, n. sp. 3-4. ASTROPECTEN ZEBRA, n. sp.
5-6. DYTASTER ÆQUIVOCUS, n. sp.

PLATE XXXVII.

PLATE XXXVII.

	Page
Figs. 1-3. <i>ASTROPECTEN BREVISPINUS</i> , n. sp.	198
Fig. 1. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 2. Mouth-plates; magnified 12 diameters.	
Fig. 3. Adambulacral and infero-marginal plates; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XXXIII. figs. 1, 2.]	
Figs. 4-6. <i>ASTROPECTEN PECTINATUS</i> , n. sp.	202
Fig. 4. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 5. Mouth-plates; magnified 10 diameters.	
Fig. 6. Adambulacral and infero-marginal plates; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XXXIII. figs. 3, 4.]	
Figs. 7-9. <i>ASTROPECTEN HERMATOPHILUS</i> , n. sp.	207
Fig. 7. A portion of the abactinal surface; magnified 25 diameters.	
Fig. 8. Mouth-plates; magnified 10 diameters.	
Fig. 9. Adambulacral and infero-marginal plates; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXXIII. figs. 5, 6.]	
Figs. 10-12. <i>ASTROPECTEN MONACANTHUS</i> , n. sp.	216
Fig. 10. A portion of the abactinal surface; magnified 25 diameters.	
Fig. 11. Mouth-plates; magnified 20 diameters.	
Fig. 12. Adambulacral and infero-marginal plates; magnified 20 diameters.	
[For macroscopic figures of this species see Pl. XXXIII. figs. 7, 8.]	



V. Michael del.

Plate XXXVII

1-3. *ASTROPECTEN BREVISPINUS*, n.sp.
 7-9. *ASTROPECTEN HERMATOPHILUS*, n.sp.

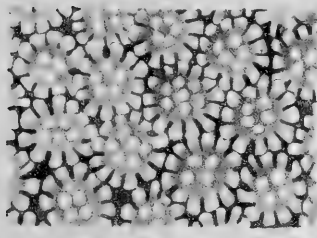
4-6. *ASTROPECTEN PECTINATUS*, n.sp.
 10-12. *ASTROPECTEN MONACANTHUS*, n.sp.

PLATE XXXVIII.

PLATE XXXVIII.

	Page
Figs. 1-3. <i>ASTROPECTEN ACANTHIFER</i> , n. sp.	203
Fig. 1. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 2. Mouth-plates ; magnified 6 diameters.	
Fig. 3. Adambulacral and infero-marginal plates ; magnified 7 diameters.	
[For macroscopic figures of this species see Pl. XXXIV. figs. 1, 2.]	
Figs. 4-6. <i>ASTROPECTEN IMBELLIS</i> , n. sp.	206
Fig. 4. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 5. Mouth-plates ; magnified 15 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 17 diameters.	
[For macroscopic figures of this species see Pl. XXXIV. figs. 3, 4.]	
Figs. 7-9. <i>ASTROPECTEN MESACTUS</i> , n. sp.	219
Fig. 7. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 8. Mouth-plates ; magnified 12 diameters.	
Fig. 9. Adambulacral and infero-marginal plates ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XXXIV. figs. 5, 6.]	
Figs. 10-12. <i>ASTROPECTEN PONTOPORÆUS</i> , n. sp.	210
Fig. 10. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 11. Mouth-plates ; magnified 6 diameters.	
Fig. 12. Adambulacral and infero-marginal plates ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XXXV. figs. 1, 2.]	

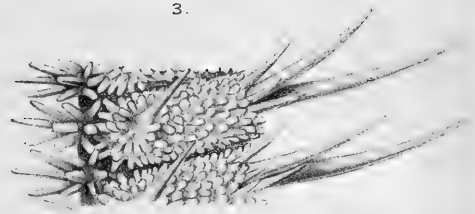
1.



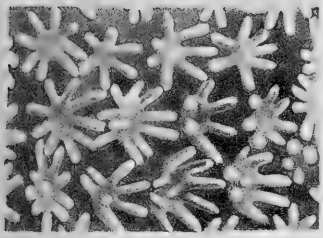
2.



3.



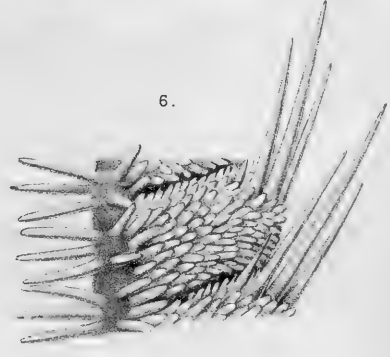
4.



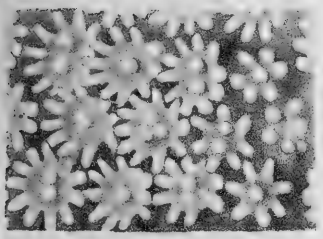
5.



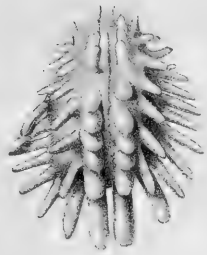
6.



7.



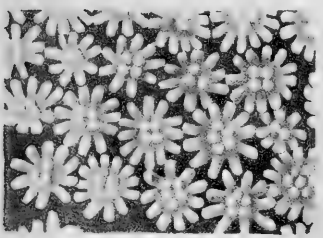
8.



9.



10.



11.



12.



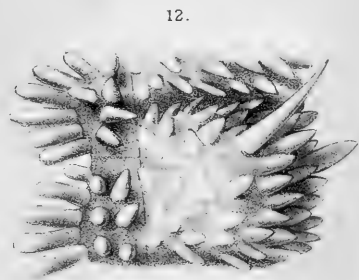
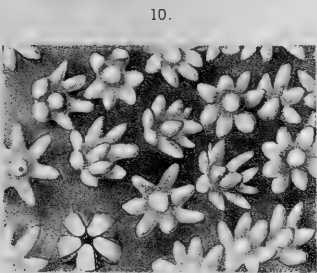
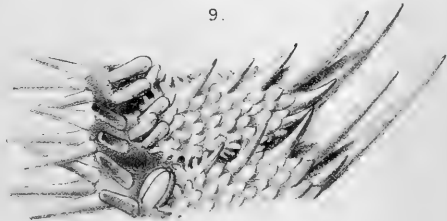
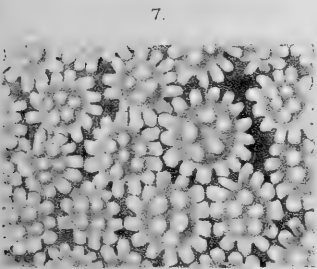
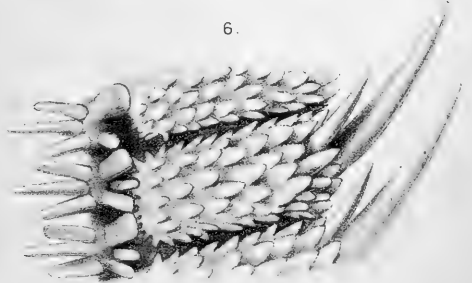
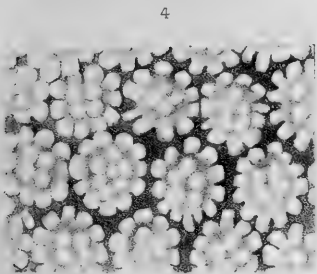
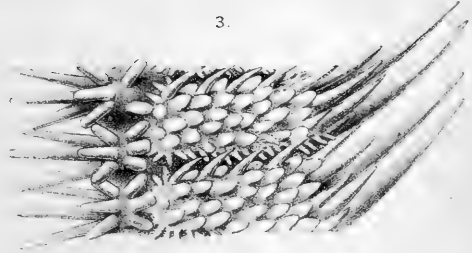
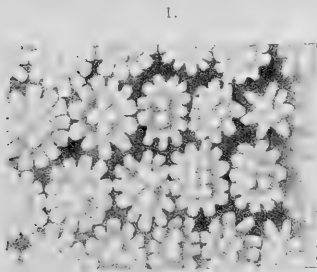
1-3. ASTROPECTEN ACANTHIFER, n. sp.
7-9. ASTROPECTEN MESACTUS, n. sp.

4-6. ASTROPECTEN IMBELLIS, n. sp.
10-12. ASTROPECTEN PONTOPORÆUS, n. sp.

PLATE XXXIX.

PLATE XXXIX.

	Page
Figs. 1-3. <i>ASTROPECTEN CINGULATUS</i> , n. sp.	218
Fig. 1. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 2. Mouth-plates; magnified 15 diameters.	
Fig. 3. Adambulacral and infero-marginal plates; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXXV. figs. 5, 6.]	
Figs. 4-6. <i>ASTROPECTEN GRANULATUS</i> , Müller and Troschel,	215
Fig. 4. A portion of the abactinal surface; magnified 30 diameters.	
Fig. 5. Mouth-plates; magnified 15 diameters.	
Fig. 6. Adambulacral and infero-marginal plates; magnified 18 diameters.	
[For macroscopic figures of this species see Pl. XXXV. figs. 3, 4.]	
Figs. 7-9. <i>ASTROPECTEN ZEBRA</i> , n. sp.	212
Fig. 7. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 8. Mouth-plates; magnified 12 diameters.	
Fig. 9. Adambulacral and infero-marginal plates; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXXVI. figs. 3, 4.]	
Figs. 10-12. <i>DYTASTER ÆQUIVOCUS</i> , n. sp.	75
Fig. 10. A portion of the abactinal surface; magnified 30 diameters.	
Fig. 11. Mouth-plates; magnified 15 diameters.	
Fig. 12. Adambulacral and infero-marginal plates; magnified 30 diameters.	
[For macroscopic figures of this species see Pl. XXXVI. figs. 5, 6.]	



F.H. Michael del.

F. Huth, Lith. Edm.

1-3. *ASTROPECTEN CINGULATUS*, n. sp.

4-6. *ASTROPECTEN GRANULATUS*, Müller & Troschel.

7-9. *ASTROPECTEN ZEBRA*, n. sp.

10-12. *DYTASTER ÆQUIVOCUS*, n. sp.

PLATE XL.

PLATE XL.

Figs. 1, 2. <i>PSILASTER ACUMINATUS</i> , n. sp.	Page 225
--	-------------

Fig. 1. Abactinal aspect ; magnified 2 diameters.

Fig. 2. Actinal aspect ; magnified 2 diameters.

[For magnified details of this species see Pl. XLII. figs. 7, 8.]

Figs. 3-6. <i>PHOXASTER PUMILUS</i> , n. sp.	236
--	-----

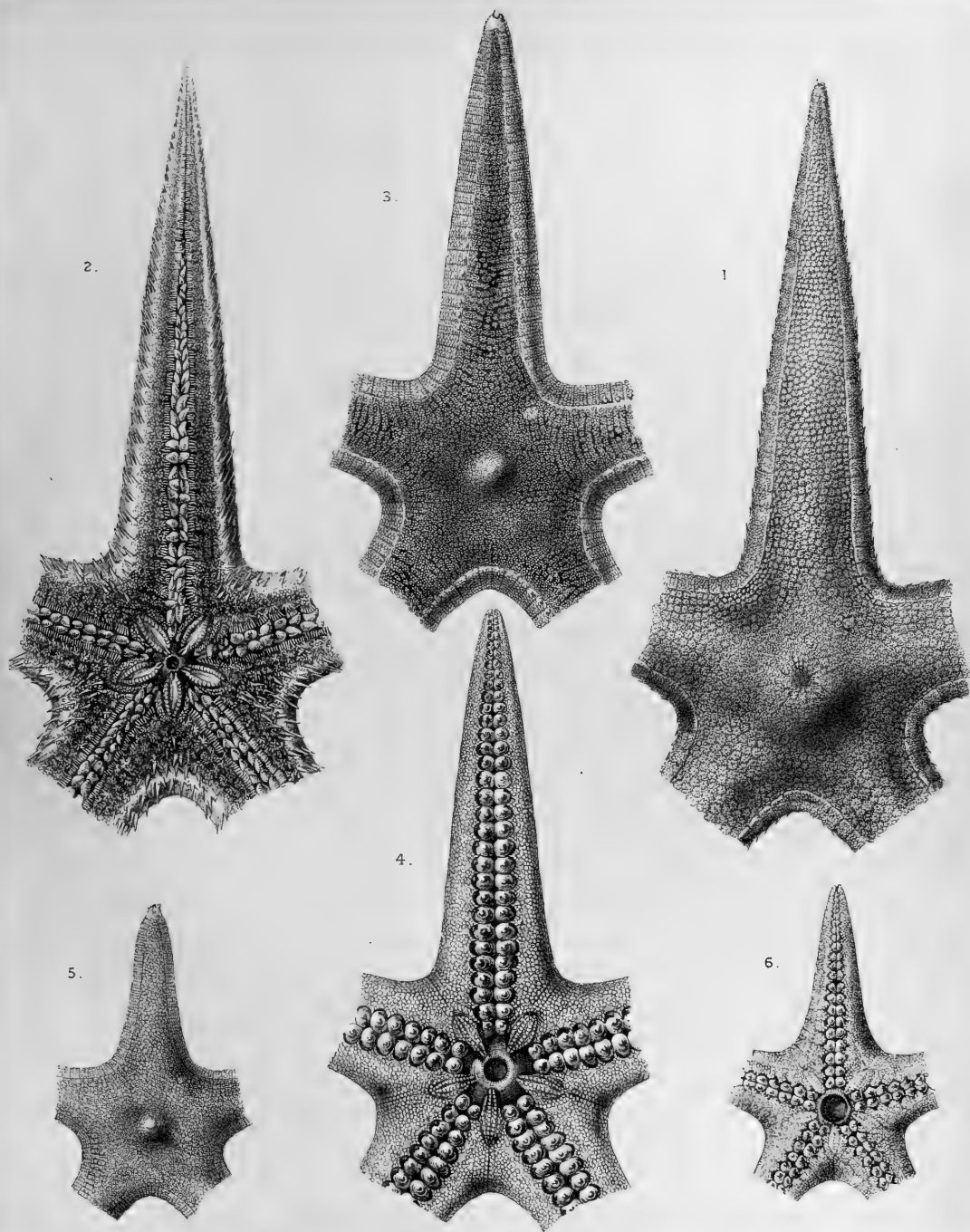
Fig. 3. Abactinal aspect ; magnified 3 diameters.

Fig. 4. Actinal aspect ; magnified 3 diameters.

Fig. 5. Abactinal aspect of a young example ; magnified 3 diameters.

Fig. 6. Actinal aspect of a young example ; magnified 3 diameters.

[For magnified details of this species see Pl. XV. figs. 7-11.]



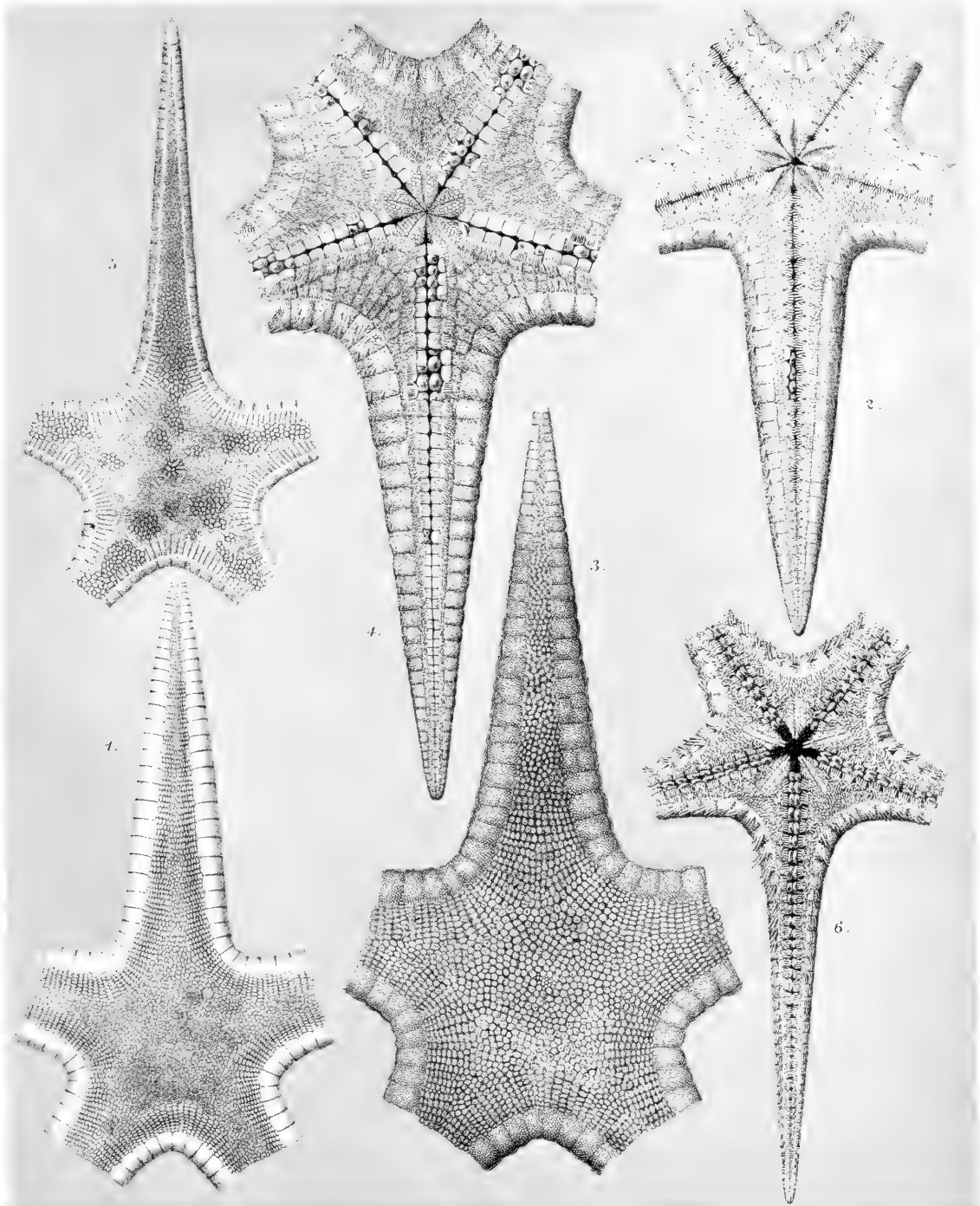
1-2. PSILASTER ACUMINATUS, n. sp.

3-6. PHOXASTER PUMILUS, n. sp.

PLATE XLI.

PLATE XLI.

	Page
Figs. 1, 2. <i>PSILASTER CASSIOPE</i> , n. sp.	228
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. VII. figs. 9, 10.]	
Figs. 3, 4. <i>PSILASTER PATAGIATUS</i> , n. sp.	232
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. VII. figs. 11, 12.]	
Figs. 5, 6. <i>PSILASTER GRACILIS</i> , n. sp.	230
Fig. 5. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 6. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XLII. figs. 9-11.]	

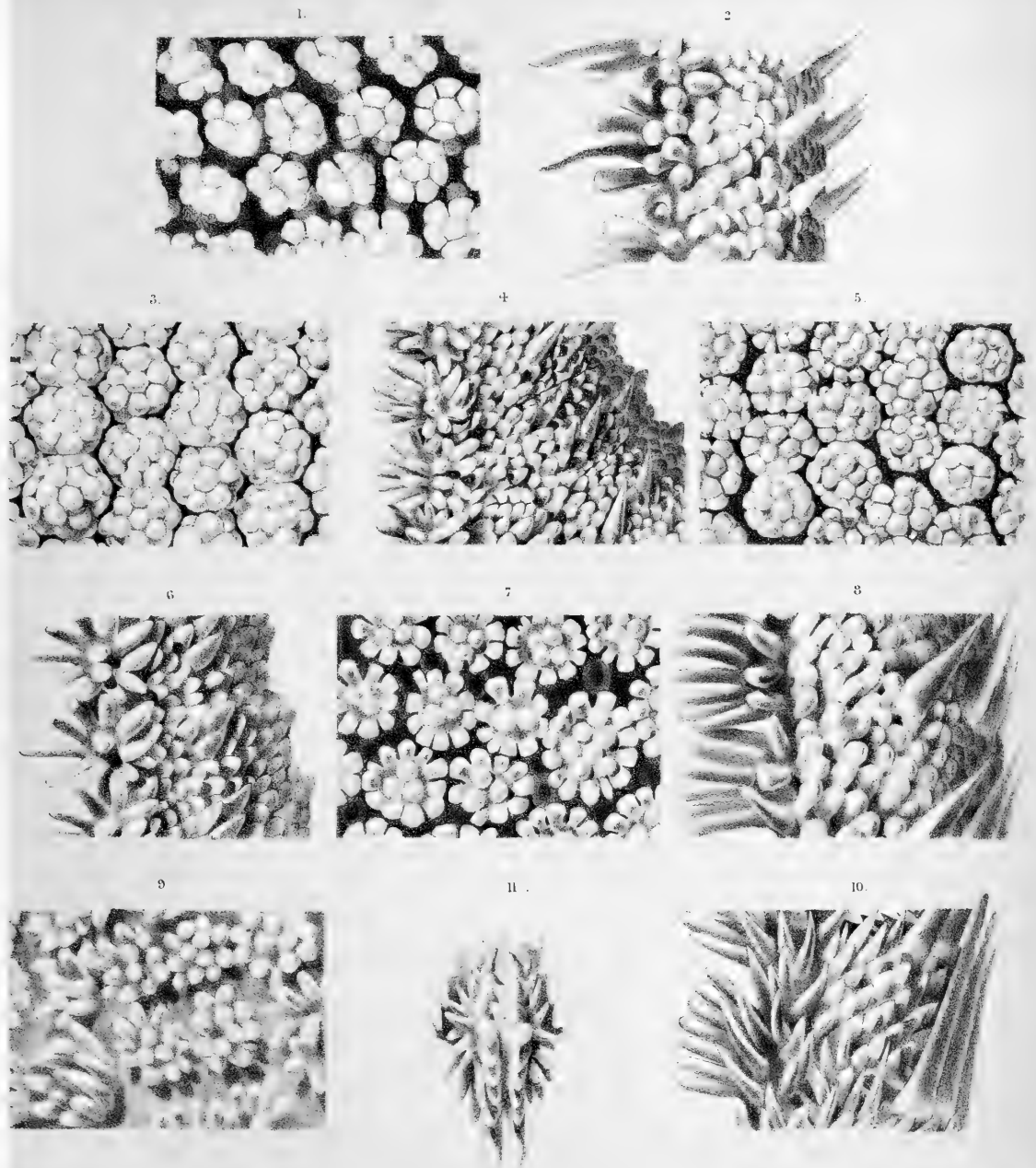


1-2. PSILASTER CASSIOPE, n. sp. 3-4. PSILASTER PATAGIATUS, n. sp.
5-6. PSILASTER GRACILIS, n. sp.

PLATE XLII.

PLATE XLII.

	Page
Figs. 1, 2. BATHYBIASTER LORIPES, n. sp.	240 .
Fig. 1. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 2. Adambulacral and infero-marginal plates ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XXXVI. figs. 1, 2.]	
Figs. 3, 4. PSEUDARCHASTER DISCUS, n. sp.	110
Fig. 3. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 4. Adambulacral and infero-marginal plates ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. XIX. figs. 1, 2.]	
Figs. 5, 6. PSEUDARCHASTER INTERMEDIUS, n. sp.	115
Fig. 5. A portion of the abactinal surface ; magnified 18 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XIX. figs. 3, 4.]	
Figs. 7, 8. PSILASTER ACUMINATUS, n. sp.	225
Fig. 7. A portion of the abactinal surface ; magnified 18 diameters.	
Fig. 8. Adambulacral and infero-marginal plates ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XL. figs. 1, 2.]	
Figs. 9-11. PSILASTER GRACILIS, n. sp.	230
Fig. 9. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 10. Adambulacral and infero-marginal plates ; magnified 15 diameters.	
Fig. 11. Mouth-plates ; magnified 7 diameters.	
[For macroscopic figures of this species see Pl. XLI. figs. 5, 6.]	



F.H. Michael del et lith.

Mintons, Essex, Eng.

1-2. BATHYBIASTER LORIPES, n. sp. 3-4. PSEUDARCHASTER DISCUS, n. sp.
5-6. PSEUDARCHASTER INTERMEDIUS, n. sp. 7-8. PSILASTER ACUMINATUS, n. sp.
9-11. PSILASTER GRACILIS, n. sp.

PLATE XLIII.

PLATE XLIII.

Figs. 1, 2. *LUIDIA ASPERA*, n. sp. Page
248.

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

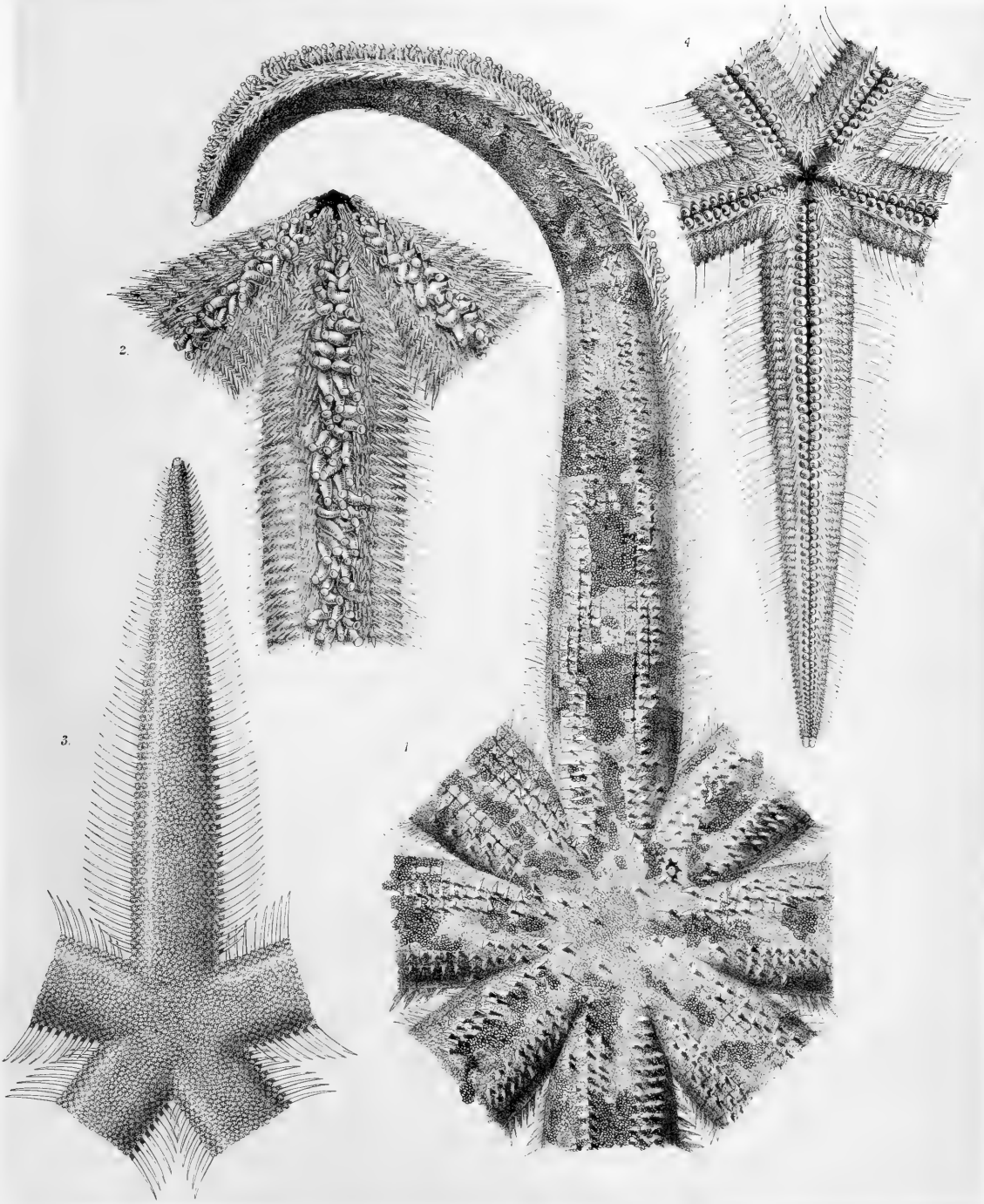
[For magnified details of this species see Pl. XLV. figs. 9, 10.]

Figs. 3, 4. *LUIDIA LONGISPINA*, n. sp. 254

Fig. 3. Abactinal aspect; magnified 2 diameters.

Fig. 4. Actinal aspect; magnified 2 diameters.

[For magnified details of this species see Pl. XLV. figs. 3, 4.]



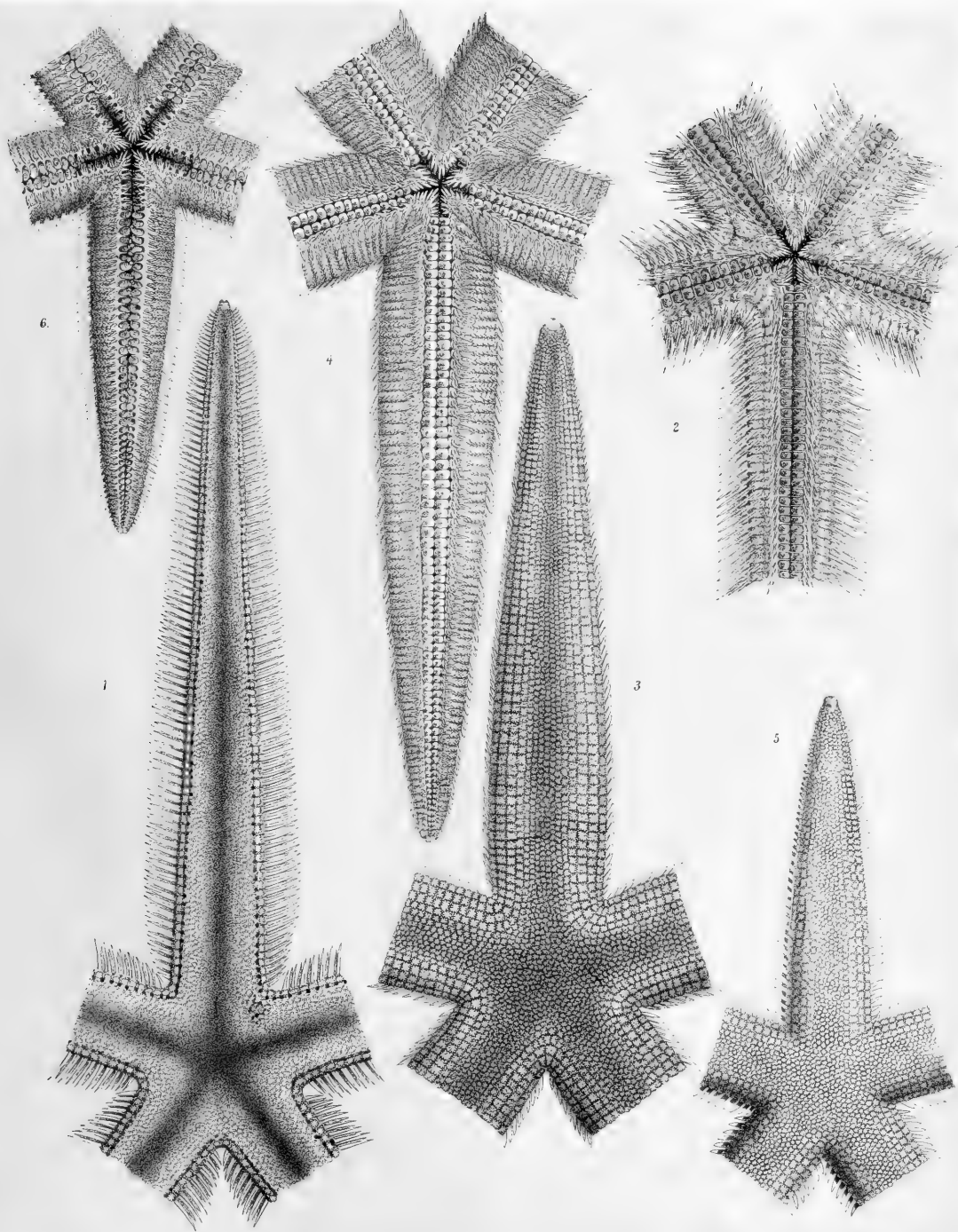
1-2. *LUIDIA ASPERA*, n.sp.

3-4. *LUIDIA LONGISPINA*, n.sp.

PLATE XLIV.

PLATE XLIV.

	Page
Figs. 1, 2. <i>LUIDIA AFRICANA</i> , n. sp.	256
Fig. 1. Abactinal aspect ; natural size.	
Fig. 2. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. XLV. figs. 1, 2.]	
Figs. 3, 4. <i>LUIDIA LIMBATA</i> , n. sp.	251
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XLV. figs. 7, 8.]	
Figs. 5, 6. <i>LUIDIA FORFICIFER</i> , n. sp.	258
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. XLV. figs. 5, 6.]	

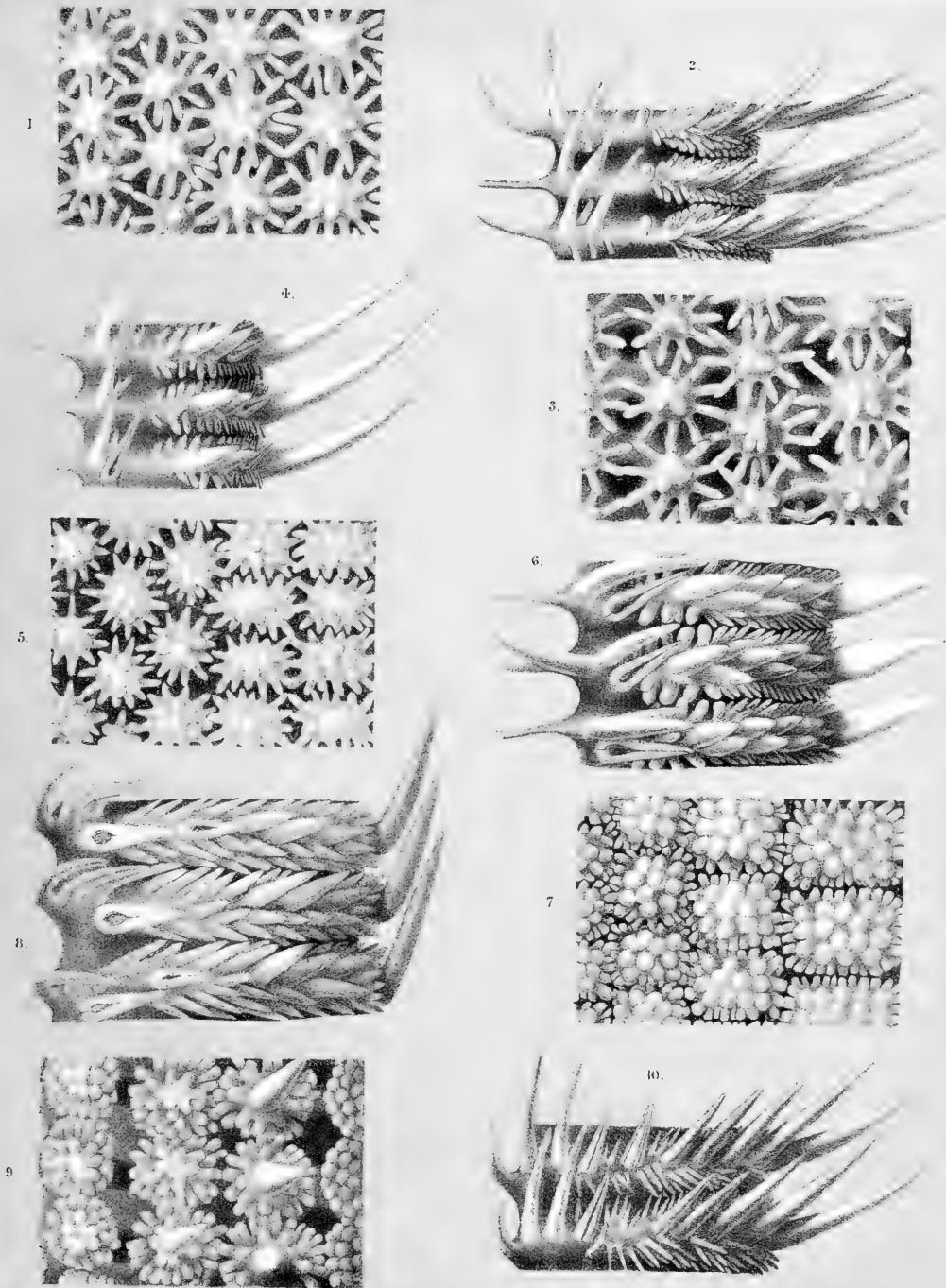


1-2. *LUIDIA AFRICANA*, n.sp. 3-4. *LUIDIA LIMBATA*, n.sp.
5-6. *LUIDIA FORCIFER*, n.sp.

PLATE XLV.

PLATE XLV.

	Page
Figs. 1, 2. <i>LUIDIA AFRICANA</i> , n. sp.	256
Fig. 1. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 2. Adambulacral and infero-marginal plates; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. XLIV. figs. 1, 2.]	
Figs. 3, 4. <i>LUIDIA LONGISPINA</i> , n. sp.	254
Fig. 3. A portion of the abactinal surface; magnified 20 diameters.	
Fig. 4. Adambulacral and infero-marginal plates; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLIII. figs. 3, 4.]	
Figs. 5, 6. <i>LUIDIA FORFICIFER</i> , n. sp.	258
Fig. 5. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 6. Adambulacral and infero-marginal plates; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XLIV. figs. 5, 6.]	
Figs. 7, 8. <i>LUIDIA LIMBATA</i> , n. sp.	251
Fig. 7. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 8. Adambulacral and infero-marginal plates; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLIV. figs. 3, 4.]	
Figs. 9, 10. <i>LUIDIA ASPERA</i> , n. sp.	248
Fig. 9. A portion of the abactinal surface; magnified 10 diameters.	
Fig. 10. Adambulacral and infero-marginal plates; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XLIII. figs. 1, 2.]	



1-2. *LUIDIA AFRICANA*, n.sp.

3-4. *LUIDIA LONGISPINA*, n.sp.

5-6. *LUIDIA FORFICIFER*, n.sp.

7-8. *LUIDIA LIMBATA*, n.sp.

9-10. *LUIDIA ASPERA*, n.sp.

PLATE XLVI.

PLATE XLVI.

	Page
Figs. 1, 2. PENTAGONASTER JAPONICUS, n. sp. . . .	272
Fig. 1. Abactinal aspect ; natural size.	
Fig. 2. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. XLIX. figs. 1, 2.]	
Figs. 3, 4. PENTAGONASTER PATAGONICUS, n. sp. . . .	269
Fig. 3. Abactinal aspect ; natural size.	
Fig. 4. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. XLIX. figs. 3, 4.]	



W.H. Crowther del. H. Hollick lith.

1-2. *PENTAGONASTER JAPONICUS*, n. sp.

3-4. *PENTAGONASTER PATAGONICUS*, n. sp.

PLATE XLVII.

PLATE XLVII.

Figs. 1, 2. GNATHASTER MERIDIONALIS, Smith, sp. Page
287

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

[For macroscopic figures of a young example see Pl. XLVIII. figs. 5, 6; for magnified details of the same see Pl. XLIX. figs. 11, 12.]

Figs. 3, 4. MIMASTER COGNATUS, n. sp. 336

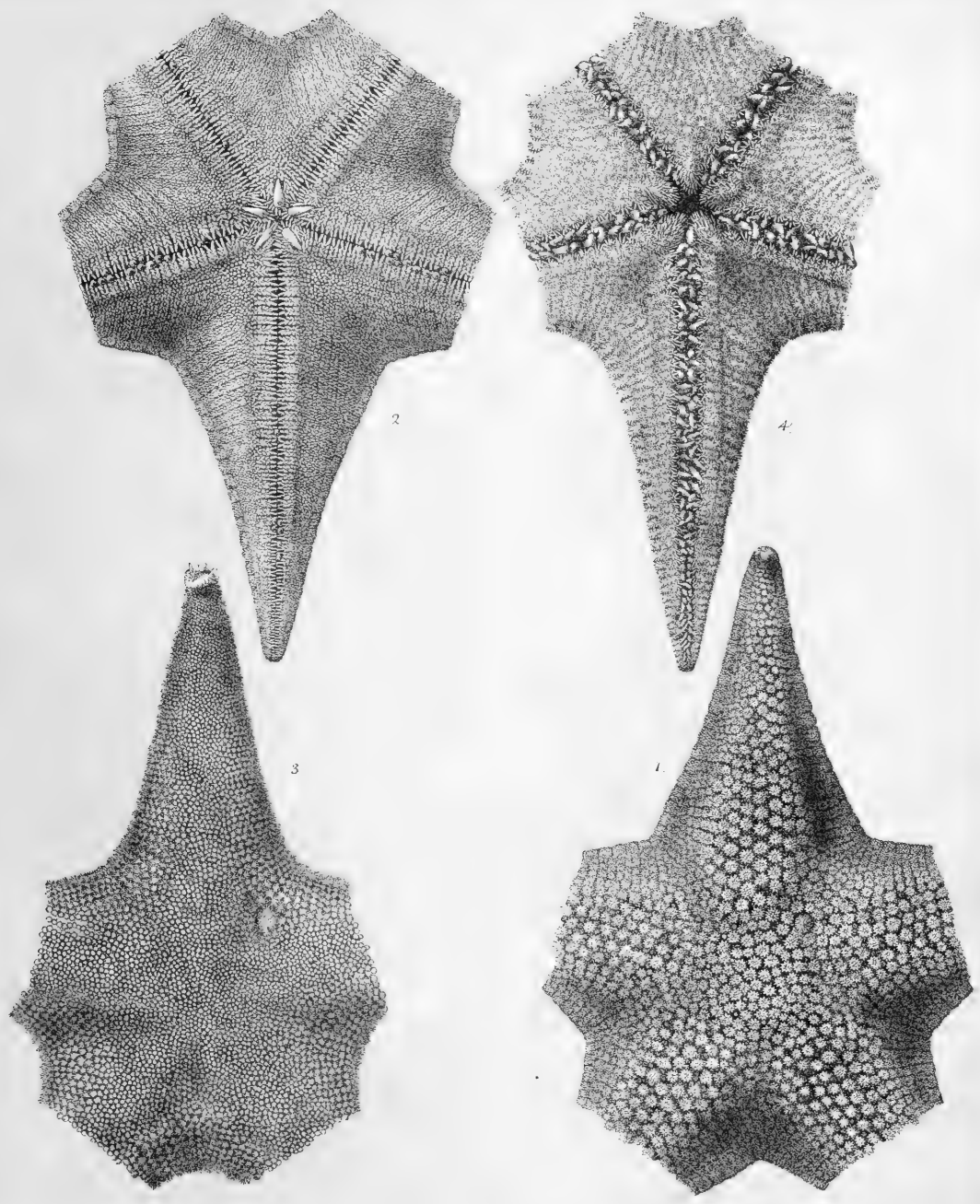
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. LXII. figs. 4, 5.]

Error in the legend of the Plate:

For "n. sp." after GNATHASTER MERIDIONALIS *read* "Smith, sp."



H. Michael del. J. S. S. sculp.

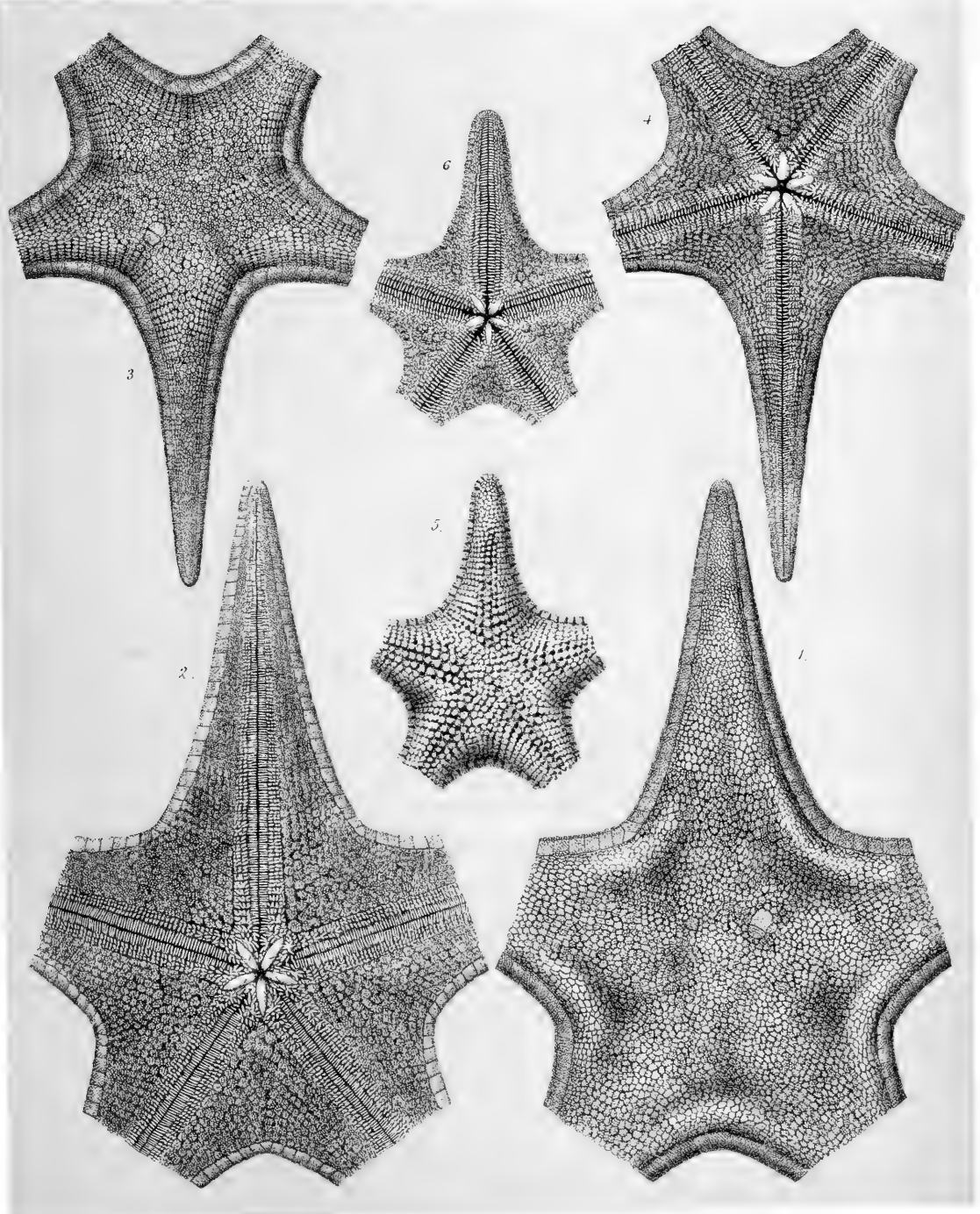
1-2. GNATHASTER MERIDIONALIS, n. sp. 3-4. MIMASTER COGNATUS, n. sp.

Wagoner

PLATE XLVIII.

PLATE XLVIII.

	Page
Figs 1, 2. GNATHASTER ELONGATUS, n. sp.	288
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XLIX. figs. 5-8 ; for macroscopic figures of a young example see Pl. XIX. figs. 5, 6.]	
Figs. 3, 4. GNATHASTER ELONGATUS, n. sp. (Variety),	288
Fig. 3. Abactinal aspect of an attenuate variety ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect of an attenuate variety ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this variety see Pl. XLIX. figs. 9, 10.]	
Figs. 5, 6. GNATHASTER MERIDIONALIS, Smith, sp.	287
Fig. 5. Abactinal aspect of a young example ; magnified 3 diameters.	
Fig. 6. Actinal aspect of a young example ; magnified 3 diameters.	
[For magnified details of this example see Pl. XLIX. figs. 11, 12 ; for macroscopic figures of an adult example see Pl. XLVII. figs. 1, 2.]	



W.H. Crowther del., H. M. S. Challenger

R. Hart imp.

1-2. GNATHASTER ELONGATUS, n. sp.

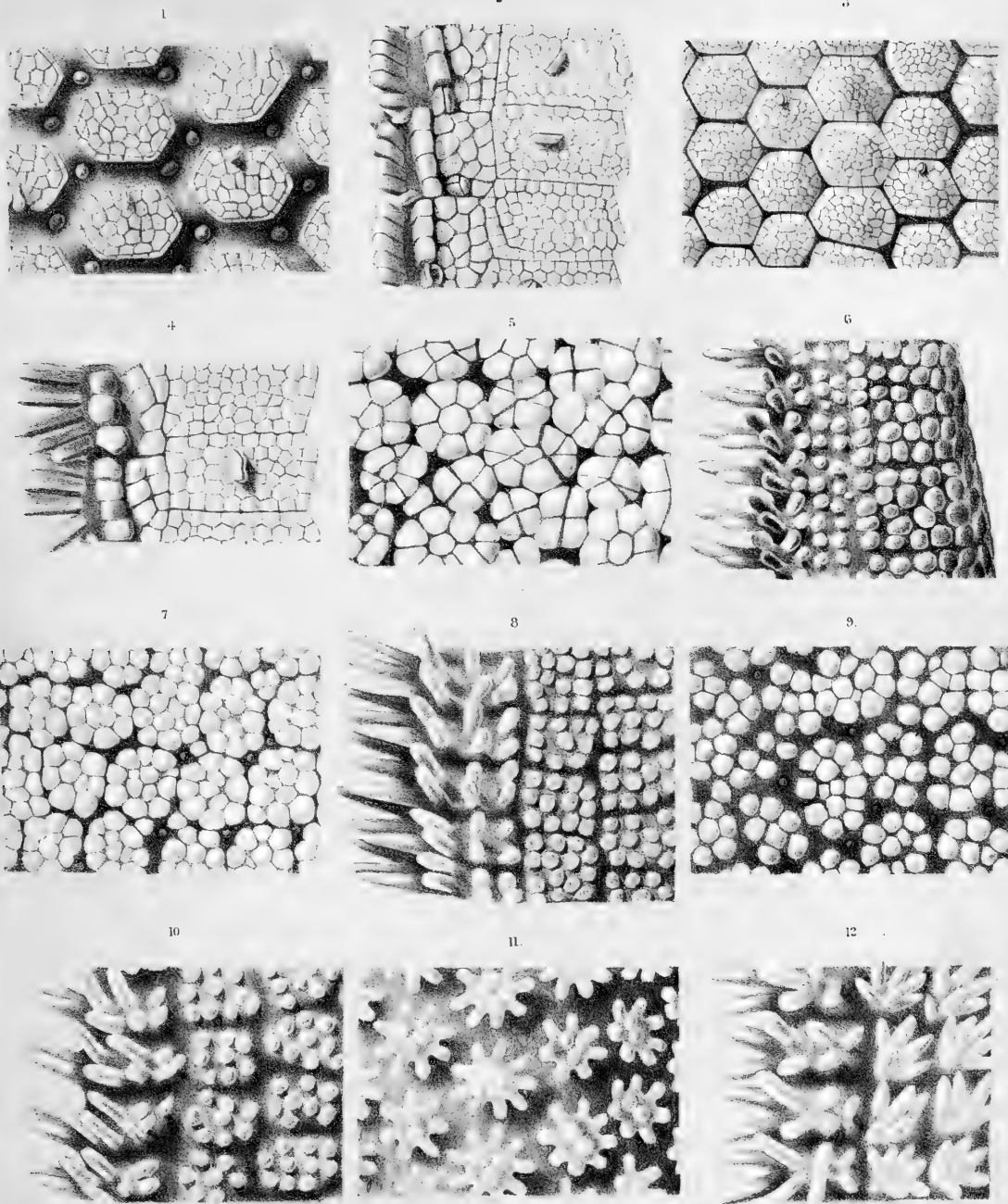
3-4. GNATHASTER ELONGATUS, n. sp. (Var.)

5-6. GNATHASTER MERIDIONALIS, Smith, sp. (Juv.)

PLATE XLIX.

PLATE XLIX.

	Page
Figs. 1, 2. <i>PENTAGONASTER JAPONICUS</i> , n. sp.	272
Fig. 1. A portion of the abactinal surface ; magnified 8 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLVI. figs. 1, 2.]	
Figs. 3, 4. <i>PENTAGONASTER PATAGONICUS</i> , n. sp.	269
Fig. 3. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLVI. figs. 3, 4.]	
Figs. 5, 6. <i>GNATHASTER ELONGATUS</i> , n. sp.	288
Fig. 5. A portion of the abactinal surface of a young example ; magnified 20 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface of a young example ; magnified 15 diameters.	
[For macroscopic figures of this example see Pl. XIX. figs. 5, 6.]	
Figs. 7, 8. <i>GNATHASTER ELONGATUS</i> , n. sp.	288
Fig. 7. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XLVIII. figs. 1, 2.]	
Figs. 9, 10. <i>GNATHASTER ELONGATUS</i> , n. sp. (Variety),	288
Fig. 9. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this variety see Pl. XLVIII. figs. 3, 4.]	
Figs. 11, 12. <i>GNATHASTER MERIDIONALIS</i> , Smith, sp.	287
Fig. 11. A portion of the abactinal surface of a young example ; magnified 20 diameters.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface of a young example ; magnified 30 diameters.	
[For macroscopic figures of this example see Pl. XLVIII. figs. 5, 6 ; for those of an adult example see Pl. XLVII. figs. 1, 2.]	



W. H. Crowther del et lith.

Mintern Bros imp

1-2. PENTAGONASTER JAPONICUS, n. sp.
 5-6. GNATHASTER ELONGATUS, n. sp., (juv).
 9-10. GNATHASTER ELONGATUS, n. sp., (var).

3-4. PENTAGONASTER PATAGONICUS, n. sp.
 7-8. GNATHASTER ELONGATUS, n. sp.
 11-12. GNATHASTER MERIDIONALIS, Smith, sp. (juv).

PLATE I.

PLATE L.

Figs. 1, 2. <i>NYPHASTER SYMBOLICUS</i> , n. sp.	Page 297
--	-------------

Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.

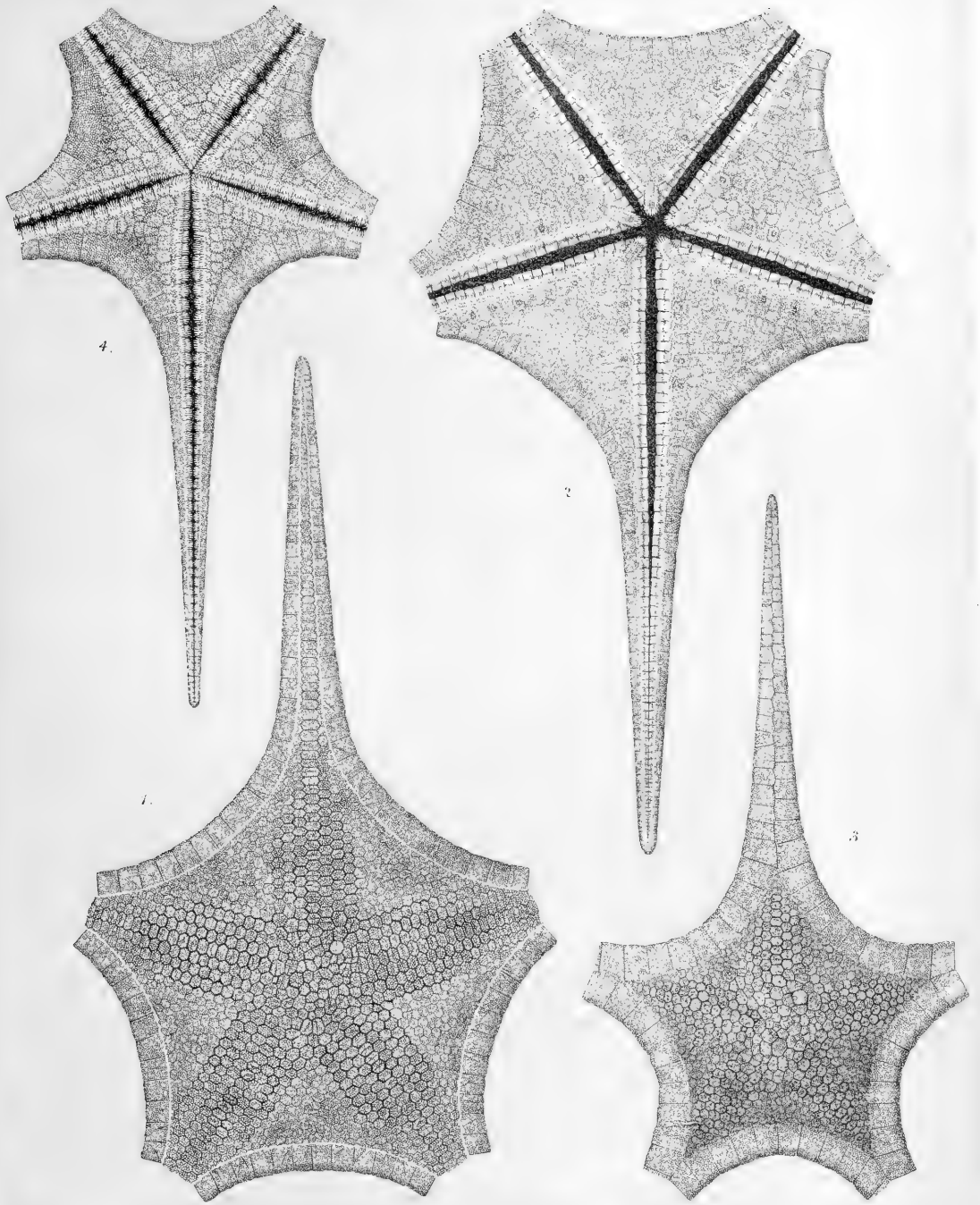
[For magnified details of this species see Pl. LIII. figs. 7, 8.]

Figs. 3, 4. <i>NYPHASTER PROTENTUS</i> , n. sp.	303
---	-----

Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters. *

Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. LIII. figs. 9, 10.]



W. H. Cowley, et des. et del. x 100.

Hanhart, imp.

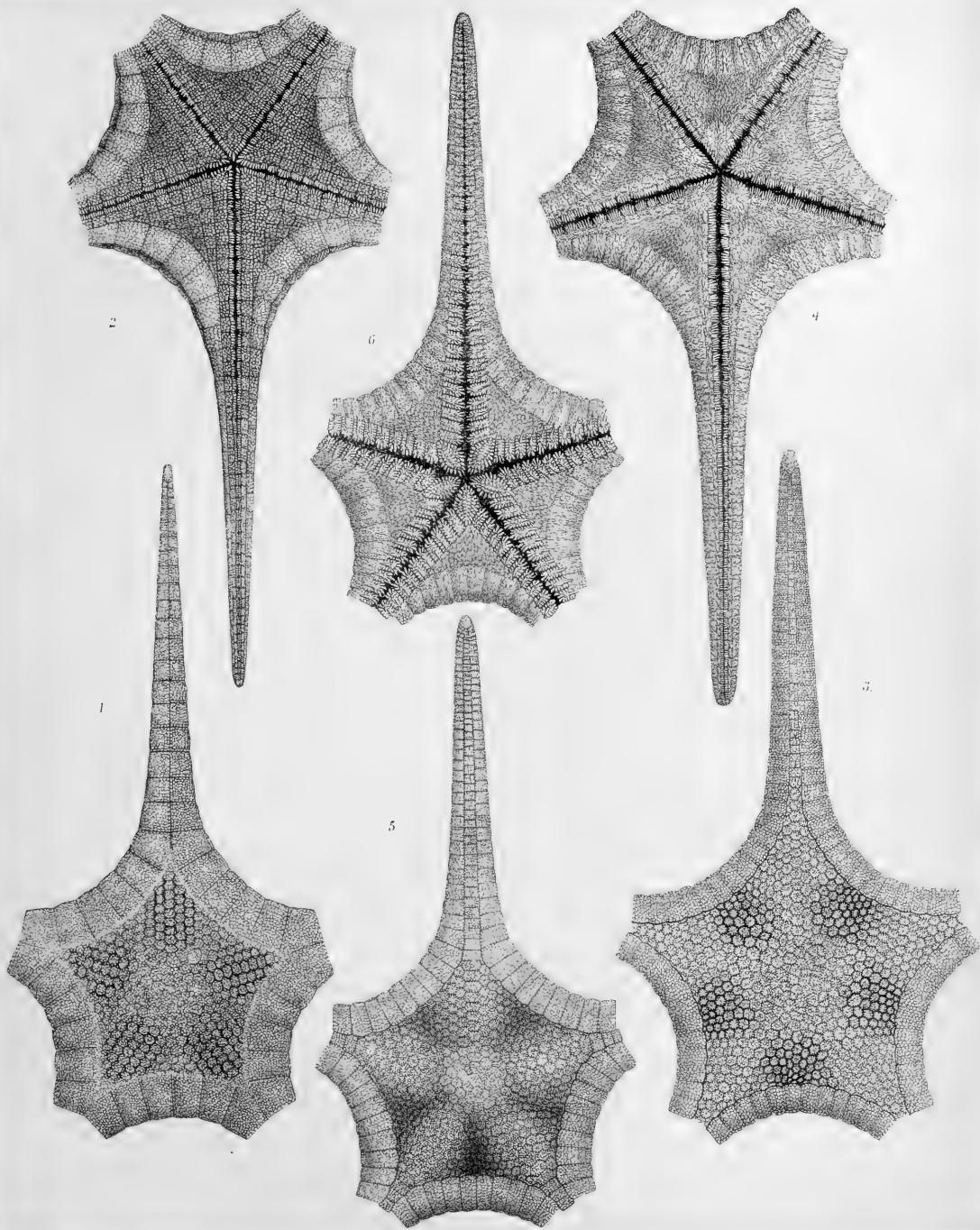
1-2. NYMPHASTER SYMBOLICUS, n. sp.

3-4. NYMPHASTER PROTENTUS, n. sp.

PLATE LI.

PLATE LI.

	Page
Figs. 1, 2. <i>NYMPHASTER ALBIDUS</i> , n. sp.	306
Fig. 1. Abactinal aspect ; magnified 2 diameters.	
Fig. 2. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LIII. figs. 5, 6.]	
Figs. 3, 4. <i>PARAGONASTER CYLINDRATUS</i> , n. sp.	314
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LIII. figs. 3, 4.]	
Figs. 5, 6. <i>PARAGONASTER CTENIPES</i> , n. sp.	311
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LIII. figs. 1, 2.]	



W. H. Crother del.

Min. Geol. Surv. lith.

1-2. NYMPHASTER ALBIDUS, n. sp.

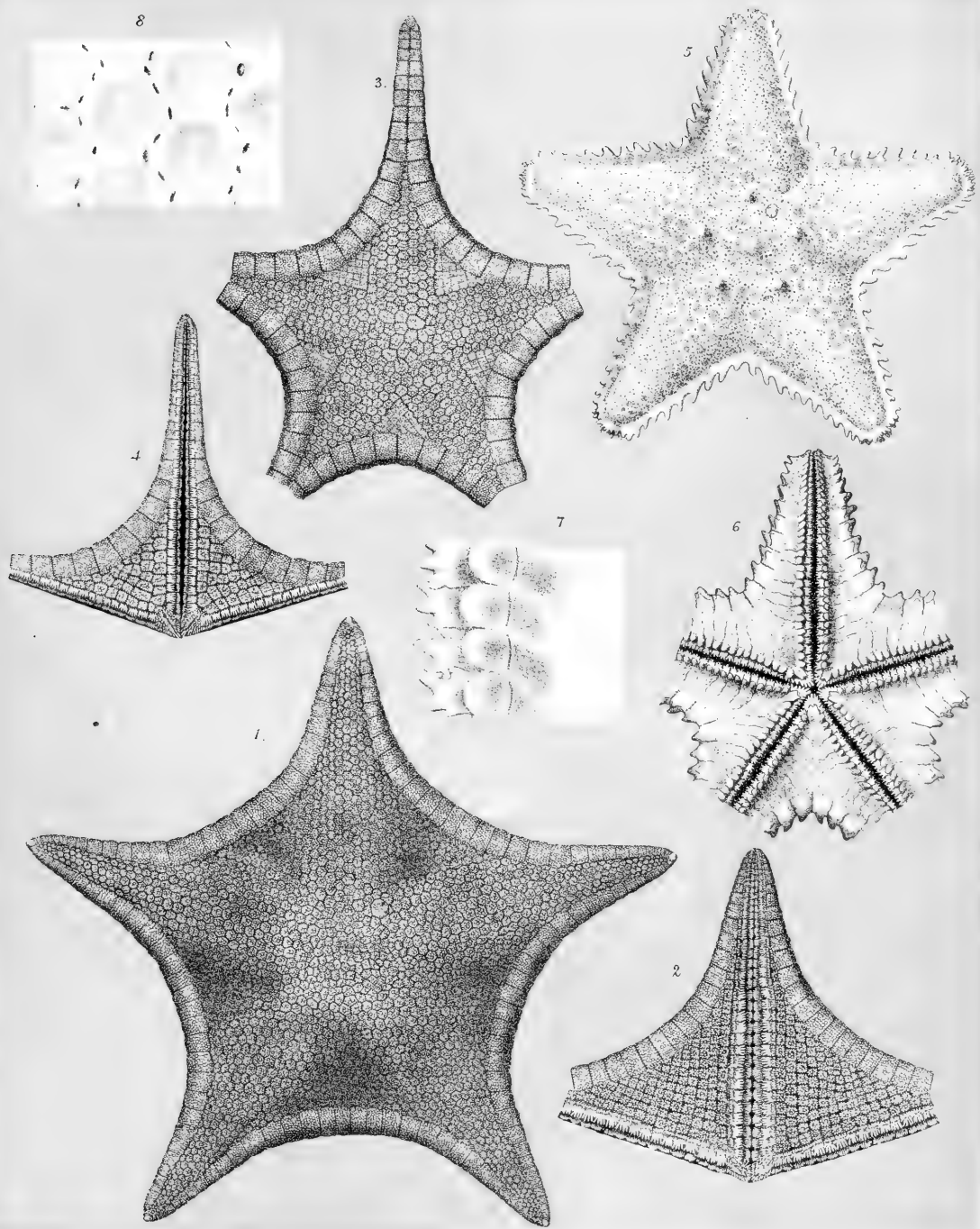
3-4. PARAGONASTER CYLINDRATUS, n. sp.

5-6. PARAGONASTER CTENIPES, n. sp.

PLATE LII.

PLATE LII.

	Page
Figs. 1, 2. <i>PENTAGONASTER ARCUATUS</i> , n. sp.	277
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XVIII. figs. 5, 6.]	
Figs. 3, 4. <i>NYMPHASTER BIPUNCTUS</i> , n. sp.	301
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LIII. figs. 11, 12.]	
Figs. 5-8. <i>GYMNASTERIA CARINIFERA</i> (Lamarck), von Martens,	357
Fig. 5. Abactinal aspect of a young example ; magnified 2 diameters.	
Fig. 6. Actinal aspect of a young example ; magnified 2 diameters.	
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface of the same example ; magnified 10 diameters.	
Fig. 8. A portion of the abactinal surface of the same ; magnified 10 diameters.	



1-2. *PENTAGONASTER ARGUATUS*, n. sp.

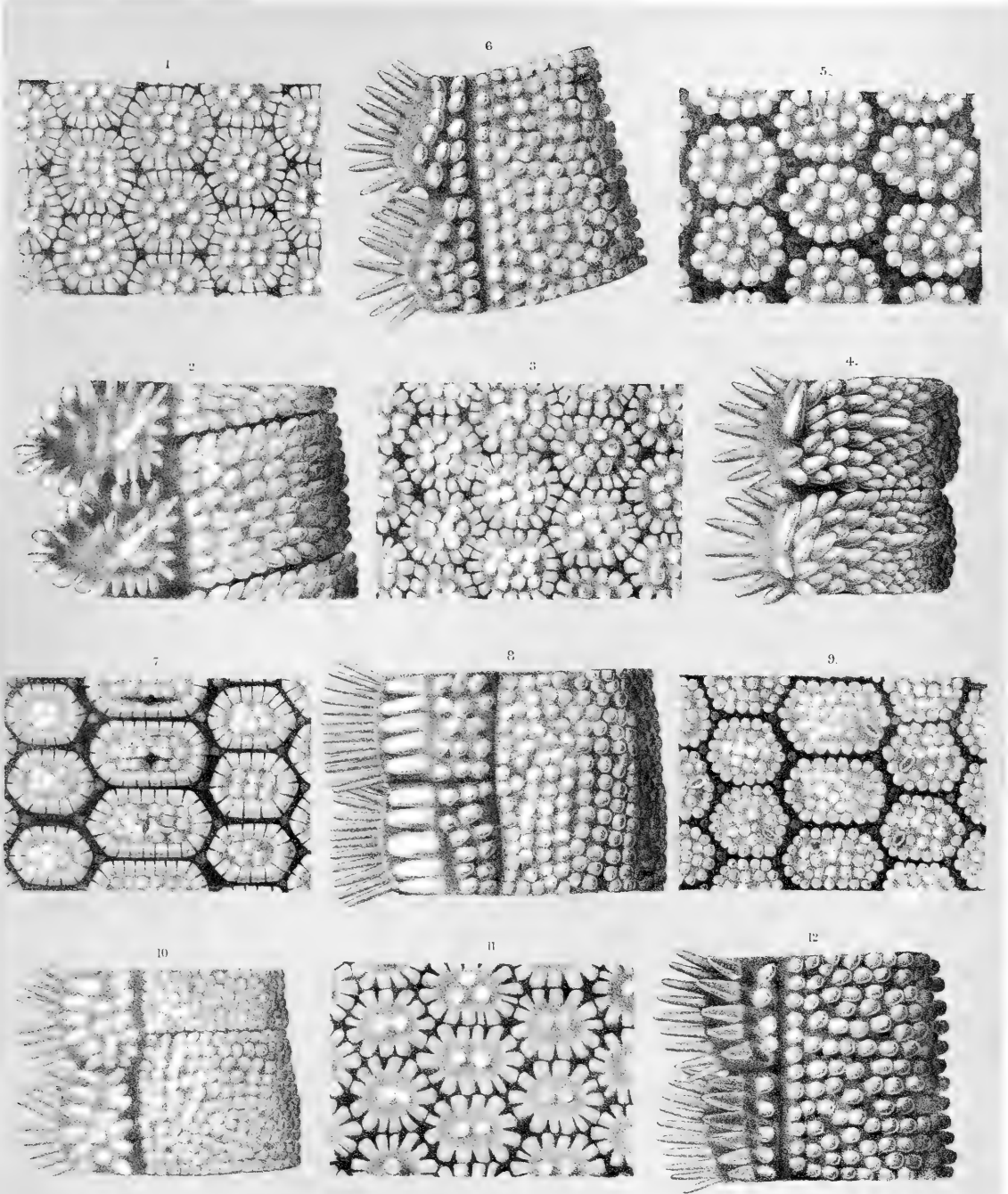
3-4. *NYMPHASTER BIPUNCTUS*, n. sp.

5-8. *GYMNASTERIA CARINIFERA* (Lamarck) V. Martens (juv.)

PLATE LIII.

PLATE LIII.

	Page
Figs. 1, 2. PARAGONASTER CTENIPES, n. sp.	311
Fig. 1. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 2. Adambulacral and infero-marginal plates ; magnified 15 diameters. [For macroscopic figures of this species see Pl. LI. figs. 5, 6.]	
Figs. 3, 4. PARAGONASTER CYLINDRATUS, n. sp.	314
Fig. 3. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 4. Adambulacral and infero-marginal plates ; magnified 15 diameters. [For macroscopic figures of this species see Pl. LI. figs. 3, 4.]	
Figs. 5, 6. NYMPHASTER ALBIDUS, n. sp.	306
Fig. 5. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 6. Adambulacral and infero-marginal plates ; magnified 15 diameters. [For macroscopic figures of this species see Pl. LI. figs. 1, 2.]	
Figs. 7, 8. NYMPHASTER SYMBOLICUS, n. sp.	297
Fig. 7. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 8. Adambulacral and infero-marginal plates ; magnified 15 diameters. [For macroscopic figures of this species see Pl. L. figs. 1, 2.]	
Figs. 9, 10. NYMPHASTER PROTENTUS, n. sp.	303
Fig. 9. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 10. Adambulacral and infero-marginal plates ; magnified 12 diameters. [For macroscopic figures of this species see Pl. L. figs. 3, 4.]	
Figs. 11, 12. NYMPHASTER BIPUNCTUS, n. sp.	301
Fig. 11. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 12. Adambulacral and infero-marginal plates ; magnified 20 diameters. [For macroscopic figures of this species see Pl. LII. figs. 3, 4.]	



1-2. PARAGONASTER CTENIPES, n. sp.
 3-4. PARAGONASTER CYLINDRATUS, n. sp.
 9-10. NYMPHASTER PROTENTUS, n. sp.

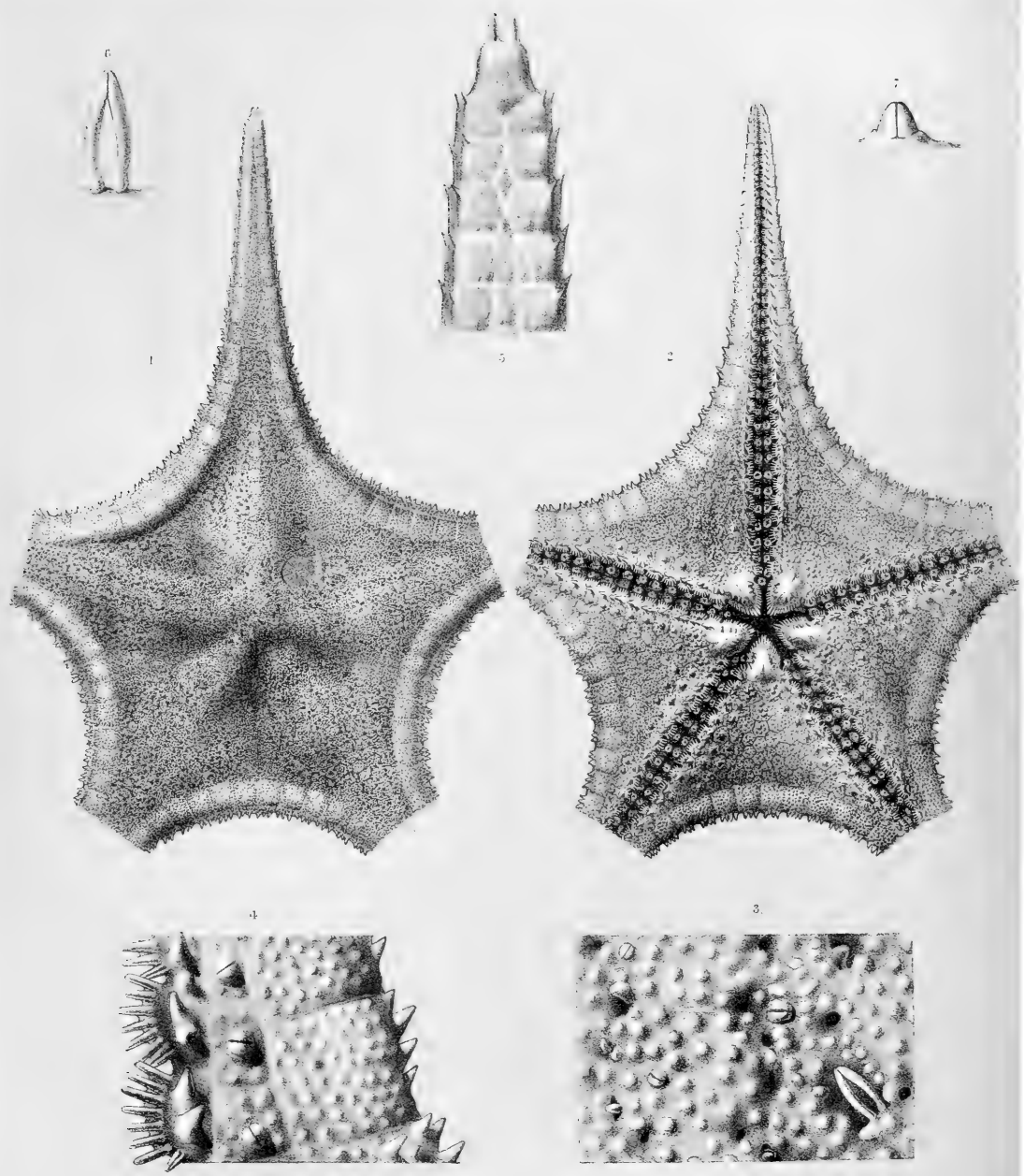
5. NYMPHASTER ALBIDUS, n. sp.
 7-8. NYMPHASTER SYMBOLICUS, n. sp.
 11-12. NYMPHASTER BIPUNCTUS, n. sp.

Mason, Proc. U.S. Geol. Surv., 1880, p. 100, pl. 1, fig. 1.

PLATE LIV.

PLATE LIV.

- | | Page |
|--|------|
| Figs. 1-7. <i>LEPTOGONASTER CRISTATUS</i> , n. sp. | 327 |
| Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters. | |
| Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters. | |
| Fig. 3. A portion of the abactinal surface; magnified 15 diameters. | |
| Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified 8 diameters. | |
| Fig. 5. The extremity of a ray; magnified. | |
| Fig. 6. One of the pincer-shaped pedicellariæ on the abactinal surface, seen in profile; magnified. | |
| Fig. 7. One of the tubercle-like valvate pedicellariæ on the plates adjacent to the adambulacral plates, seen in profile; magnified. | |

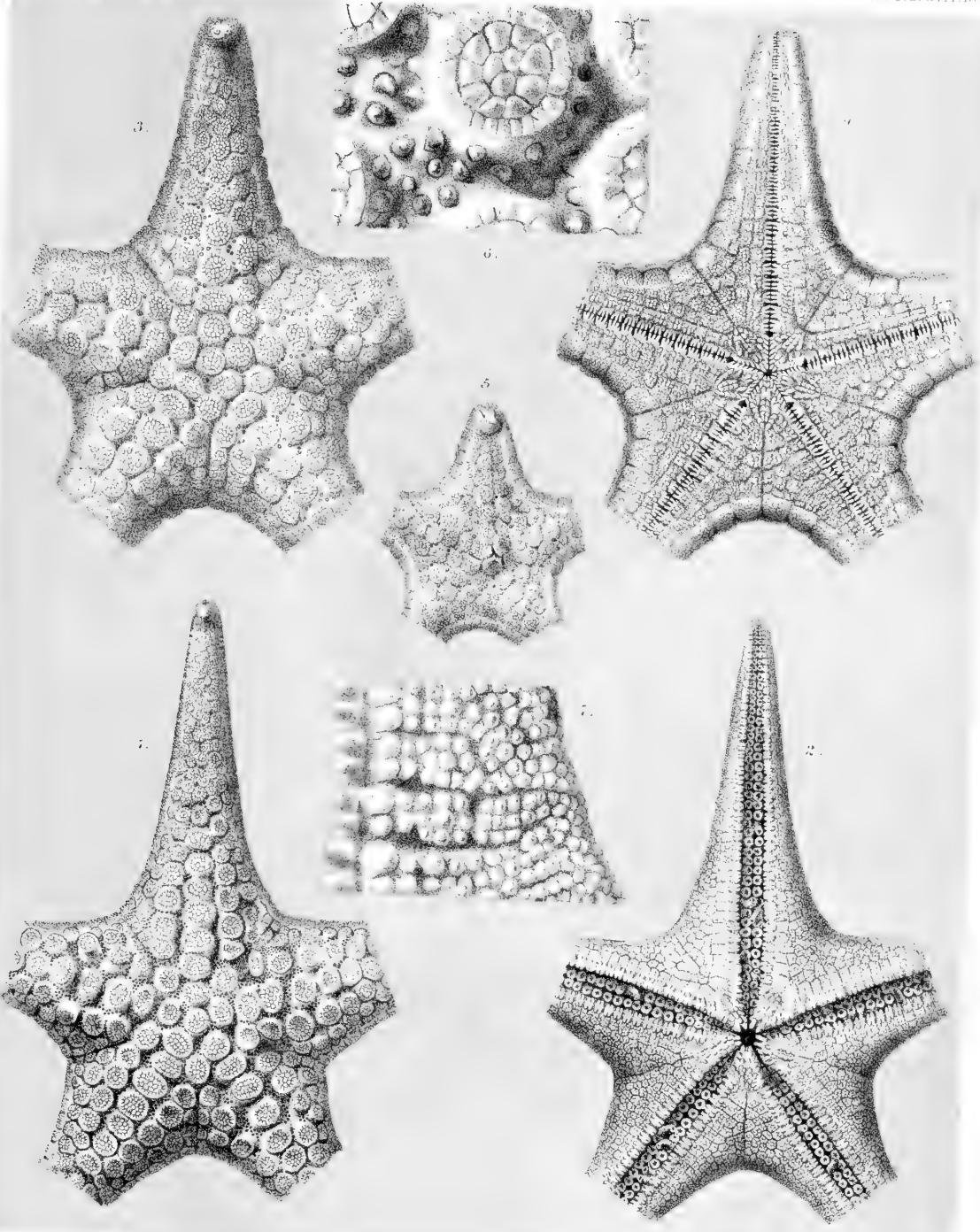


LEPTOGONASTER CRISTATUS, n. sp.

PLATE LV.

PLATE LV.

- | | Page |
|--|------|
| Figs. 1-7. NECTRIA OCELLIFERA (Lamarck), Gray, . . . | 319 |
| Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters. | |
| Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters. | |
| Fig. 3. Abactinal aspect of a younger example ; magnified 3 diameters. | |
| Fig. 4. Actinal aspect of the same ; magnified 3 diameters. | |
| Fig. 5. Abactinal aspect of a young example ; magnified 3 diameters. | |
| Fig. 6. A portion of the abactinal surface of the adult ; magnified 9 diameters. | |
| Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified 9 diameters. | |



T. H. McJannet del. H. S. G. lith.

NECTRIA OCELLIFERA (Lamarck), Gray

Pl. IV.

PLATE LVI.

PLATE LVI.

Figs. 1-4. *CALLIASTER BACCATUS*, n. sp.

Page
280

Fig. 1. Actinal aspect, magnified $1\frac{1}{2}$ diameters.

Fig. 2. Abactinal aspect, magnified $1\frac{1}{2}$ diameters.

Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified
12 diameters.

Fig. 4. A portion of the abactinal surface ; magnified 12 diameters.

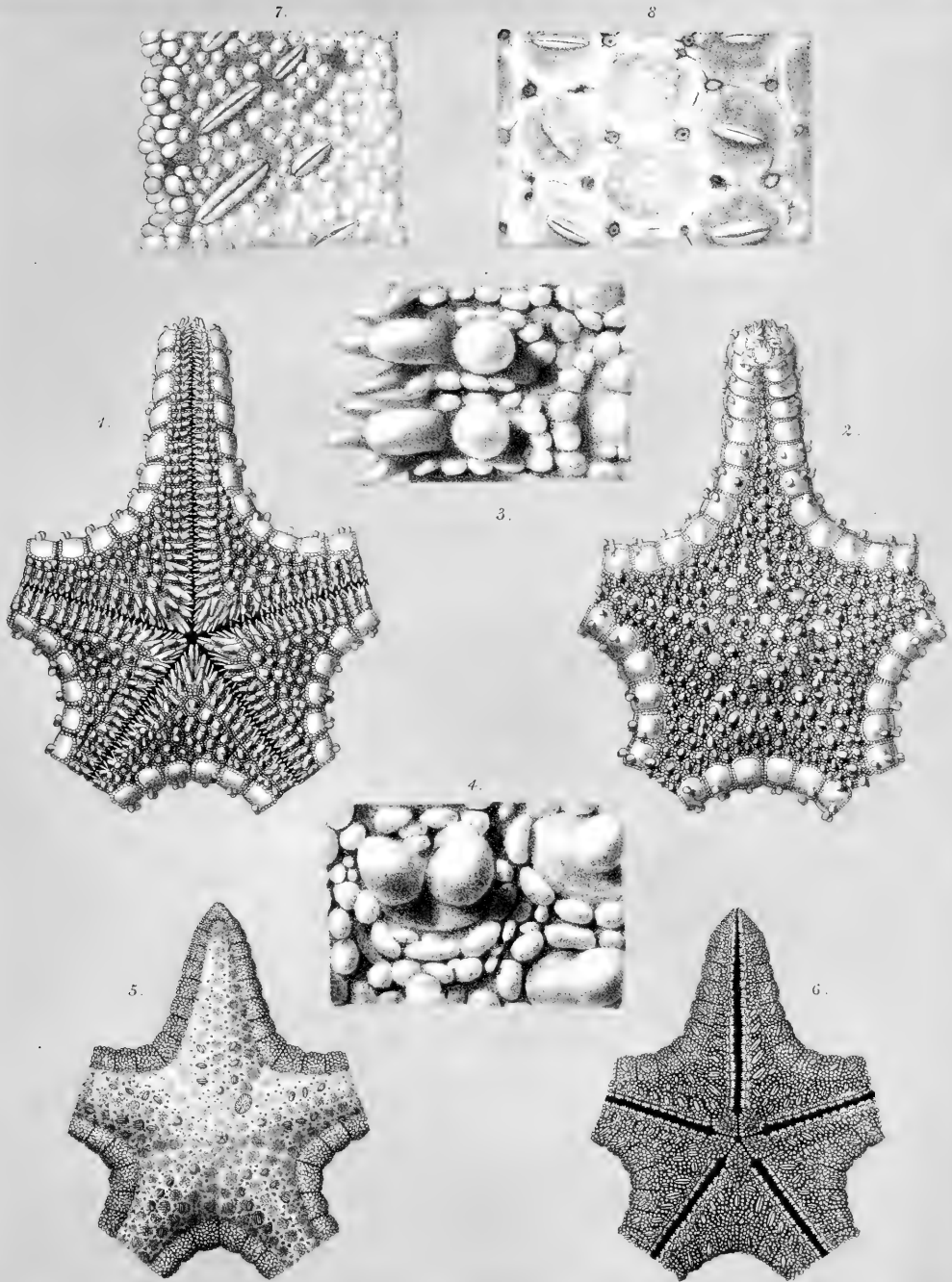
Figs. 5-8. *ANTHENA TUBERCULOSA*, Gray (?), 340

Fig. 5. Abactinal aspect of a young example ; magnified 3 diameters.

Fig. 6. Actinal aspect of a young example ; magnified 3 diameters.

Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified
20 diameters.

Fig. 8. A portion of the abactinal surface ; magnified 15 diameters.



del. H. Sillik. lit.

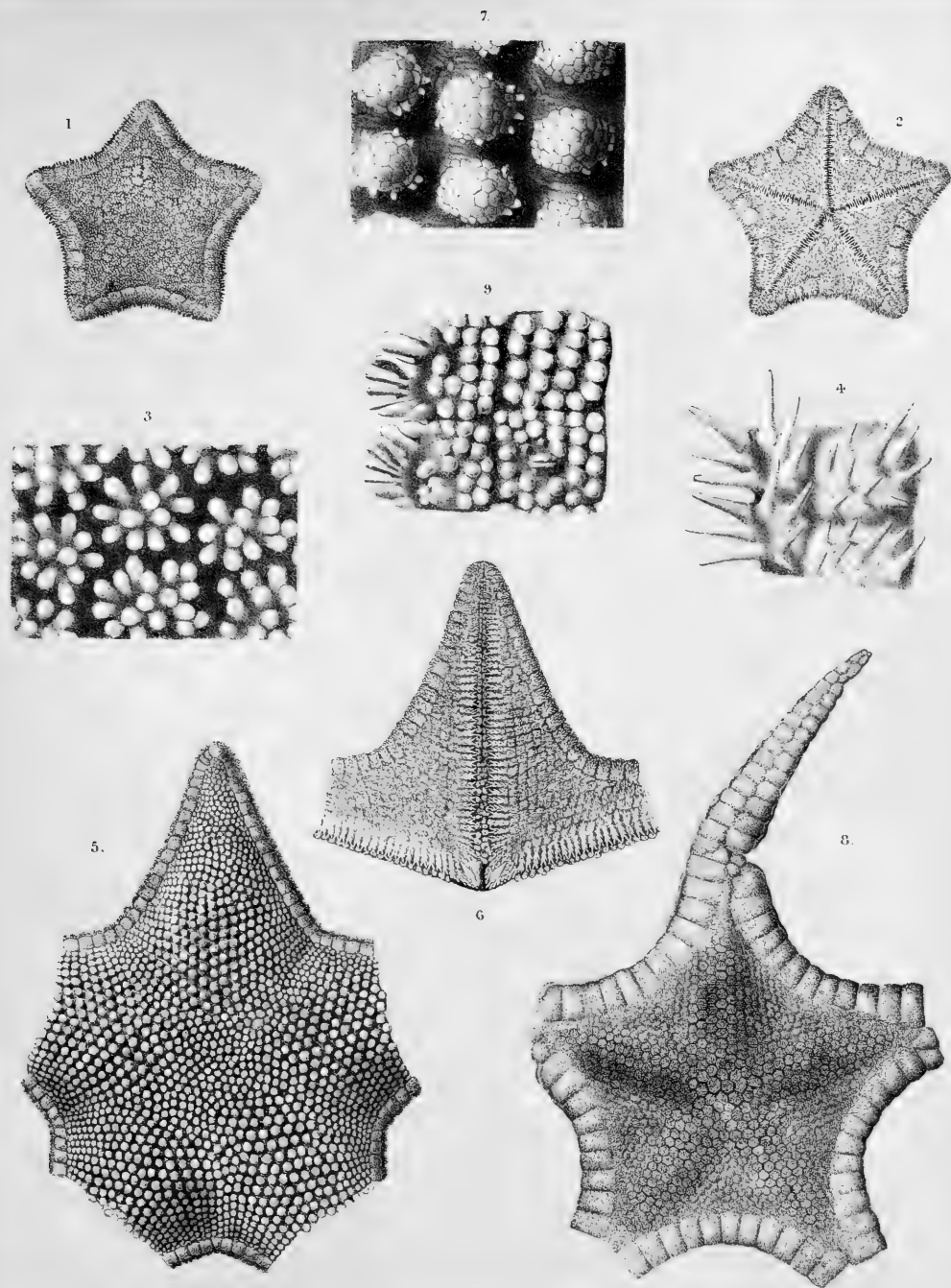
1-4. CALLIASTER BACCATUS, n. sp.

5-8. ANTHEENA TUBERCULOSA, Gray, 2, juv.

PLATE LVII.

PLATE LVII.

	Page
Figs. 1-4. PENTAGONASTER LEPIDUS, n. sp.	275
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
Fig. 3. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 35 diameters.	
Figs. 5-7. GNATHASTER PILULATUS, n. sp.	292
Fig. 5. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 6. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 7. A portion of the abactinal surface ; magnified 10 diameters.	
Figs. 8, 9. NYMPHASTER BASILICUS, n. sp.	308
Fig. 8. Abactinal aspect ; natural size.	
Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	

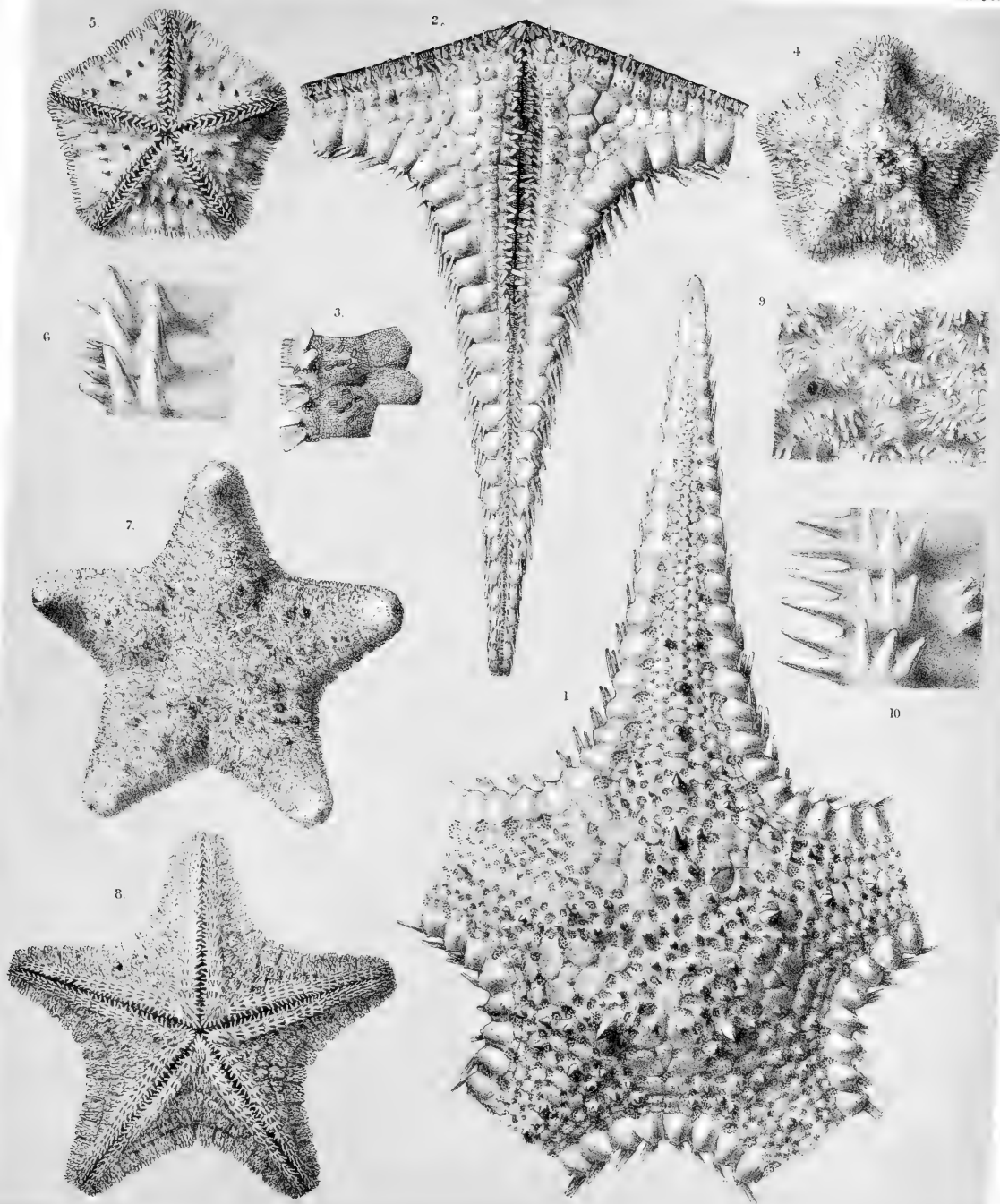


1-4. PENTAGONASTER LEPIDUS, n.sp. 5-7. GNATHASTER PILULATUS, n.sp.
8-9. NYMPHASTER BASILICUS, n.sp.

PLATE LVIII.

PLATE LVIII.

	Page
Figs. 1-3. <i>STELLASTER PRINCEPS</i> , n. sp.	323
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface; magnified.	
Figs. 4-6. <i>MARGINASTER FIMBRIATUS</i> , n. sp.	365
Fig. 4. Abactinal aspect; magnified 4 diameters.	
Fig. 5. Actinal aspect; magnified 4 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface; magnified 24 diameters.	
Figs. 7-10. <i>LASIASTER VILLOSUS</i> , n. sp.	372
Fig. 7. Abactinal aspect; magnified 4 diameters.	
Fig. 8. Actinal aspect; magnified 4 diameters.	
Fig. 9. A portion of the abactinal surface; magnified 15 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface; magnified 20 diameters.	



1-3. *STELLASTER PRINCEPS*, n.sp.

4-6. *MARGINASTER FIMBRIATUS*, n.sp.

7-10. *LASIASTER VILLOSUS*, n.sp.

Mitlen. Bros. imp.

F. H. Michael del. et lith.

PLATE LIX.

PLATE LIX.

	Page
Figs. 1, 2. <i>PORANIA GLABER</i> , n. sp.	360
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
Fig. 3. <i>PORANIA ANTARCTICA</i> , Smith,	360
Fig. 3. Abactinal aspect; natural size.	
Fig. 4. <i>PORANIA SPICULATA</i> , n. sp.	362
Fig. 4. Abactinal aspect; natural size.	
Fig. 5. <i>PORANIA MAGELLANICA</i> , Studer,	363
Fig. 5. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	



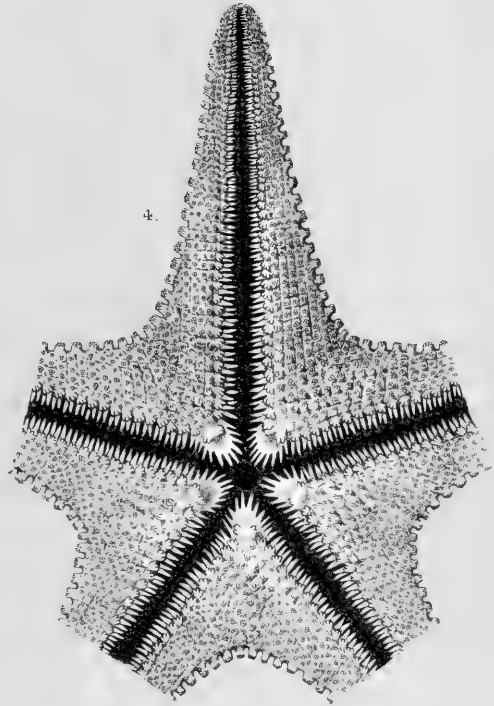
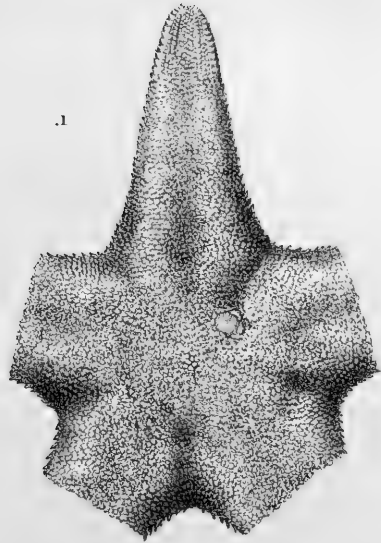
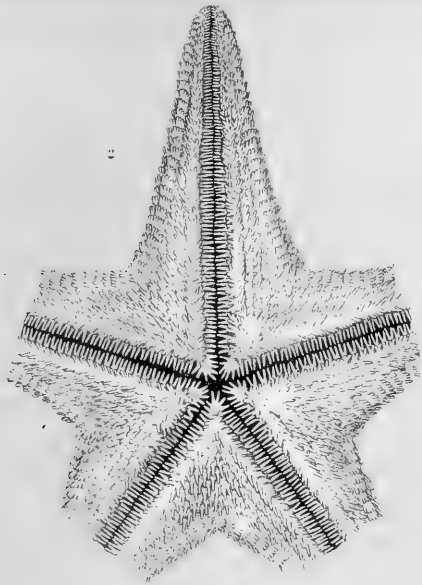
1-2. *PORANIA GLABER*, n.sp.
4. *PORANIA SPICULATA*, n.sp.

3. *PORANIA ANTARCTICA*, Smith.
5. *PORANIA MAGELLANICA*, Studer.

PLATE LX.

PLATE LX.

	Page
Figs. 1, 2. <i>GANERIA FALKLANDICA</i> , Gray,	383
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
[For magnified details of this species see Pl. LXII. figs. 6, 7.]	
Figs. 3, 4. <i>CYCETHRA ELECTILIS</i> , n. sp.	377
Fig. 3. Abactinal aspect; magnified 2 diameters.	
Fig. 4. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. LXII. figs. 2, 3.]	

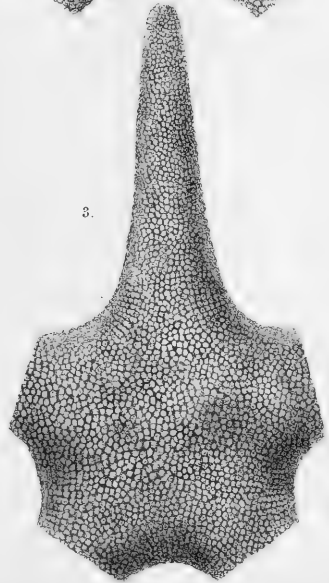
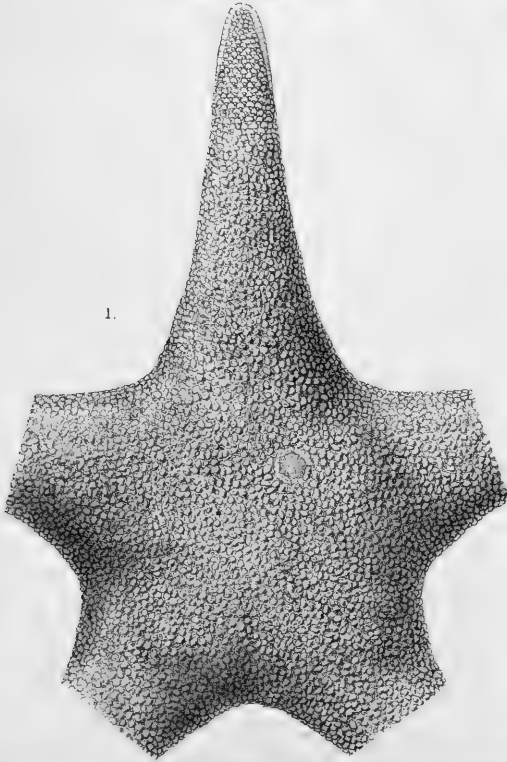
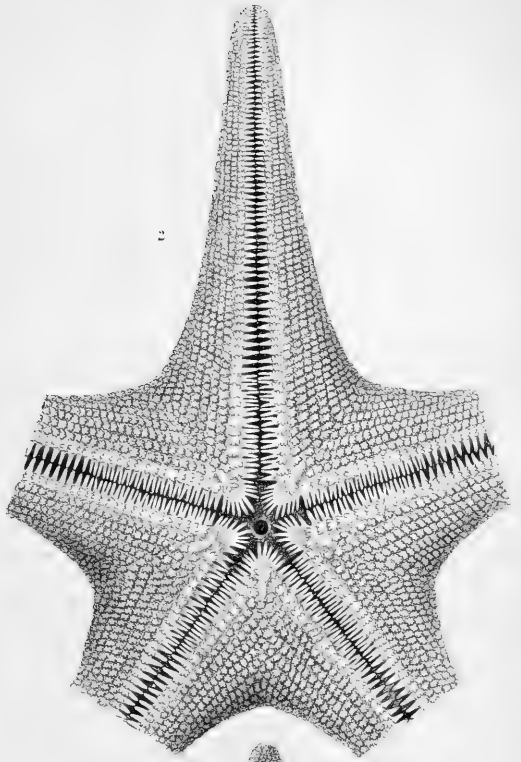
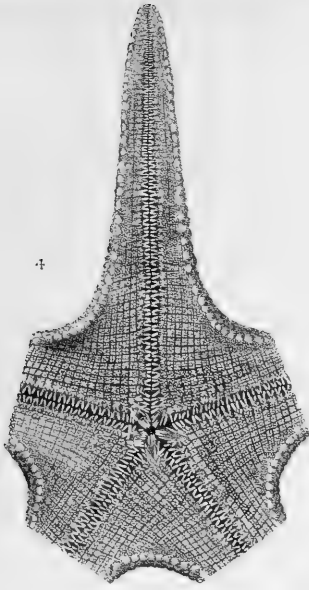


1-2. GANERIA FALKLANDICA, Gray. 3-4. CYCETHRA ELECTILIS, n.sp.

PLATE LXI.

PLATE LXI.

	Page
Figs. 1, 2. <i>CYCETHRA PINGUIS</i> , n. sp.	380
Fig. 1. Abactinal aspect ; natural size.	
Fig. 2. Actinal aspect ; natural size.	
[For magnified details of this species see Pl. LXII. figs. 8, 9.]	
Figs. 3, 4. <i>CYCETHRA NITIDA</i> , n. sp.	379
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXII. figs. 10, 11.]	



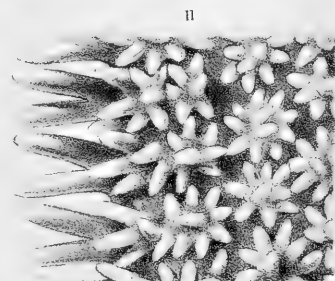
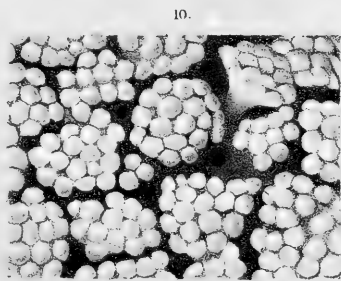
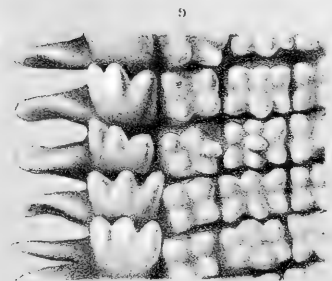
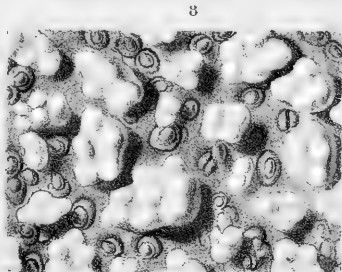
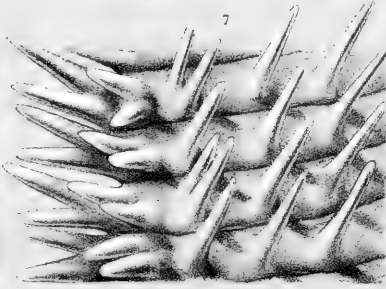
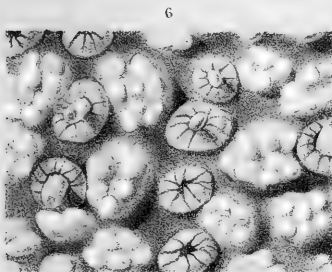
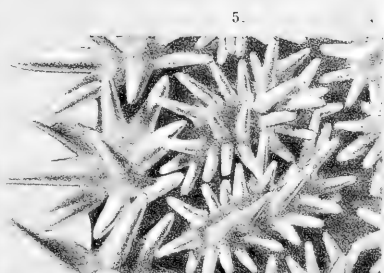
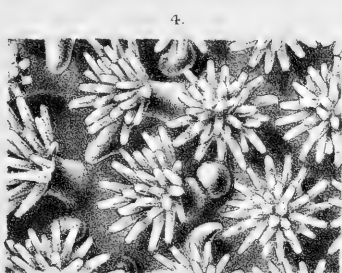
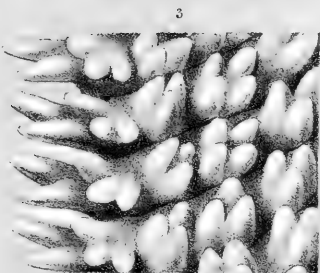
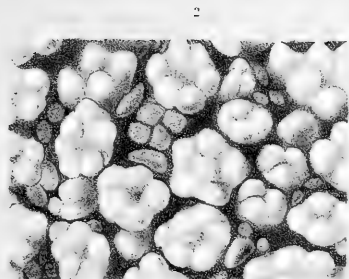
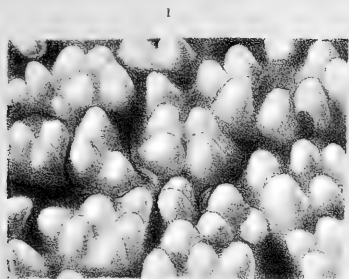
1-2. *CYCETHRA PINGUIS*, n.sp.

3-4. *CYCETHRA NITIDA*, n.sp.

PLATE LXII.

PLATE LXII.

	Page
Fig. 1. PERKMASTER FUSCUS, n. sp.	551
Fig. 1. A portion of the abactinal surface ; magnified 22 diameters. [For macroscopic figures of this species see Pl. XCVII. figs. 3, 4.]	
Figs. 2, 3. CYCETHRA ELECTILIS, n. sp.	377
Fig. 2. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters. [For macroscopic figures of this species see Pl. LX. figs. 3, 4.]	
Figs. 4, 5. MIMASTER COGNATUS, n. sp.	336
Fig. 4. A portion of the abactinal surface ; magnified 24 diameters.	
Fig. 5. Adambulacral plates and adjacent portion of the actinal surface ; magnified 16 diameters. [For macroscopic figures of this species see Pl. XLVII. figs. 3, 4.]	
Figs. 6, 7. GANERIA FALKLANDICA, Gray,	383
Fig. 6. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters. [For macroscopic figures of this species see Pl. LX. figs. 1, 2.]	
Figs. 8, 9. CYCETHRA PINGUIS, n. sp.	380
Fig. 8. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified 6 diameters. [For macroscopic figures of this species see Pl. LXI. figs. 1, 2.]	
Figs. 10, 11. CYCETHRA NITIDA, n. sp.	379
Fig. 10. A portion of the abactinal surface ; magnified 20 diameters.	
Fig. 11. Adambulacral plates and adjacent portion of the actinal surface ; magnified 12 diameters. [For macroscopic figures of this species see Pl. LXI. figs. 3, 4.]	



1. PERKMASTER FUSCUS, n. sp.
 4-5. MIMASTER COGNATUS, n. sp.
 8-9. CYCETHRA PINGUIS, n. sp.

2-3. CYCETHRA ELECTILIS, n. sp.
 6-7. GANERIA FALKLANDICA, Gray.
 10-11. CYCETHRA NITIDA, n. sp.

PLATE LXIII.

PLATE LXIII.

Figs. 1, 2. *PATIRIA BELLULA*, n. sp. Page
385

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

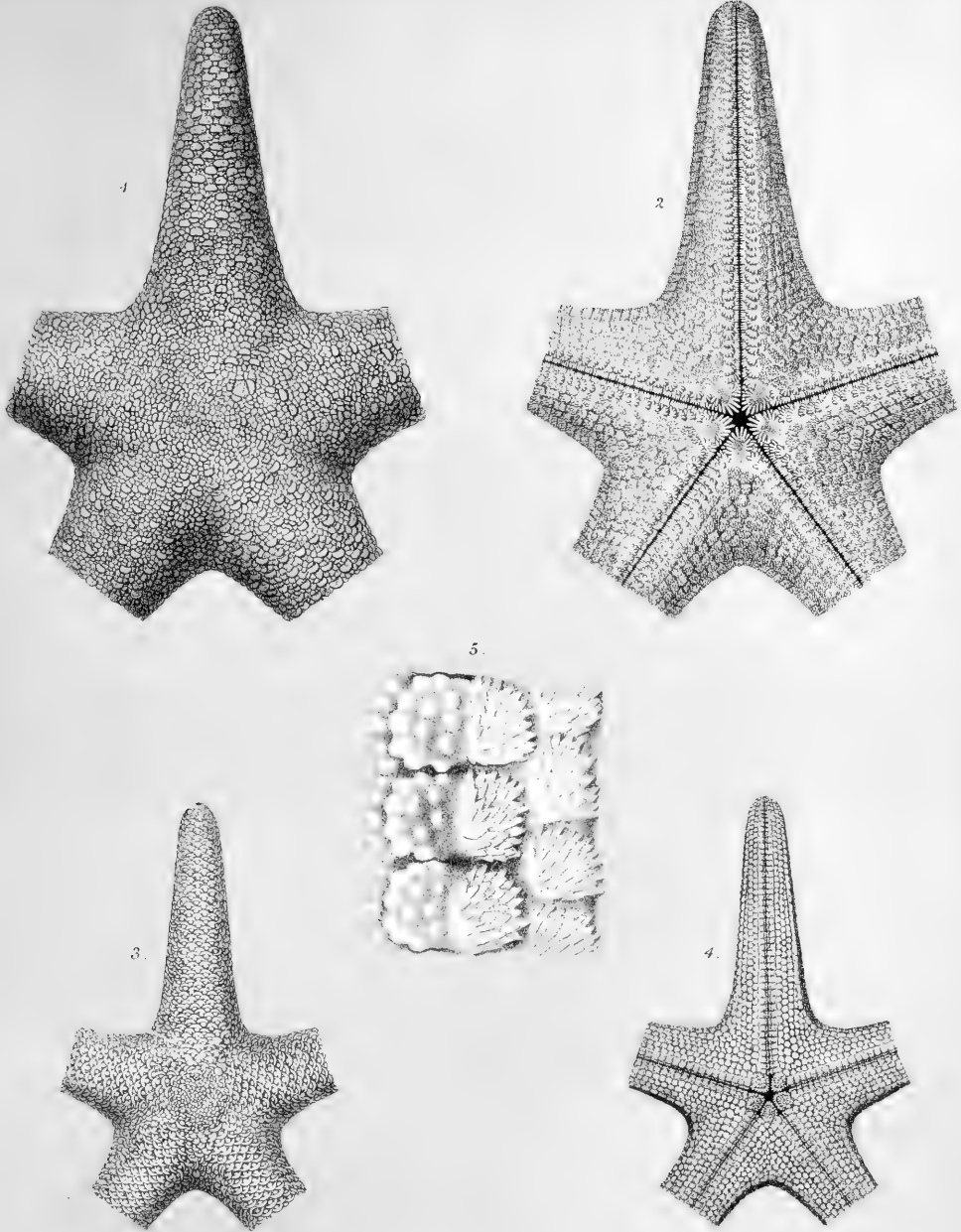
[For magnified details of this species see Pl. LXIV. figs. 5, 6.]

Figs. 3-5. *NEPANTHIA BREVIS*, Perrier, 387

Fig. 3. Abactinal aspect; magnified 2 diameters.

Fig. 4. Actinal aspect; magnified 2 diameters.

Fig. 5. Adambulacral plates and adjacent portion of the actinal surface; magnified
25 diameters.



1-2. PATIRIA BELLULA, n. sp. 3-5. NEPANTHIA BREVIS, Perrier.

PLATE LXIV.

PLATE LXIV.

Figs. 1-4. *NEPANTHIA MACULATA*, Gray, Page
388

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 20 diameters.

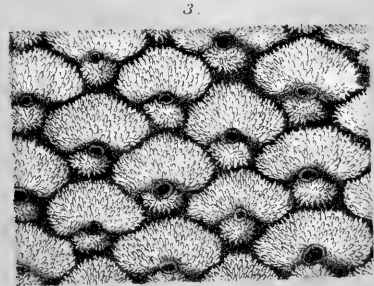
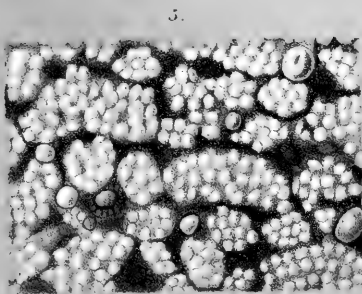
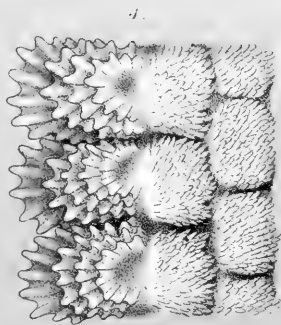
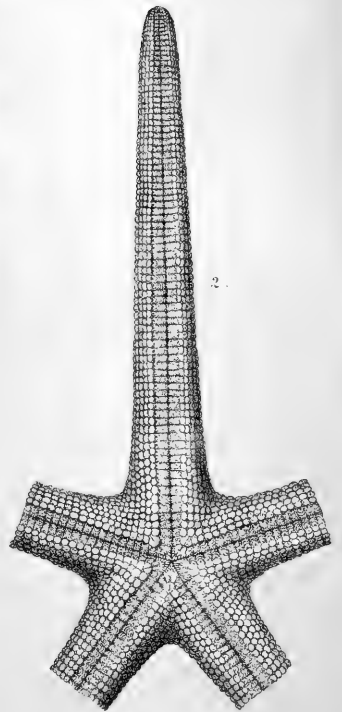
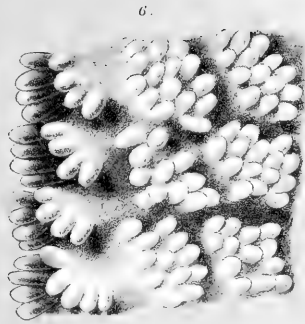
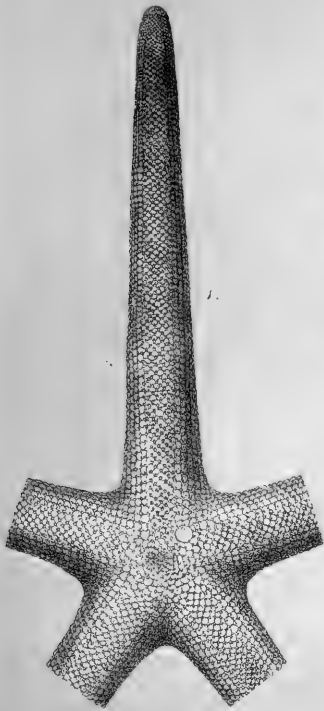
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified
15 diameters.

Figs. 5, 6. *PATIRIA BELLULA*, n. sp. 385

Fig. 5. A portion of the abactinal surface; magnified 10 diameters.

Fig. 6. Adambulacral plates and adjacent portion of the actinal surface; magnified
10 diameters.

[For macroscopic figures of this species see Pl. LXIII. figs. 1, 2.]



W.H. Crowther del. Hollick lith.

Hanhart 1779

1-4. *NEPANTHIA MACULATA*, Gray.

5-6. *PATIRIA BELLULA*, n.sp.

PLATE LXV.

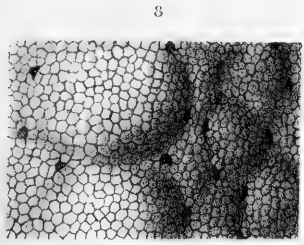
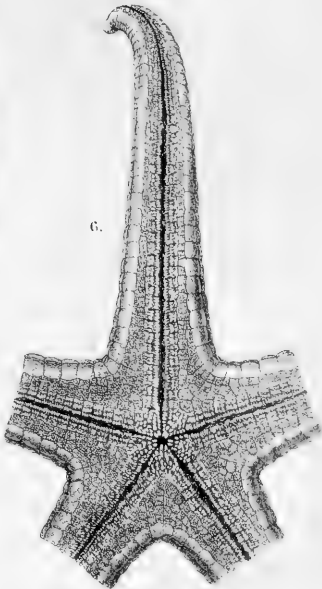
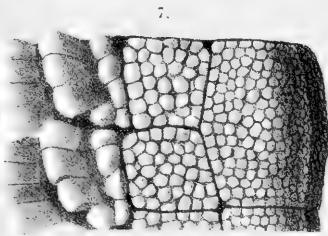
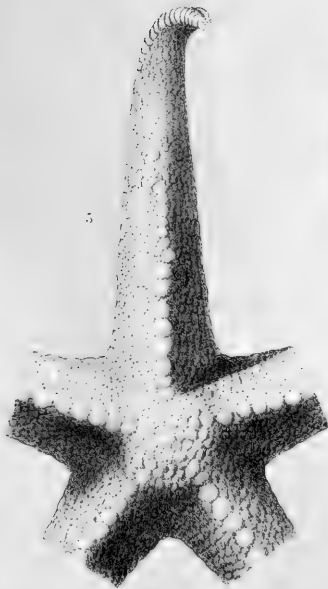
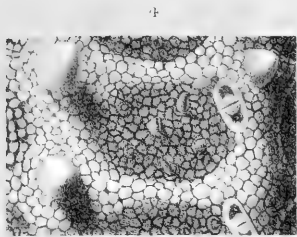
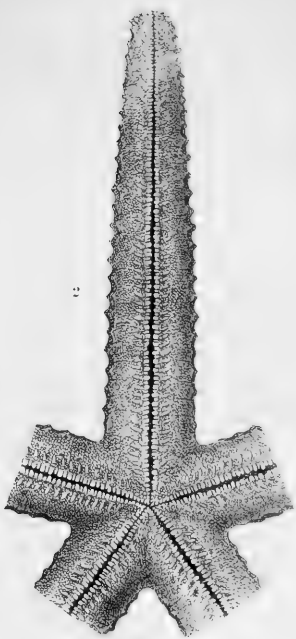
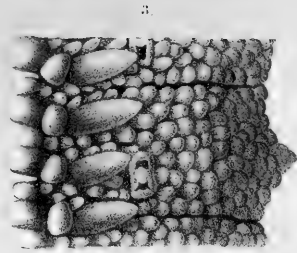
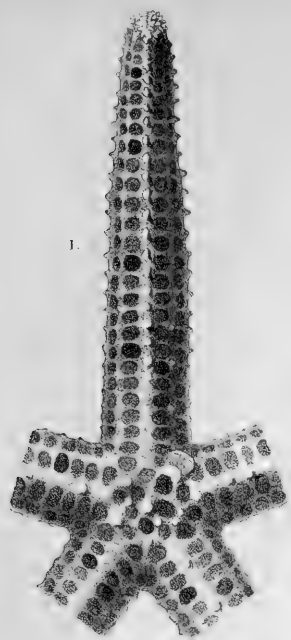
PLATE LXV.

Figs. 1-4. *OPHIDIASTER TUBERIFER*, n. sp. Page
404

- Fig. 1. Abactinal aspect ; magnified 2 diameters.
- Fig. 2. Actinal aspect ; magnified 2 diameters.
- Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified
12 diameters.
- Fig. 4. A portion of the abactinal surface ; magnified 12 diameters.

Figs. 5-8. *NARCISSIA TRIGONARIA*, n. sp. 414

- Fig. 5. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.
- Fig. 6. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.
- Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified
12 diameters.
- Fig. 8. A portion of the abactinal surface ; magnified 10 diameters.



1-4. OPHIDIASTER TUBERIFER, n. sp. 5-8. NARCISSIA TRIGONARIA, n. sp.

PLATE LXVI.

PLATE LXVI.

Figs. 1, 2. ZOROASTER FULGENS, Wyville Thomson, . . . Page
418

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

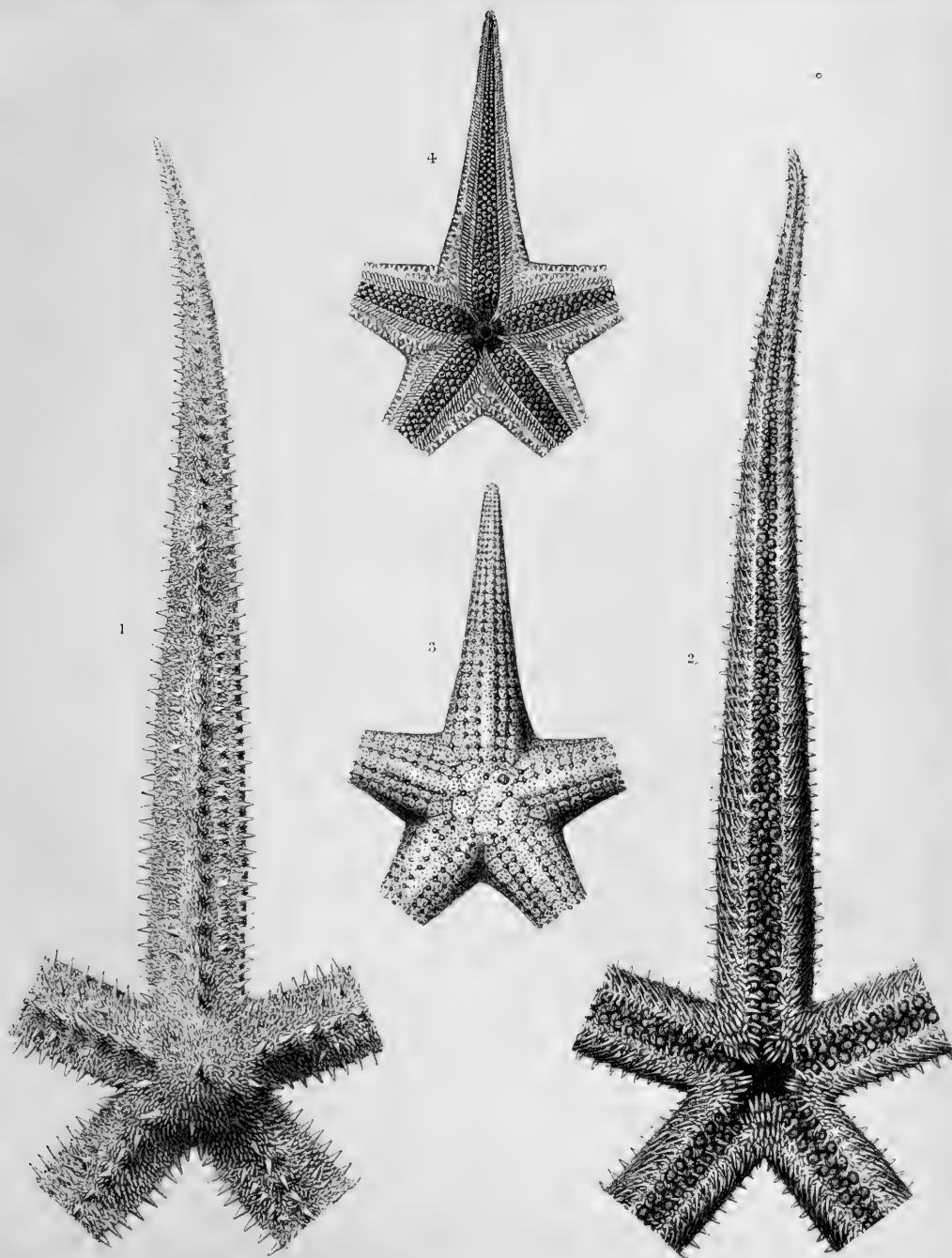
[For magnified details of this species see Pl. LXVIII. figs. 1, 2.]

Figs. 3, 4. NEOMORPHASTER EUSTICHUS, n. sp. 438

Fig. 3. Abactinal aspect; magnified 2 diameters.

Fig. 4. Actinal aspect; magnified 2 diameters.

[For magnified details of this species see Pl. LXVIII. figs. 9, 10.]



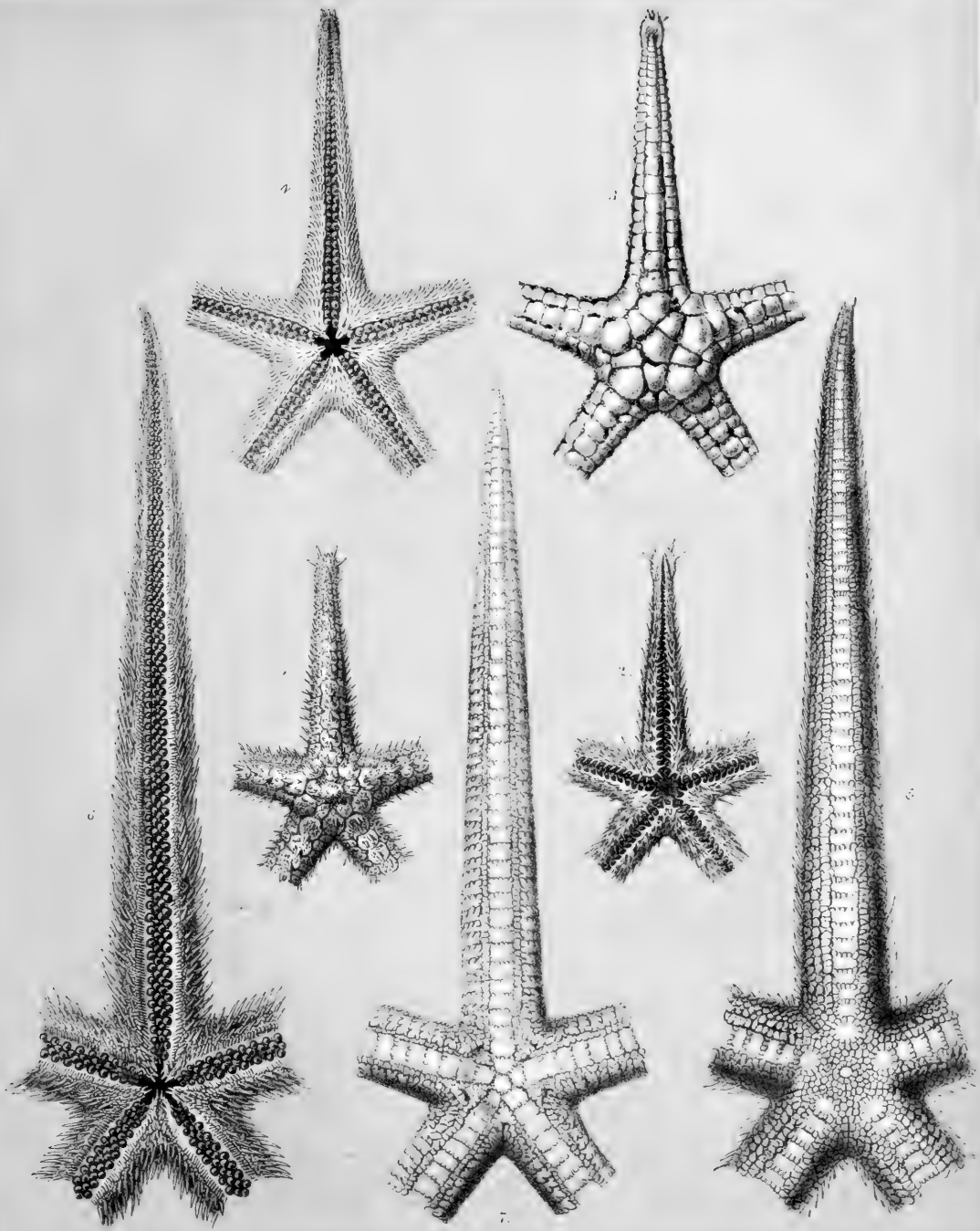
1-2. ZOROASTER FULGENS, Wyville Thomson.

3-4. NEOMORPHASTER EUSTICHUS, n.sp.

PLATE LXVII.

PLATE LXVII.

	Page
Figs. 1, 2. <i>ZOROASTER TENUIS</i> , n. sp.	421
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. LXVIII. figs. 7, 8.]	
Figs. 3, 4. <i>CNEMIDASTER WYVILLII</i> , n. sp.	424
Fig. 3. Abactinal aspect ; magnified 3 diameters.	
Fig. 4. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. LXVIII. figs. 3, 4.]	
Figs. 5, 6. <i>PHOLIDASTER SQUAMATUS</i> , n. sp.	427
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LXVIII. figs. 5, 6.]	
Fig. 7. <i>PHOLIDASTER DISTINCTUS</i> , n. sp.	429
Fig. 7. Abactinal aspect ; magnified 2 diameters.	



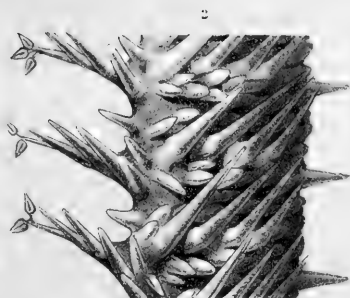
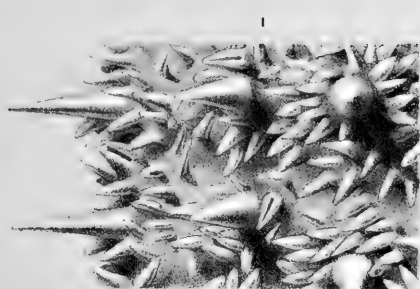
1-2. ZOROASTER TENUIS, n.sp
 5-6. PHOLIDASTER SQUAMATUS, n.sp

3-4. CNEMIDASTER WYVILLII, n.sp
 7. PHOLIDASTER DISTINCTUS, n.sp

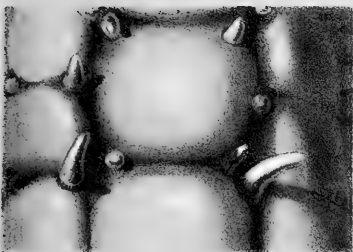
PLATE LXVIII.

PLATE LXVIII.

	Page
Figs. 1, 2. <i>ZOROASTER FULGENS</i> , Wyville Thomson,	418
Fig. 1. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. LXVI. figs. 1, 2.]	
Figs. 3, 4. <i>CNEMIDASTER WYVILLII</i> , n. sp.	424
Fig. 3. A portion of the abactinal surface ; magnified 18 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 25 diameters.	
[For macroscopic figures of this species see Pl. LXVII. figs. 3, 4.]	
Figs. 5, 6. <i>PHOLIDASTER SQUAMATUS</i> , n. sp.	427
Fig. 5. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. LXVII. figs. 5, 6.]	
Figs. 7, 8. <i>ZOROASTER TENUIS</i> , n. sp.	421
Fig. 7. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified.	
[For macroscopic figures of this species see Pl. LXVII. figs. 1, 2.]	
Figs. 9, 10. <i>NEOMORPHASTER EUSTICHUS</i> , n. sp.	438
Fig. 9. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 24 diameters.	
[For macroscopic figures of this species see Pl. LXVI. figs. 3, 4.]	



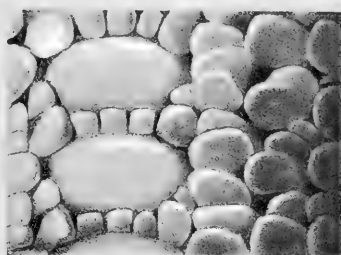
3



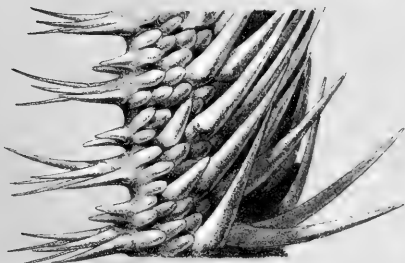
4



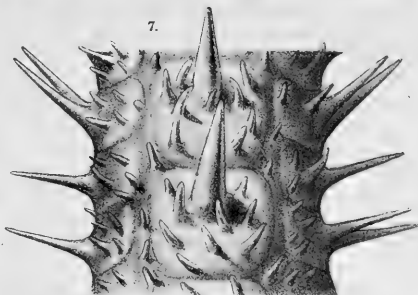
5



6



7



8



9



10

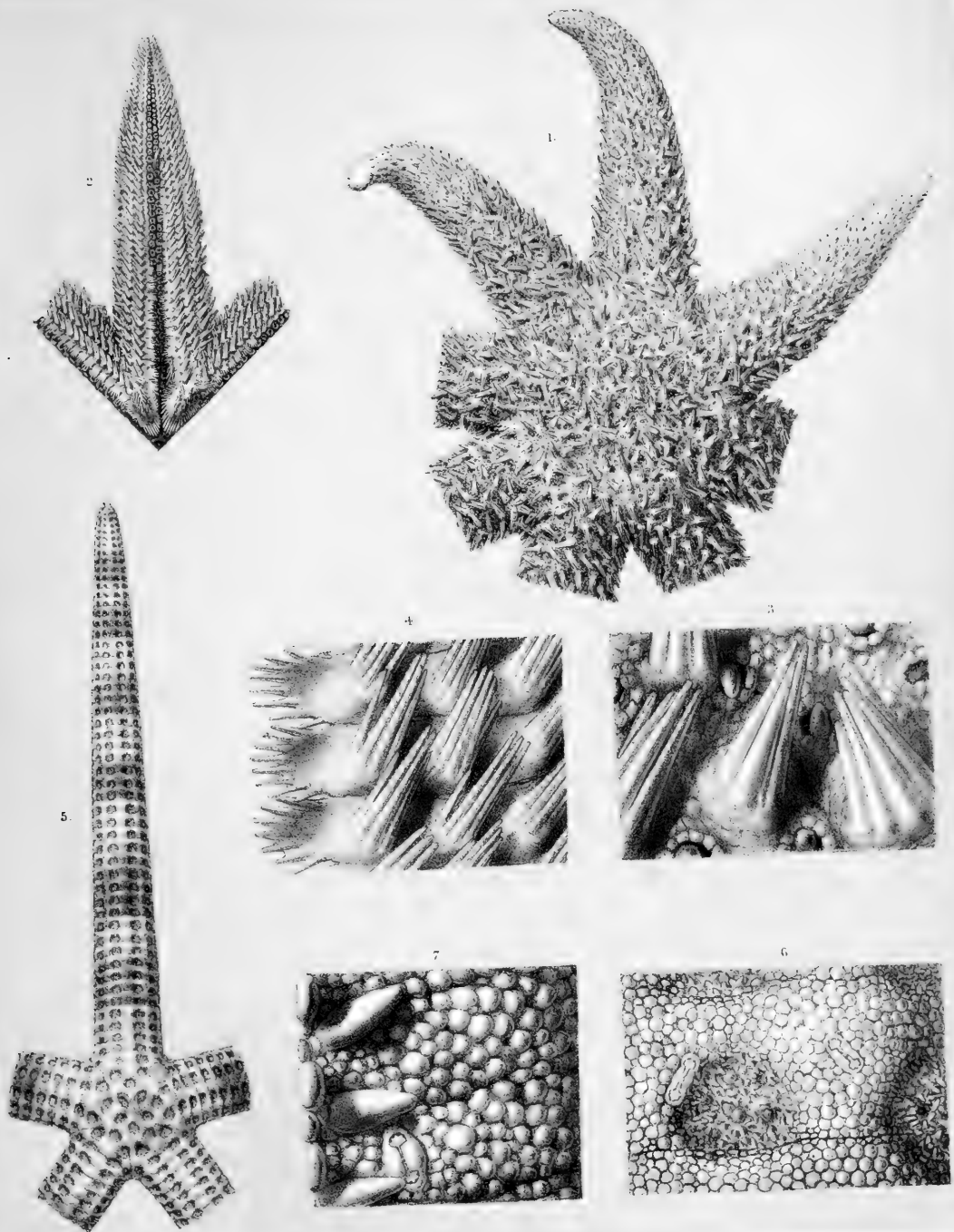


1-2. ZOROASTER FULGENS, Wyville Thomson. 3-4. CNEMIDASTER WYVILLII, n.sp.
5-6. PHOLIDASTER SQUAMATUS, n.sp. 7-8. ZOROASTER TENUIS, n.sp.
9-10. NEOMORPHASTER EUSTICHUS, n.sp.

PLATE LXIX.

PLATE LXIX.

	Page
Figs. 1-4. RHIPIDASTER VANNIPES, n. sp.	448
Fig. 1. Abactinal surface ; natural size.	
Fig. 2. Actinal surface ; natural size.	
Fig. 3. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
Figs. 5-7. OPHIDIASTER HELICOSTICHUS, n. sp.	405
Fig. 5. Abactinal aspect ; natural size.	
Fig. 6. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	



Meisner, Brusa 1917.

F. H. Michael del. et lith.

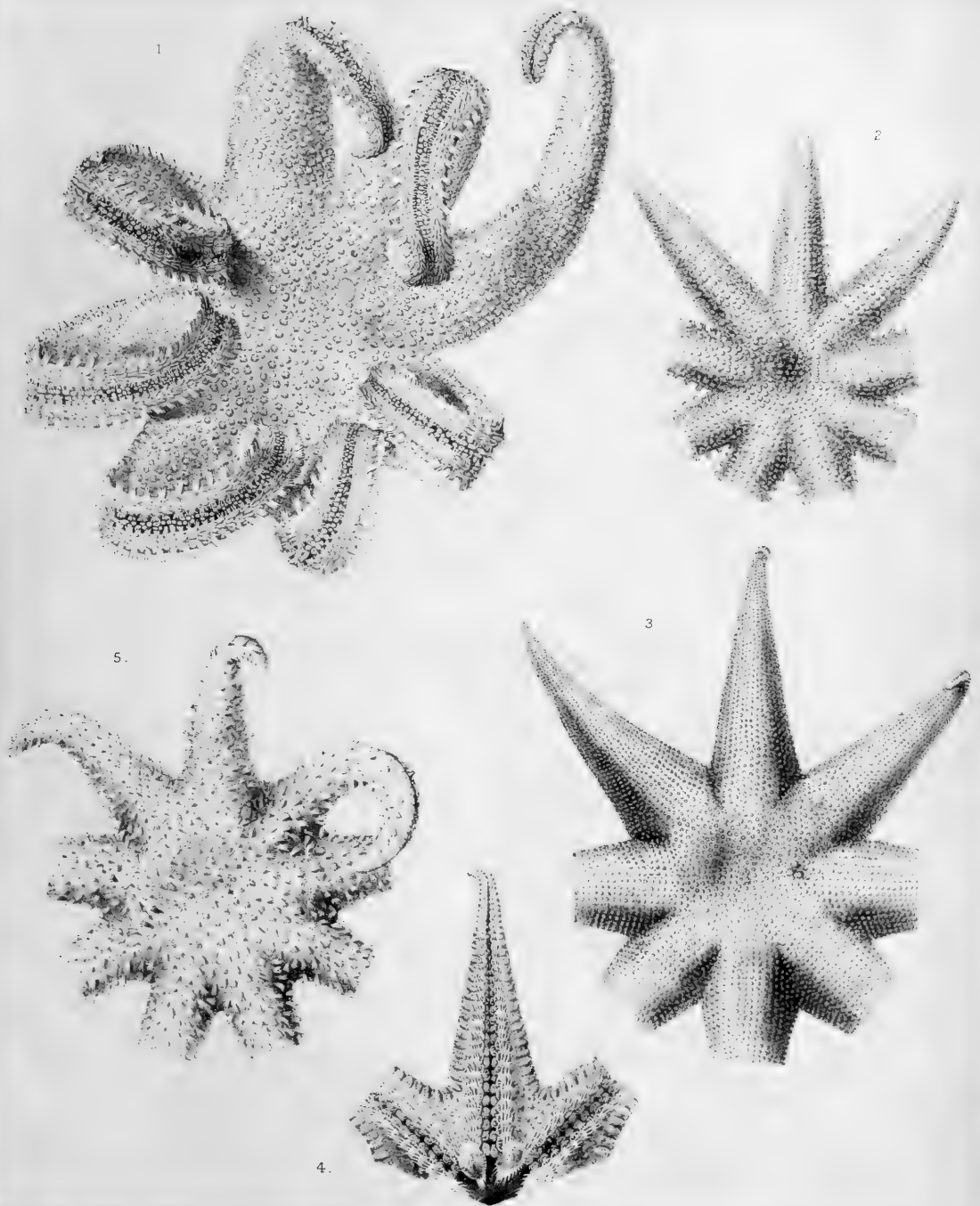
1-4. RHIPIDASTER VANNIPES, n. sp.

5-7. OPHIDIASTER HELICOSTICHUS, n. sp.

PLATE LXX.

PLATE LXX.

	Page
Fig. 1. SOLASTER REGULARIS, n. sp.	454
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXXII. figs. 5, 6.]	
Fig. 2. SOLASTER SUBARCUATUS, n. sp.	455
Fig. 2. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXXII. figs. 7, 8.]	
Figs. 3, 4. SOLASTER TORULATUS, n. sp.	457
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXXII. figs. 3, 4.]	
Fig. 5. CROSSASTER PENICILLATUS, n. sp.	446
Fig. 5. Abactinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. LXXII. figs. 9, 10.]	



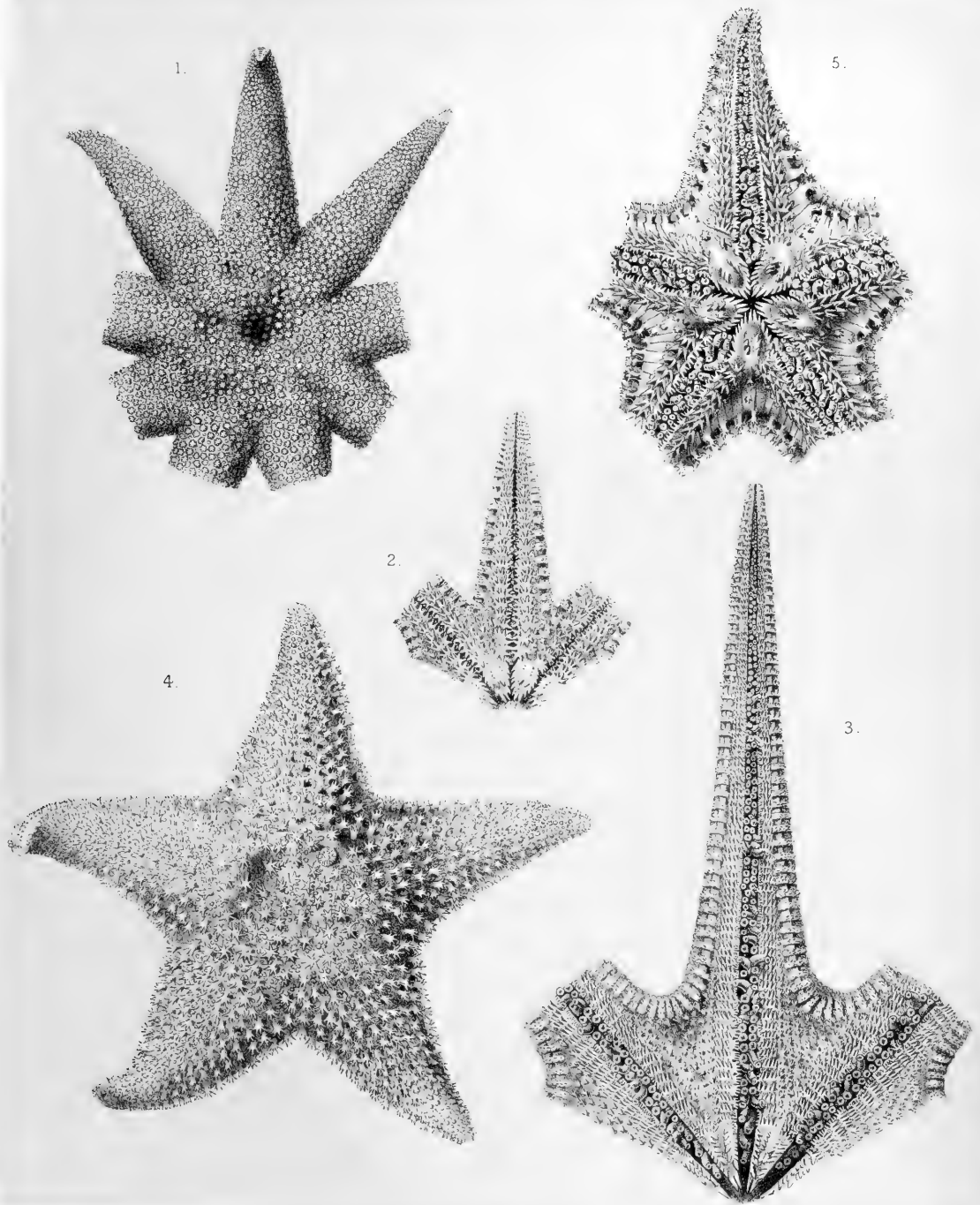
1. SOLASTER REGULARIS, n. sp.
3-4. SOLASTER TORULATUS, n. sp.

2. SOLASTER SUBARCUATUS, n. sp.
5. CROSSASTER PENICILLATUS, n. sp.

PLATE LXXI.

PLATE LXXI.

	Page
Figs. 1-3. SOLASTER PAXILLATUS, n. sp.	452
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
Fig. 3. Actinal aspect of a large example ; natural size.	
[For magnified details of this species see Pl. LXXII. figs. 1, 2.]	
Figs. 4, 5. LOPHASTER STELLANS, n. sp.	460
Fig. 4. Abactinal aspect ; magnified 2 diameters.	
Fig. 5. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LXXII. figs. 11, 12.]	



1-3. SOLASTER PAXILLATUS, n. sp.

4-5. LOPHASTER STELLANS, n. sp.

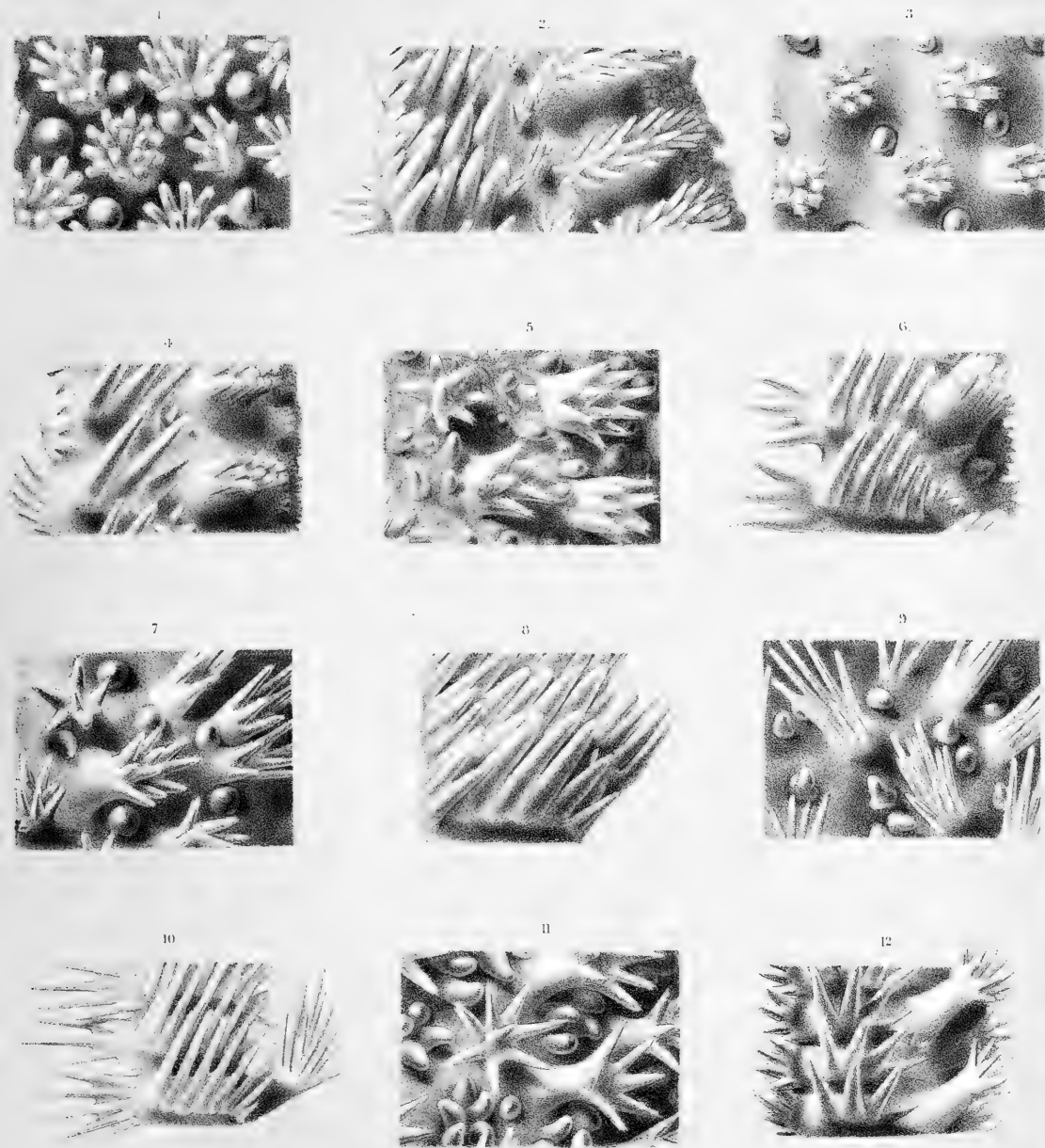
E.M. Michael del.

F. Roth, Lith. East.

PLATE LXXII.

PLATE LXXII.

	Page
Figs. 1, 2. <i>SOLASTER PAXILLATUS</i> , n. sp.	452
Fig. 1. A portion of the abactinal surface ; magnified 25 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface (from a large example) ; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. LXXI. figs. 1-3.]	
Figs. 3, 4. <i>SOLASTER TORULATUS</i> , n. sp.	457
Fig. 3. A portion of the abactinal surface ; magnified 32 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified.	
[For macroscopic figures of this species see Pl. LXX. figs. 3, 4.]	
Figs. 5, 6. <i>SOLASTER REGULARIS</i> , n. sp.	454
Fig. 5. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 9 diameters.	
[For a macroscopic figure of this species see Pl. LXX. fig. 1.]	
Figs. 7, 8. <i>SOLASTER SUBARCUATUS</i> , n. sp.	455
Fig. 7. A portion of the abactinal surface ; magnified 16 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified 13 diameters.	
[For a macroscopic figure of this species see Pl. LXX. fig. 2.]	
Figs. 9, 10. <i>CROSSASTER PENICILLATUS</i> , n. sp.	446
Fig. 9. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For a macroscopic figure of this species see Pl. LXX. fig. 5.]	
Figs. 11, 12. <i>LOPHASTER STELLANS</i> , n. sp.	460
Fig. 11. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. LXXI. figs. 4, 5.]	



H. Michael deLeth.

Modern Press, Inc.

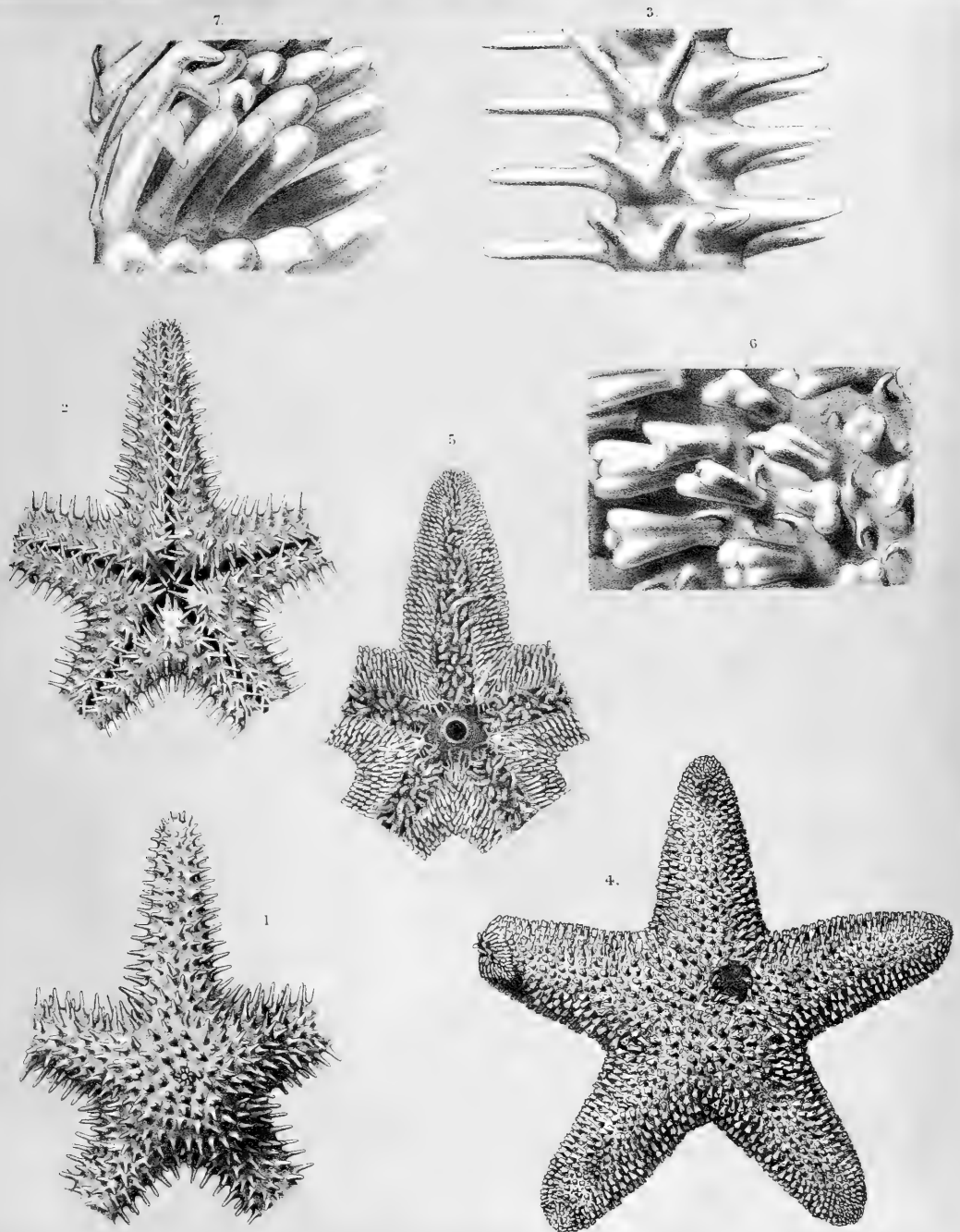
1-2. SOLASTER PAXILLATUS, n. sp.
 5-6. SOLASTER REGULARIS, n. sp.
 9-10. CROSSASTER PENICILLATUS, n. sp.

3-4. SOLASTER TORULATUS, n. sp.
 7-8. SOLASTER SUBARCUATUS, n. sp.
 11-12. LOPHASTER STELLANS, n. sp.

PLATE LXXIII.

PLATE LXXIII.

	Page
Figs. 1-3. <i>CHITONASTER CATAPHRACTUS</i> , n. sp.	283
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
Figs. 4-7. <i>PERIBOLASTER FOLLICULATUS</i> , n. sp.	465
Fig. 4. Abactinal aspect ; natural size.	
Fig. 5. Actinal aspect ; natural size.	
Fig. 6. A portion of the abactinal surface ; magnified 8 diameters.	
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	



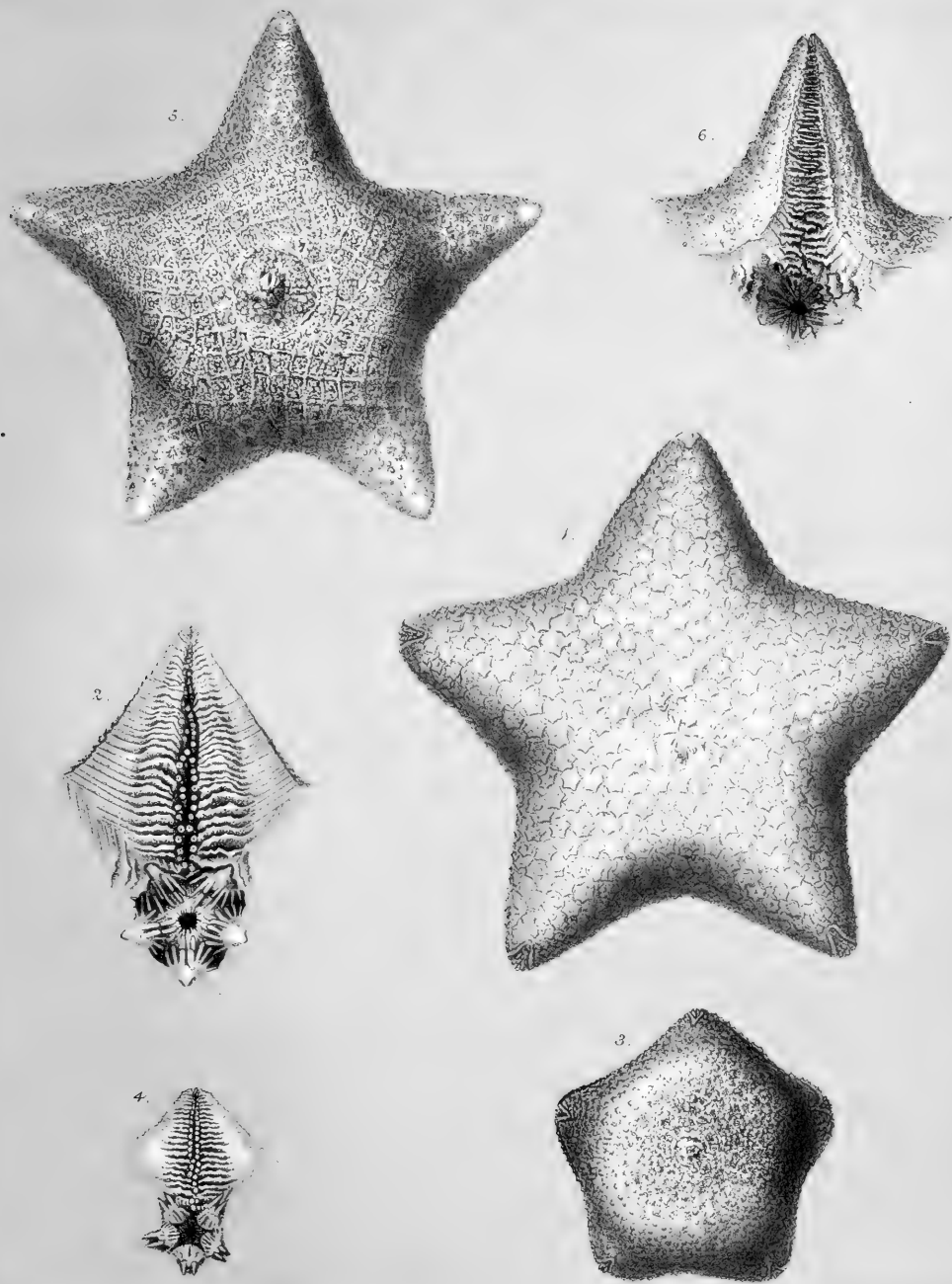
1-3. CHITONASTER CATAPHRACTUS, n. sp.

4-7. PERIBOLASTER FOLLICULATUS, n. sp.

PLATE LXXIV.

PLATE LXXIV.

	Page
Figs. 1, 2. <i>PTERASTER STELLIFER</i> , n. sp.	474
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXXVII. figs. 1, 2.]	
Figs. 3, 4. <i>PTERASTER RUGATUS</i> , n. sp.	473
Fig. 3. Abactinal aspect; magnified 3 diameters.	
Fig. 4. Actinal aspect; magnified 3 diameters.	
[For magnified details of this species see Pl. LXXVII. figs. 3, 4.]	
Figs. 5, 6. <i>RETASTER GIBBER</i> , n. sp.	481
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. LXXVII. figs. 7, 8.]	



1-2. PTERASTER STELLIFER, n. sp. 3-4. PTERASTER RUGATUS, n. sp.
5-6. RETASTER GIBBER, n. sp.

F.H. McLeod del. H. Stöckel lith.

Hanhart imp.

PLATE LXXV.

PLATE LXXV.

	Page
Figs. 1-4. <i>RETASTER PEREGRINATOR</i> , n. sp.	479
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
Fig. 3. A portion of the supradorsal membrane; magnified 10 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified 5 diameters.	
Figs. 5, 6. <i>PTERASTER SEMIRETICULATUS</i> , n. sp.	475
Fig. 5. Abactinal aspect; magnified 3 diameters.	
Fig. 6. Actinal aspect; magnified 3 diameters.	

[For magnified details of this species see Pl. LXXVII. figs. 5, 6.]

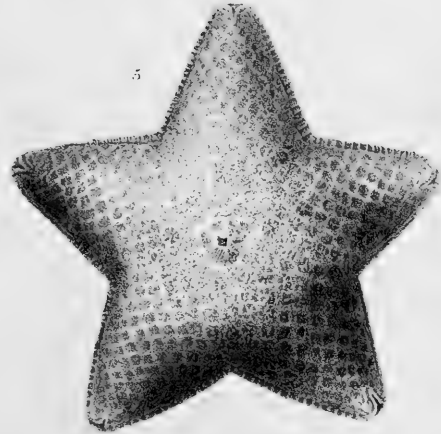
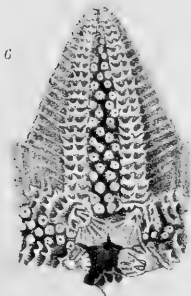
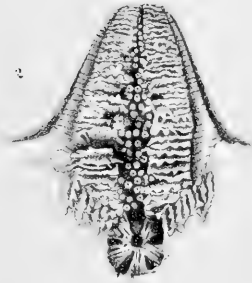
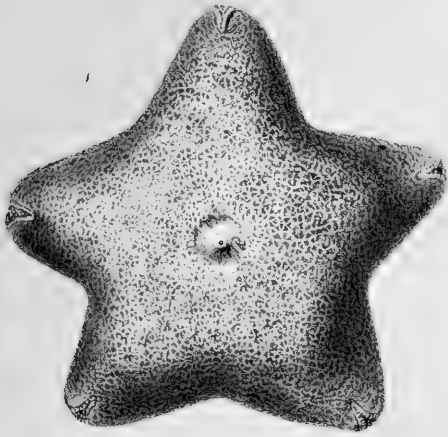


PLATE LXXVI.

PLATE LXXVI.

	Page
Figs. 1, 2. <i>RETASTER VERRUCOSUS</i> , n. sp.	478

Fig. 1. Abactinal aspect ; natural size.

Fig. 2. Actinal aspect ; natural size.

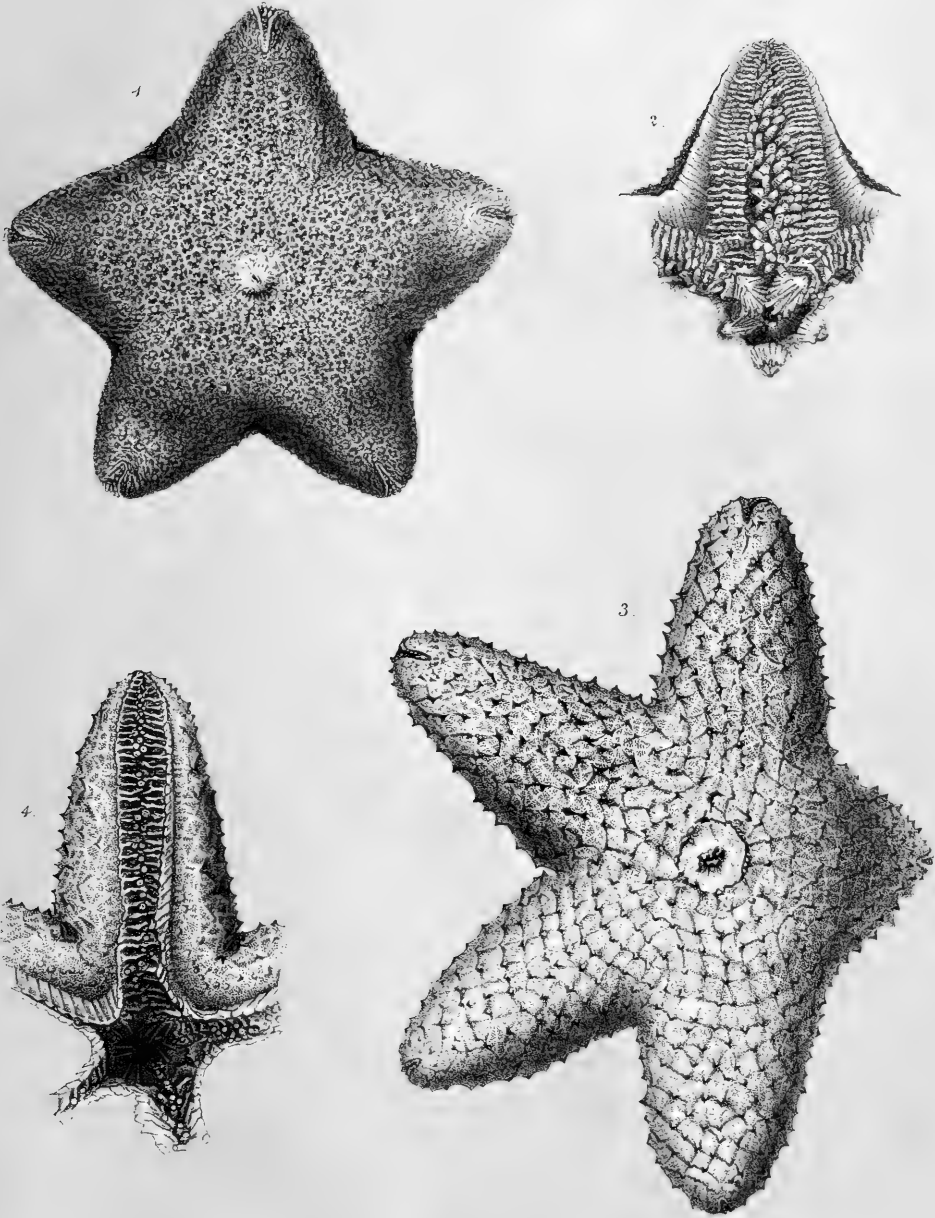
[For magnified details of this species see Pl. LXXVII. figs. 9, 10.]

Figs. 3, 4. <i>RETASTER INSIGNIS</i> , n. sp.	482
---	-----

Fig. 3. Abactinal aspect ; natural size.

Fig. 4. Actinal aspect ; natural size.

[For magnified details of this species see Pl. LXXVII. figs. 11, 12.]



1-2. RETASTER VERRUCOSUS, n. sp.

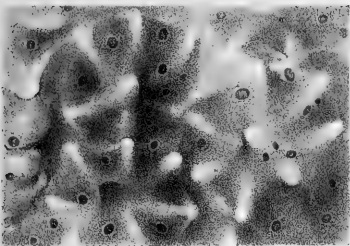
3-4. RETASTER INSIGNIS, n. sp.

PLATE LXXVII.

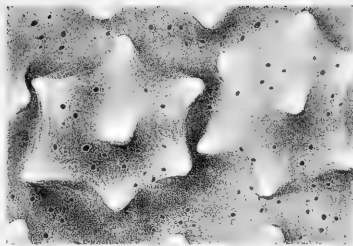
PLATE LXXVII.

	Page
Figs. 1, 2. <i>PTERASTER STELIFER</i> , n. sp.	474
Fig. 1. A portion of the supradorsal membrane ; magnified 10 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface ; magnified 6 diameters.	
[For macroscopic figures of this species see Pl. LXXIV. figs. 1, 2.]	
Figs. 3, 4. <i>PTERASTER RUGATUS</i> , n. sp.	473
Fig. 3. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 12 diameters.	
[For macroscopic figures of this species see Pl. LXXIV. figs. 3, 4.]	
Figs. 5, 6. <i>PTERASTER SEMIRETICULATUS</i> , n. sp.	475
Fig. 5. A portion of the supradorsal membrane ; magnified 20 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 14 diameters.	
[For macroscopic figures of this species see Pl. LXXV. figs. 5, 6.]	
Figs. 7, 8. <i>RETASTER GIBBER</i> , n. sp.	481
Fig. 7. A portion of the supradorsal membrane ; magnified 12 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. LXXIV. figs. 5, 6.]	
Figs. 9, 10. <i>RETASTER VERRUCOSUS</i> , n. sp.	478
Fig. 9. A portion of the supradorsal membrane ; magnified 10 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 5 diameters.	
[For macroscopic figures of this species see Pl. LXXVI. figs. 1, 2.]	
Figs. 11, 12. <i>RETASTER INSIGNIS</i> , n. sp.	482
Fig. 11. A portion of the supradorsal membrane ; magnified 5 diameters.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. LXXVI. figs. 3, 4.]	

5.



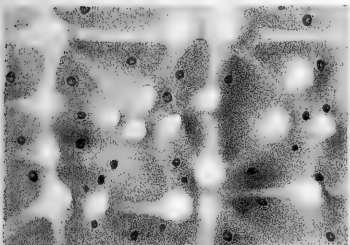
1.



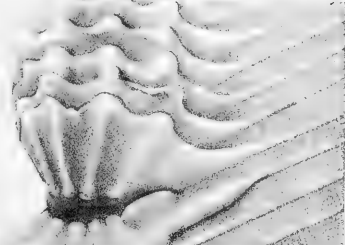
6.



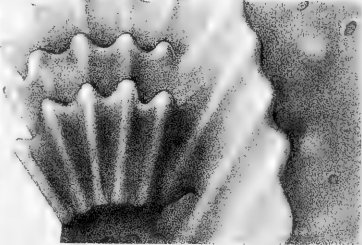
7.



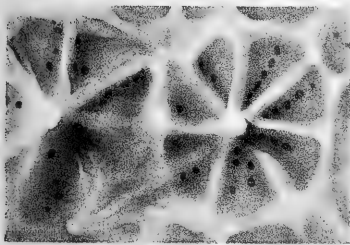
2.



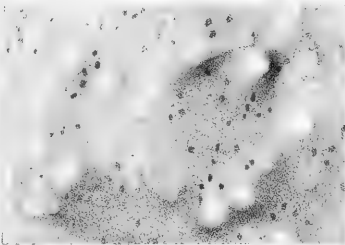
8.



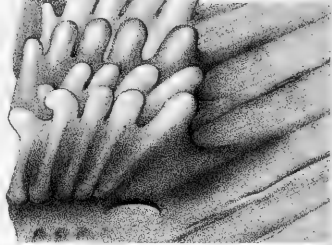
9.



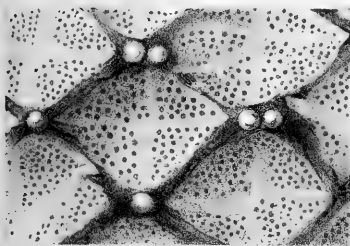
3.



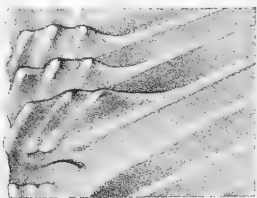
10.



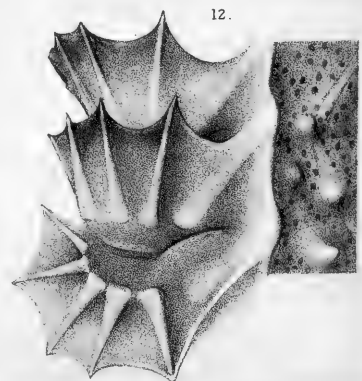
11.



4.



12.



F.H. Michael del.

F. H. H. 1-107. Edin.

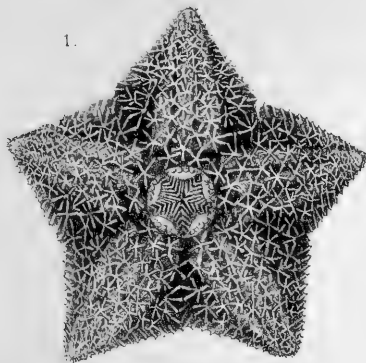
1-2. PTERASTER STELLIFER, n. sp. 3-4. PTERASTER RUGATUS, n. sp. 5-6. PTERASTER SEMIRETICULATUS, n. sp.
7-8. RETASTER GIBBER, n. sp. 9-10. RETASTER VERRUCOSUS, n. sp. 11-12. RETASTER INSIGNIS, n. sp.

PLATE LXXVIII.

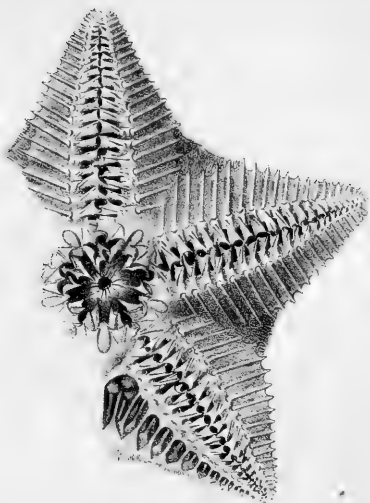
PLATE LXXVIII.

	Page
Figs. 1, 2. <i>CALYPTRASTER COA</i> , n. sp.	489
Fig. 1. Abactinal aspect ; magnified 3 diameters.	
Fig. 2. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. LXXIX. figs. 1-3.]	
Figs. 3, 4. <i>MARSIPASTER HIRSUTUS</i> , n. sp.	487
Fig. 3. Abactinal aspect ; magnified 2 diameters.	
Fig. 4. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. LXXIX. figs. 4-6.]	
Figs. 5, 6. <i>MARSIPASTER SPINOSISSIMUS</i> , n. sp.	485
Fig. 5. Abactinal aspect ; magnified 3 diameters.	
Fig. 6. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. LXXIX. figs. 7-9.]	

1.



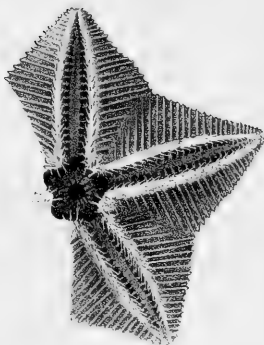
6.



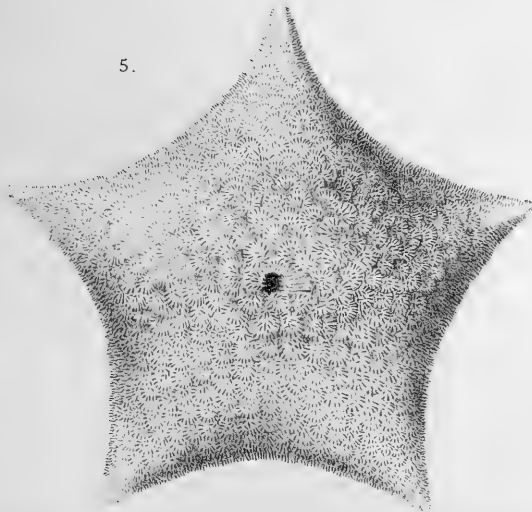
4.



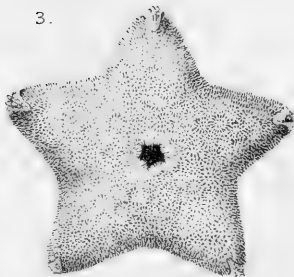
2.



5.



3.



1-2. CALYPTRASTER COA, n. sp. 3-4. MARSIPASTER HIRSUTUS, n. sp.
5-6. MARSIPASTER SPINOSISSIMUS, n. sp.

PLATE LXXIX.

PLATE LXXIX.

Figs. 1-3. CALYPTRASTER COA, n. sp. Page
489

Fig. 1. A portion of the supradorsal membrane ; magnified 20 diameters.

Fig. 2. Mouth-plates ; magnified.

Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified
20 diameters.

[For macroscopic figures of this species see Pl. LXXVIII. figs. 1, 2.]

Figs. 4-6. MARSIPASTER HIRSUTUS, n. sp. 487

Fig. 4. A portion of the supradorsal membrane ; magnified 20 diameters.

Fig. 5. Mouth-plates ; magnified.

Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified
10 diameters.

[For macroscopic figures of this species see Pl. LXXVIII. figs. 3, 4.]

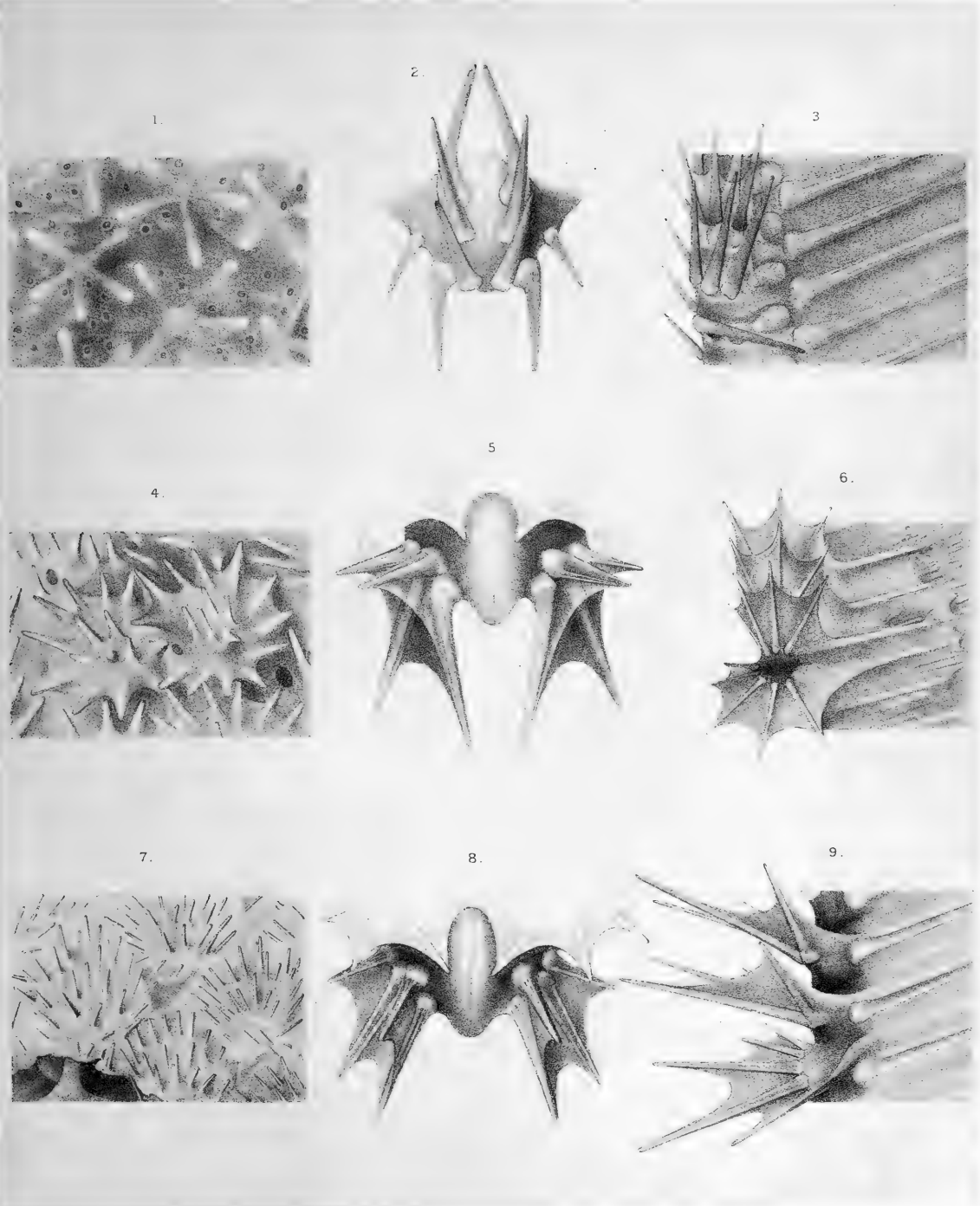
Figs. 7-9. MARSIPASTER SPINOSISSIMUS, n. sp. 485

Fig. 7. A portion of the supradorsal membrane ; magnified 20 diameters.

Fig. 8. Mouth-plates ; magnified.

Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified
15 diameters.

[For macroscopic figures of this species see Pl. LXXVIII. figs. 5, 6.]



F.H. Michael del.

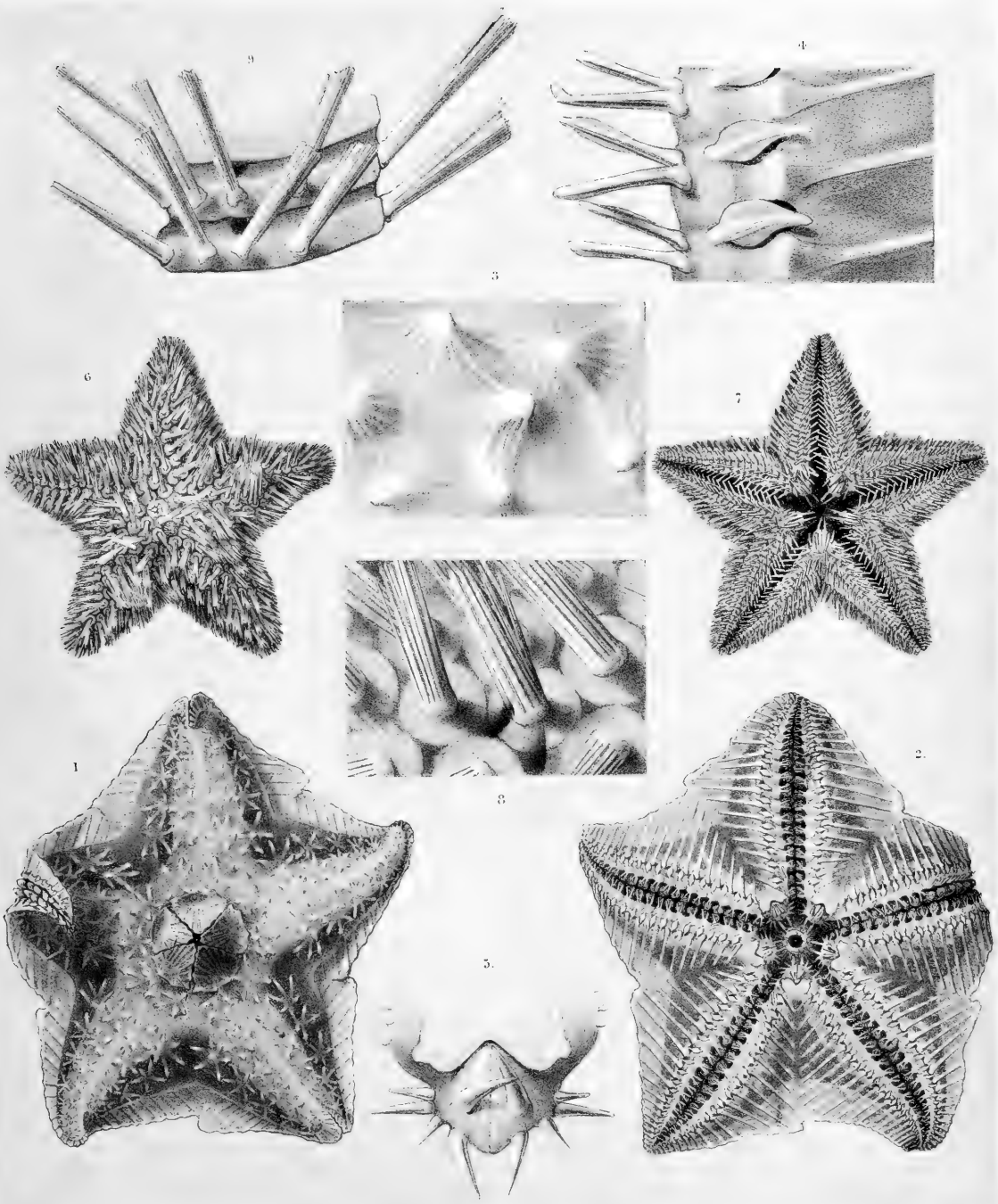
F. Birk. Lith. E. 24. 2

1-3. CALYPTRASTER COA, n sp. 4-6. MARSIPASTER HIRSUTUS, n sp.
 7-9. MARSIPASTER SPINOSISSIMUS, n sp.

PLATE LXXX.

PLATE LXXX.

- | | Page |
|--|------|
| Figs. 1-5. <i>HYMENASTER PELLUCIDUS</i> , Wyville Thomson, . . . | 508 |
| Fig. 1. Abactinal aspect; magnified 3 diameters. | |
| Fig. 2. Actinal aspect; magnified 3 diameters. | |
| Fig. 3. A portion of the supradorsal membrane; magnified 20 diameters. | |
| Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified 18 diameters. | |
| Fig. 5. Mouth-plates; magnified. | |
| Figs. 6-9. <i>KORETHRASTER HISPIDUS</i> , Wyville Thomson, . . . | 464 |
| Fig. 6. Abactinal aspect; magnified 4 diameters. | |
| Fig. 7. Actinal aspect; magnified 4 diameters. | |
| Fig. 8. A portion of the abactinal surface; magnified 24 diameters. | |
| Fig. 9. Adambulacral plates and adjacent portion of the actinal surface; magnified 35 diameters. | |



1-5. HYMENASTER PELLUCIDUS, Wyville Thomson. 6-9. KORETHRASTER HISPIDUS, Wyville Thomson

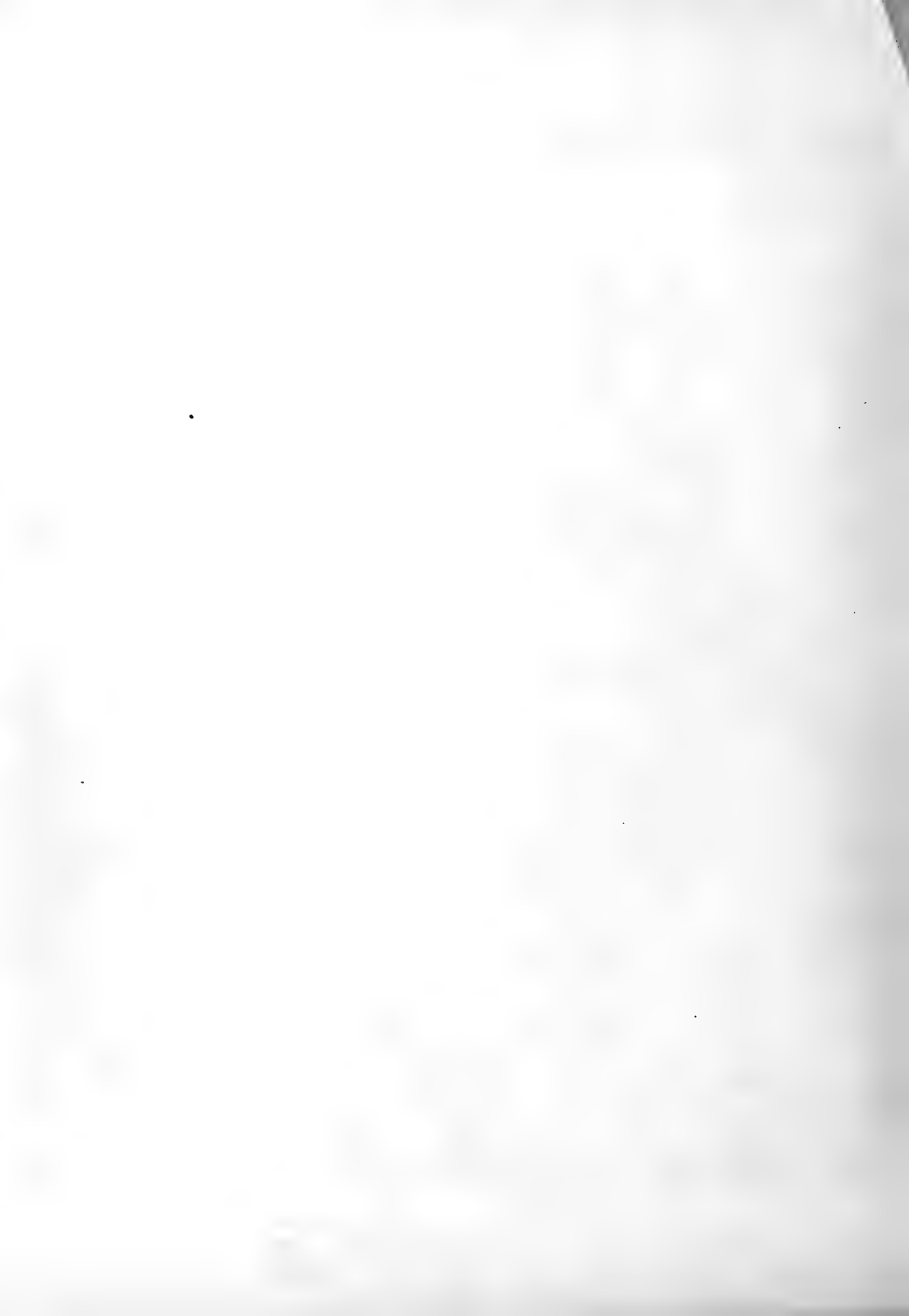


PLATE LXXXI.

PLATE LXXXI.

Figs. 1, 2. HYMENASTER PERGAMENTACEUS, n. sp.	Page 499
---	-------------

Fig. 1. Abactinal aspect; natural size.

Fig. 2. Actinal aspect; natural size.

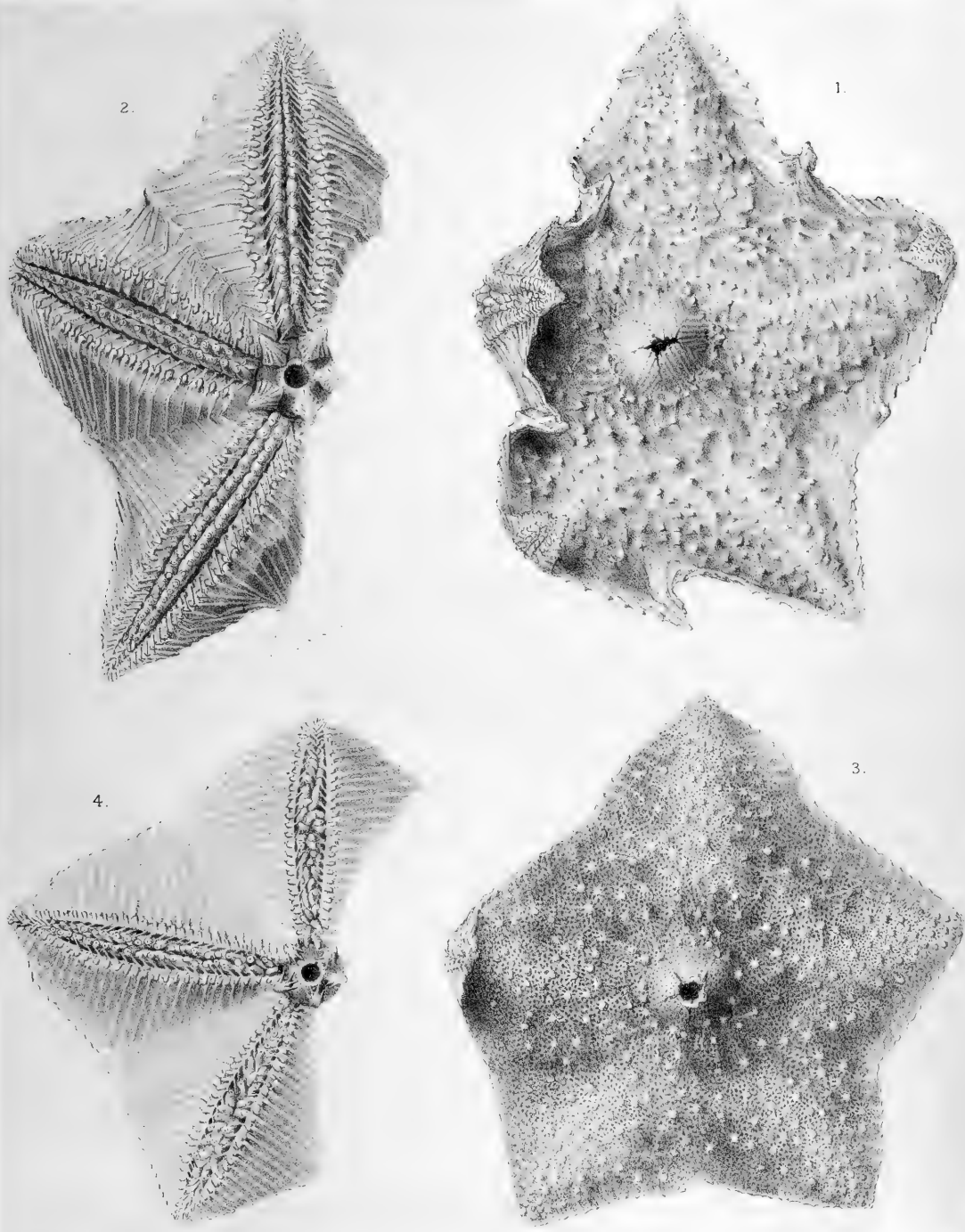
[For magnified details of this species see Pl. LXXXIII. figs. 1-3.]

Figs. 3, 4. HYMENASTER FORMOSUS, n. sp.	497
---	-----

Fig. 3. Abactinal aspect; magnified 3 diameters.

Fig. 4. Actinal aspect; magnified 3 diameters.

[For magnified details of this species see Pl. LXXXIII. figs. 4-6.]



F.H. Michael del

Phot. Lab. Edin'

1-2. HYMENASTER PERGAMENTACEUS, n. sp.

3-4. HYMENASTER FORMOSUS, n. sp.

PLATE LXXXII.

PLATE LXXXII.

Figs. 1, 2. HYMENASTER ECHINULATUS, n. sp.	Page 502
--	-------------

Fig. 1. Abactinal aspect; magnified 3 diameters.

Fig. 2. Actinal aspect; magnified 3 diameters.

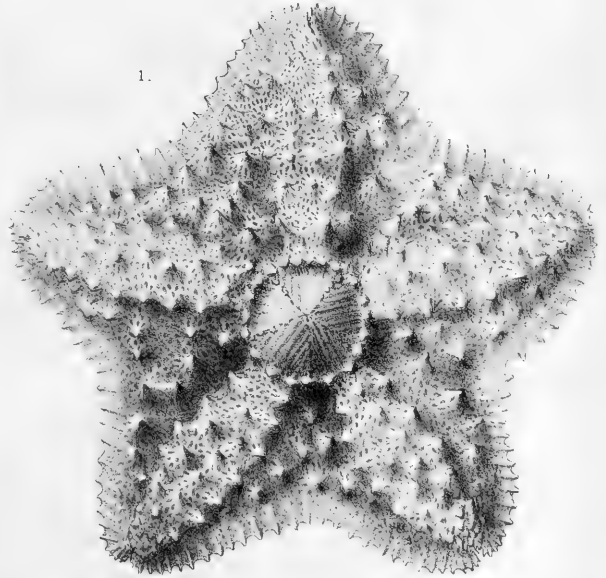
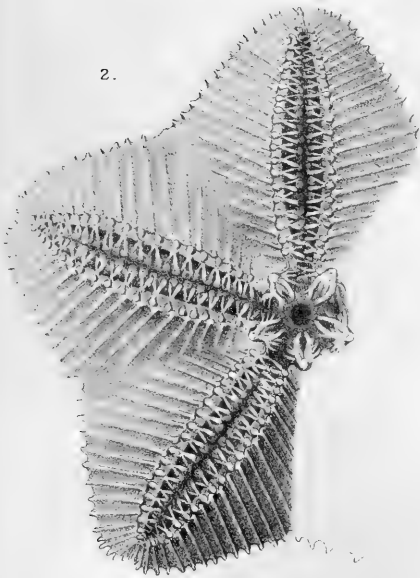
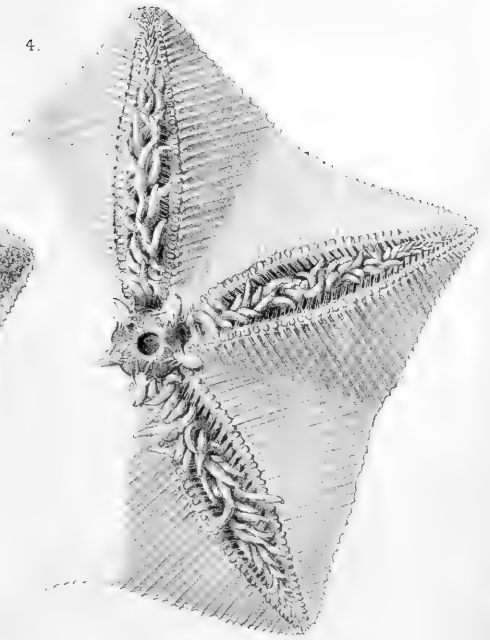
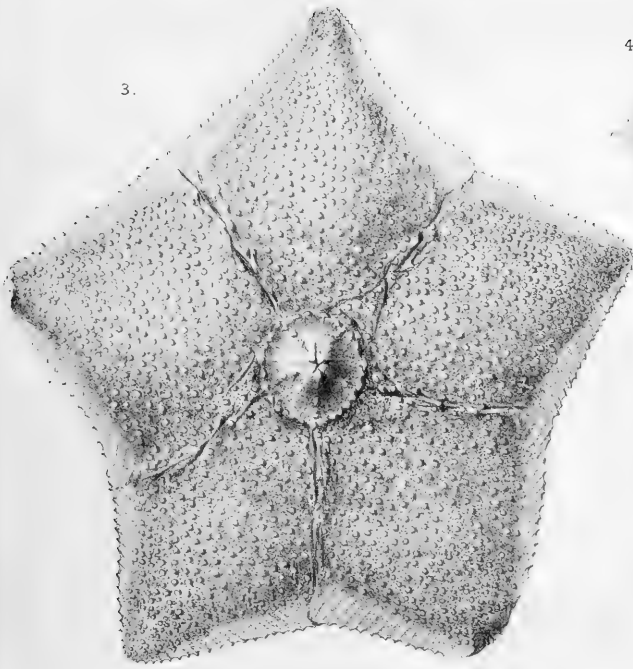
. [For magnified details of this species see Pl. LXXXIII. figs. 7-9.]

Figs. 3, 4. HYMENASTER POROSISSIMUS, n. sp.	515
---	-----

Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. LXXXIII. figs. 10-12.]



F. H. Michael del.

F. Huth, Lith. Edn.

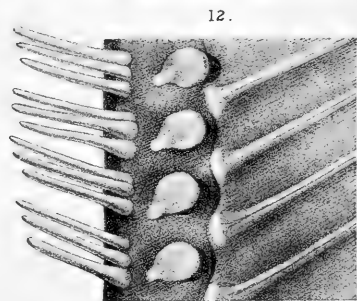
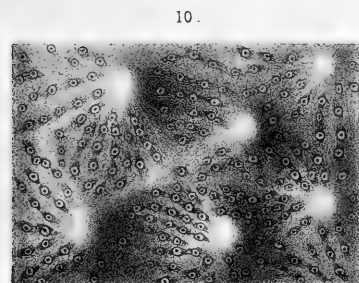
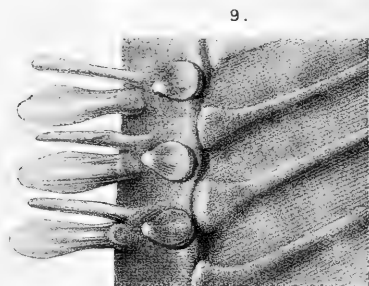
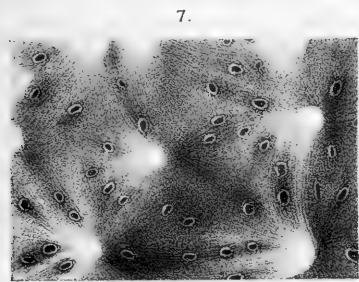
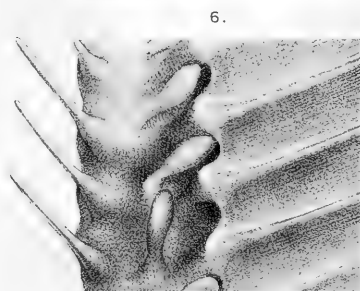
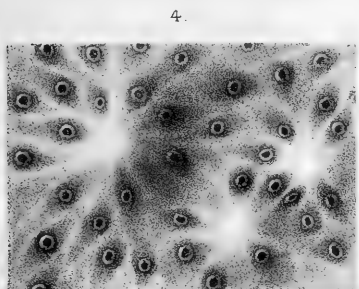
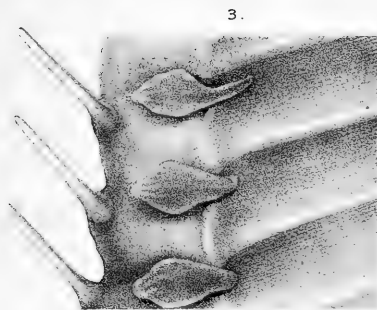
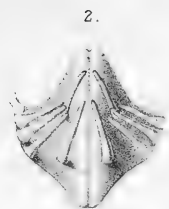
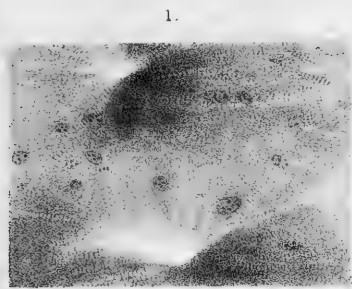
1-2. HYMENASTER ECHINULATUS, n. sp.

3-4. HYMENASTER POROSISSIMUS, n. sp.

PLATE LXXXIII.

PLATE LXXXIII.

- | | |
|--|------|
| | Page |
| Figs. 1-3. <i>HYMENASTER PERGAMENTACEUS</i> , n. sp. | 499 |
| Fig. 1. A portion of the supradorsal membrane ; magnified 10 diameters. | |
| Fig. 2. Mouth-plates ; magnified. | |
| Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified
7 diameters. | |
| [For macroscopic figures of this species see Pl. LXXXI. figs. 1, 2.] | |
| Figs. 4-6. <i>HYMENASTER FORMOSUS</i> , n. sp. | 497 |
| Fig. 4. A portion of the supradorsal membrane ; magnified 16 diameters. | |
| Fig. 5. Mouth-plates ; magnified. | |
| Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified
15 diameters. | |
| [For macroscopic figures of this species see Pl. LXXXI. figs. 3, 4.] | |
| Figs. 7-9. <i>HYMENASTER ECHINULATUS</i> , n. sp. | 502 |
| Fig. 7. A portion of the supradorsal membrane ; magnified 15 diameters. | |
| Fig. 8. Mouth-plates ; magnified. | |
| Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified
16 diameters. | |
| [For macroscopic figures of this species see Pl. LXXXII. figs. 1, 2.] | |
| Figs. 10-12. <i>HYMENASTER POROSISSIMUS</i> , n. sp. | 515 |
| Fig. 10. A portion of the supradorsal membrane ; magnified 10 diameters. | |
| Fig. 11. Mouth-plates ; magnified. | |
| Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified
8 diameters. | |
| [For macroscopic figures of this species see Pl. LXXXII. figs. 3, 4.] | |



1-3. HYMENASTER PERGAMENTACEUS, n. sp. 4-6. HYMENASTER FORMOSUS, n. sp.
7-9. HYMENASTER ECHINULATUS, n. sp. 10-12. HYMENASTER POROSISSIMUS, n. sp.

PLATE LXXXIV.

PLATE LXXXIV.

Figs. 1, 2. *HYMENASTER GLAUCUS*, n. sp. Page
505

Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. LXXXVI. figs. 4-6.]

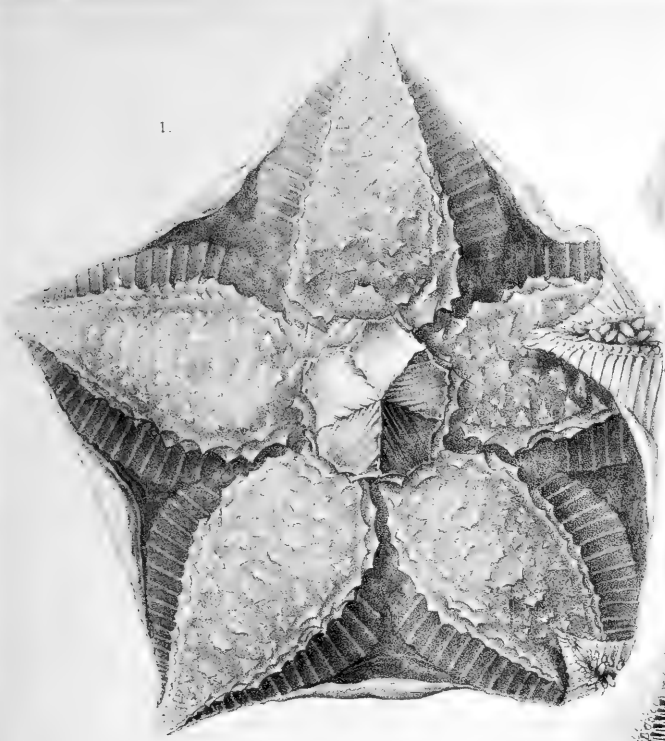
Figs. 3, 4. *HYMENASTER VICARIUS*, n. sp. 507

Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.

Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. LXXXVI. figs. 1-3.]

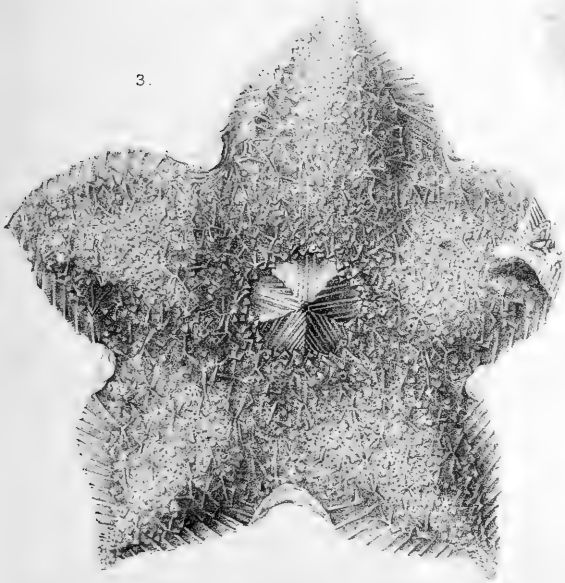
1.



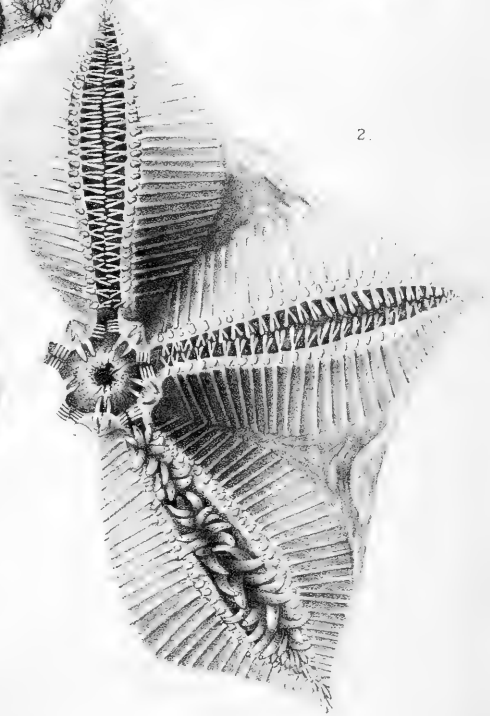
4.



3.



2.



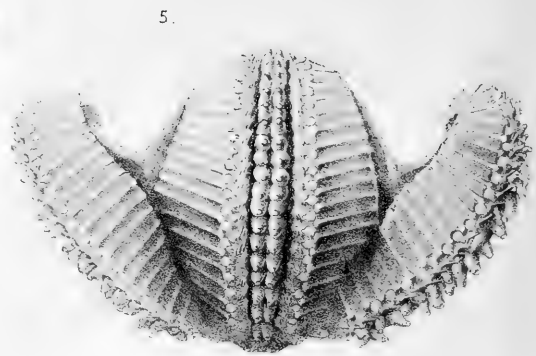
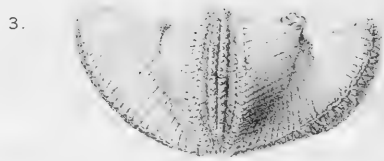
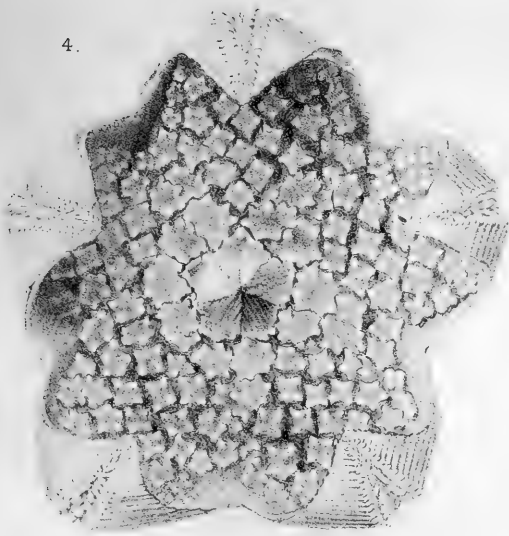
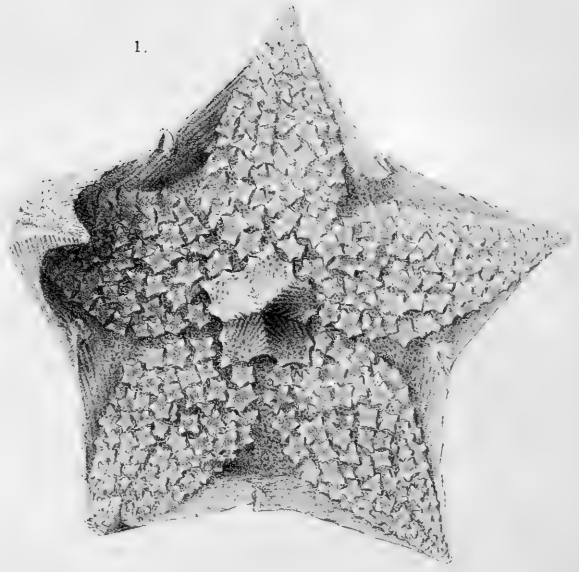
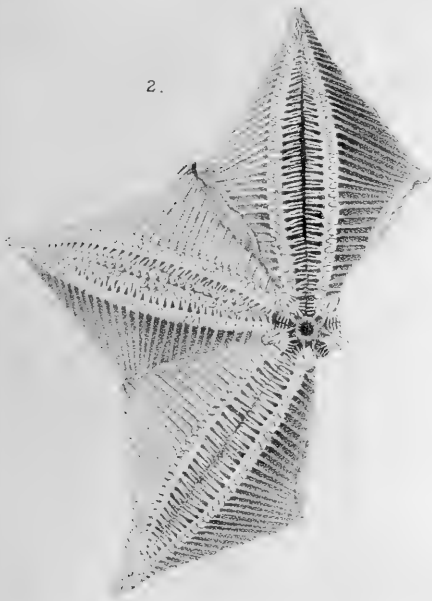
1-2. HYMENASTER GLAUCUS, n sp

3-4. HYMENASTER VICARIUS, n sp

PLATE LXXXV.

PLATE LXXXV.

	Page
Figs. 1-3. <i>HYMENASTER SACCOLATUS</i> , n. sp.	501
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 3. Profile view of a small example; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXXXVI, figs. 7-9.]	
Figs. 4, 5. <i>HYMENASTER CÆLATUS</i> , n. sp.	509
Fig. 4. Abactinal aspect; magnified 2 diameters.	
Fig. 5. Profile view of the same; magnified 2 diameters.	
[For magnified details of this species see Pl. LXXXVI, figs. 10-12.]	



H. M. S. Challenger.

F. H. S. P. E. H. S. P.

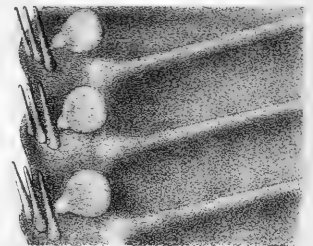
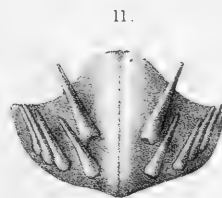
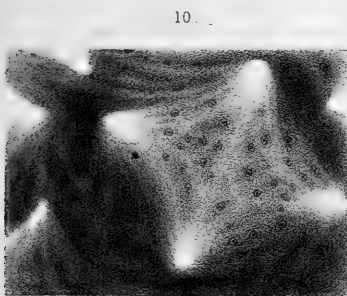
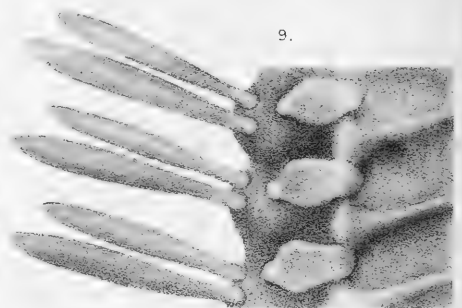
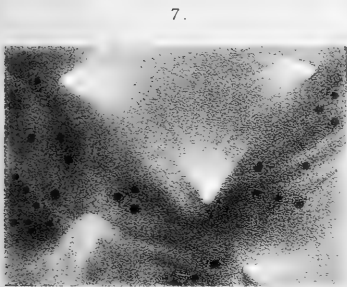
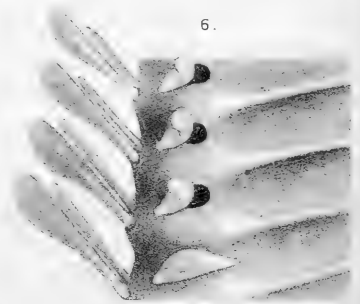
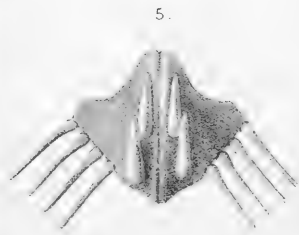
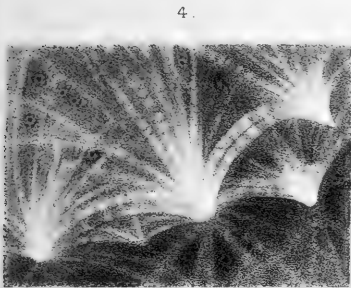
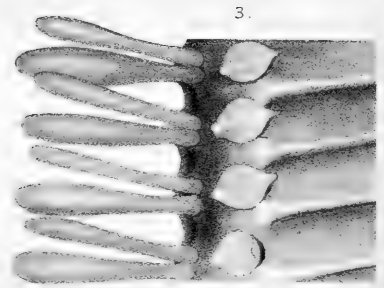
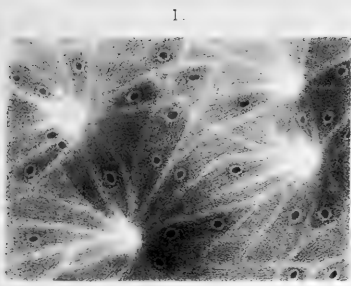
1-3. HYMENASTER SACCULATUS, n. sp.

4-5. HYMENASTER CÆLATUS, n. sp.

PLATE LXXXVI.

PLATE LXXXVI.

	Page
Figs. 1-3. <i>HYMENASTER VICARIUS</i> , n. sp.	507
Fig. 1. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 2. Mouth-plates ; magnified.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. LXXXIV. figs. 3, 4.]	
Figs. 4-6. <i>HYMENASTER GLAUCUS</i> , n. sp.	505
Fig. 4. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 5. Mouth-plates ; magnified.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. LXXXIV. figs. 1, 2.]	
Figs. 7-9. <i>HYMENASTER SACCULATUS</i> , n. sp.	501
Fig. 7. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 8. Mouth-plates ; magnified.	
Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. LXXXV. figs. 1-3.]	
Figs. 10-12. <i>HYMENASTER CÆLATUS</i> , n. sp.	509
Fig. 10. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 11. Mouth-plates ; magnified.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magni- fied 8 diameters.	
[For macroscopic figures of this species see Pl. LXXXV. figs. 4, 5.]	

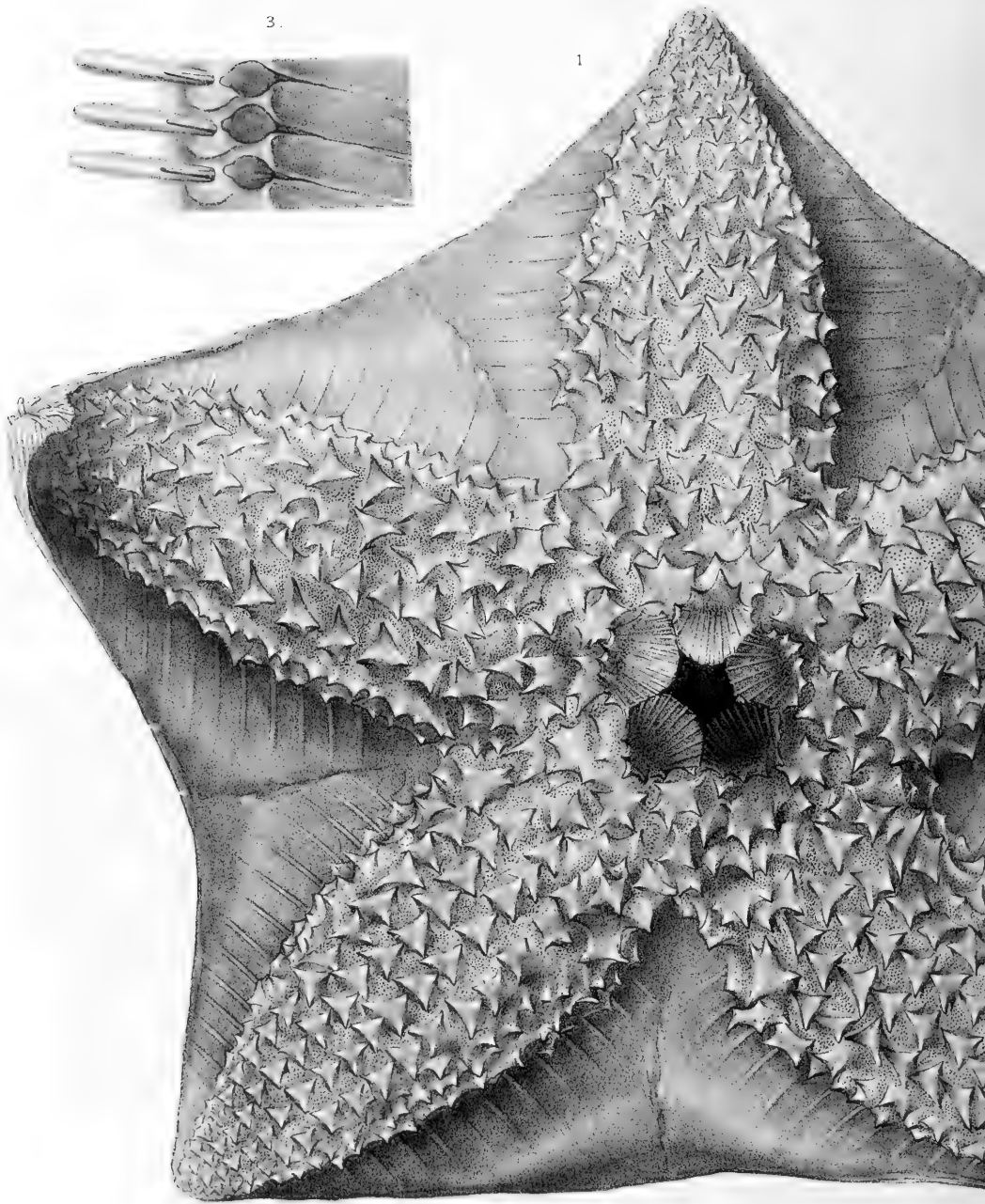


1-3. *HYMENASTER VICARIUS*, n. sp. 4-6. *HYMENASTER GLAUCUS*, n. sp. 7-9. *HYMENASTER SACCULATUS*, n. sp.
 10-12. *HYMENASTER CÆLATUS*, n. sp.

PLATE LXXXVII.

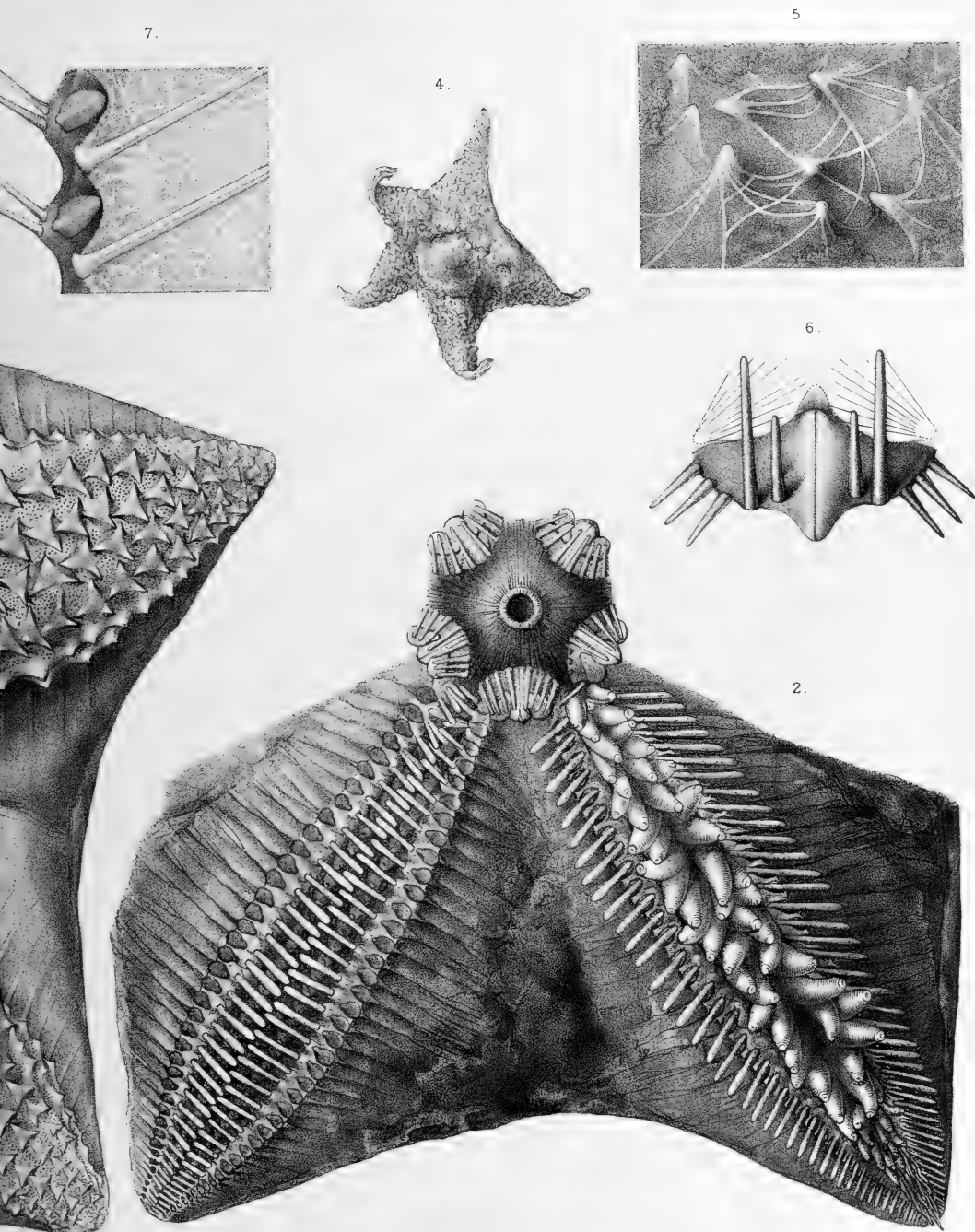
PLATE LXXXVII.

	Page
Figs. 1-3. <i>HYMENASTER NOBILIS</i> , Wyville Thomson, . . .	495
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface; magnified 3 diameters.	
Figs. 4-7. <i>HYMENASTER INFERNALIS</i> , n. sp.	508
Fig. 4. Abactinal aspect; natural size.	
Fig. 5. A portion of the supradorsal membrane; magnified 15 diameters.	
Fig. 6. Mouth-plates; magnified.	
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface; magnified 10 diameters.	

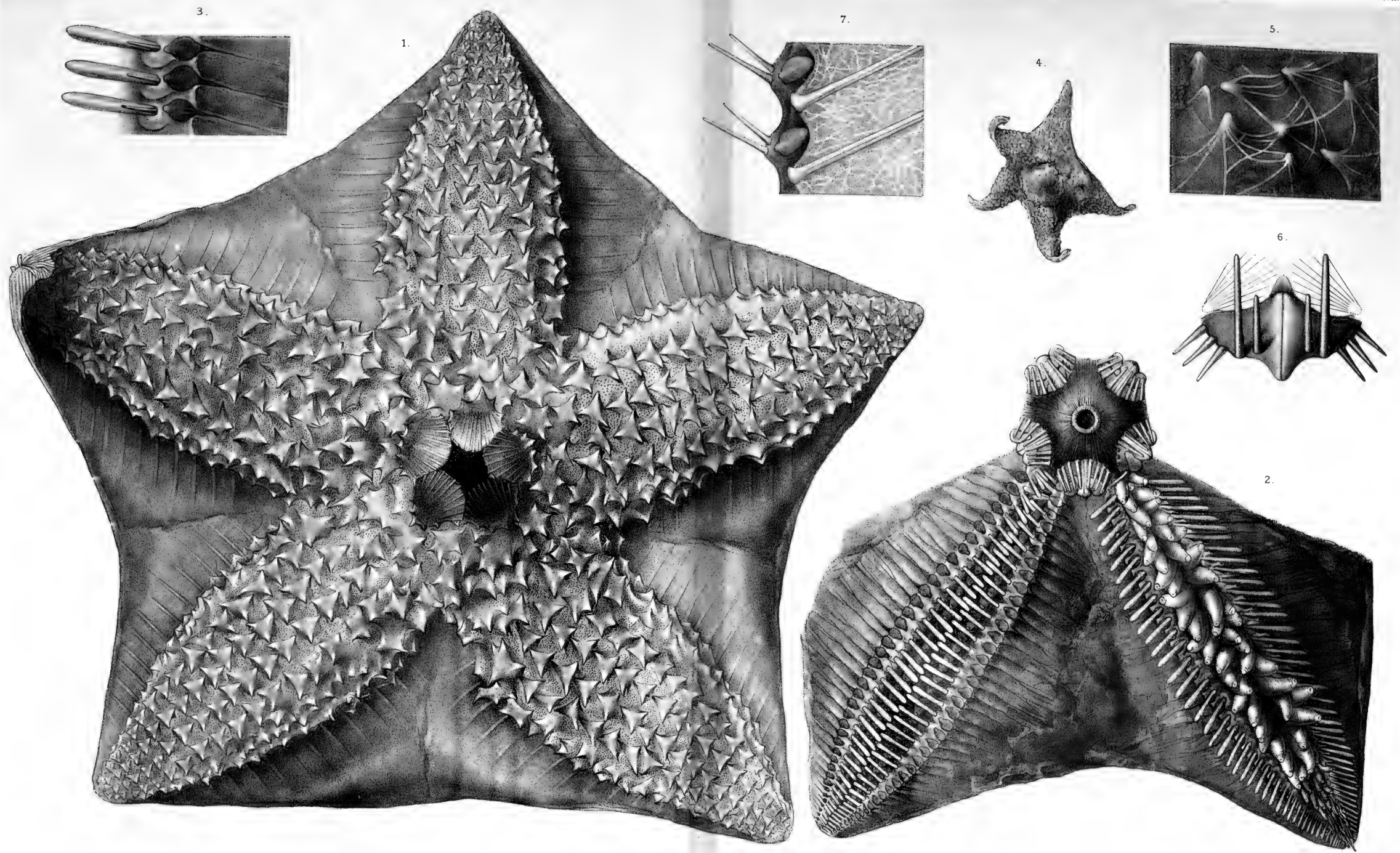


L. H. Michael del.

1-3. HYMENASTER NOBILIS, Wyville Thomson.



4-7. HYMENASTER INFERNALIS, n. sp.



1-3. HYMENASTER NOBILIS, Wyville Thomson.

4-7. HYMENASTER INFERNALIS, n. sp.

F. H. Michael del.

F. H. Michael del.



PLATE LXXXVIII.

PLATE LXXXVIII.

	Page
Figs. 1-5. HYMENASTER CARNOSUS, n. sp.	504
Fig. 1. Abactinal aspect ; natural size.	
Fig. 2. Actinal aspect ; natural size.	
Fig. 3. A portion of the supradorsal membrane ; magnified 8 diameters.	
Fig. 4. Mouth-plates ; magnified.	
Fig. 5. Adambulacral plates and adjacent portion of the actinal surface ; magnified 4 diameters.	



F. H. Michael del.

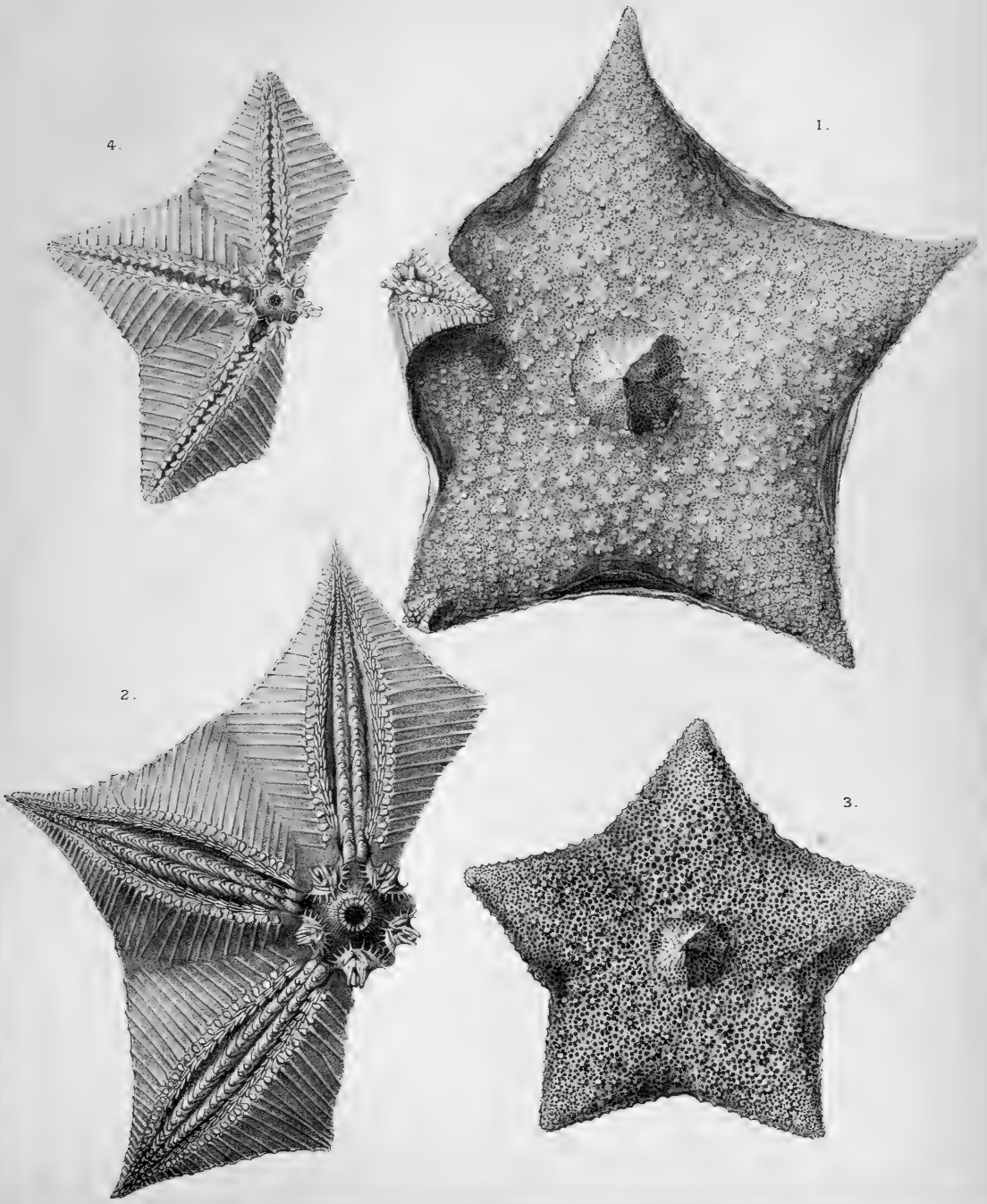
F. H. H. L. W. Edm.

HYMENASTER CARNOSUS, n. sp.

PLATE LXXXIX.

PLATE LXXXIX.

	Page
Figs. 1, 2. <i>HYMENASTER CRUCIFER</i> , n. sp.	511
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XCI. figs. 1-3.]	
Figs. 3, 4. <i>HYMENASTER ANOMALUS</i> , n. sp.	512
Fig. 3. Abactinal aspect ; magnified 3 diameters.	
Fig. 4. Actinal aspect ; magnified 3 diameters.	
[For magnified details of this species see Pl. XCI. figs. 4-6.]	



F.H. Michael del.

F. Beck, Lith. Edin.

1-2. HYMENASTER CRUCIFER, n. sp.

3-4. HYMENASTER ANOMALUS, n. sp.

PLATE XC.

PLATE XC.

Figs. 1, 2. HYMENASTER GRANIFERUS, n. sp.	Page 517
---	-------------

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. XCI. figs. 7-9.]

Figs. 3, 4. HYMENASTER COCCINATUS, n. sp.	522
---	-----

Fig. 3. Abactinal aspect; magnified 3 diameters.

Fig. 4. Actinal aspect; magnified 3 diameters.

[For magnified details of this species see Pl. XCI. figs. 10-12.]

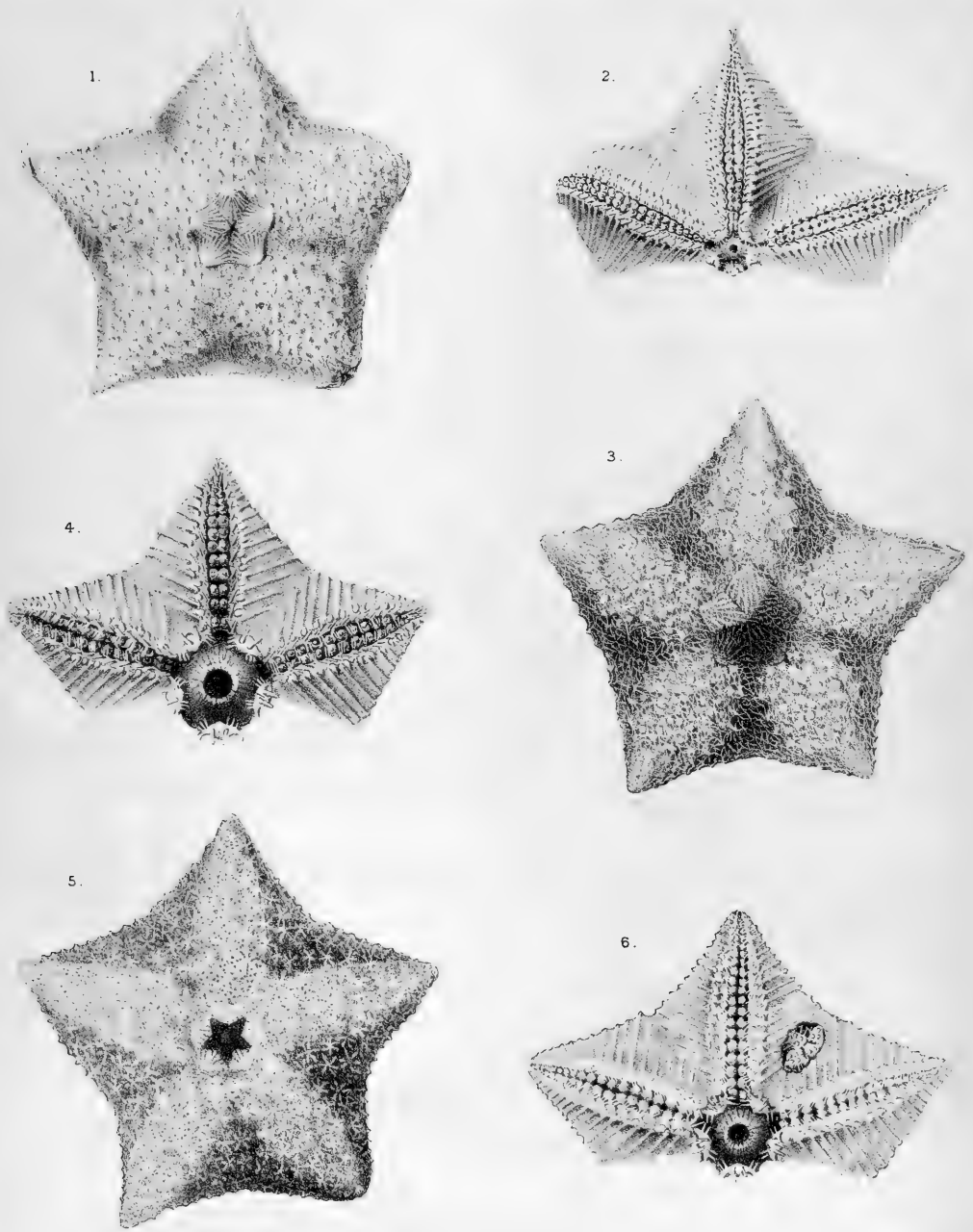
Figs. 5, 6. HYMENASTER PRÆCOQUIS, n. sp.	524
--	-----

Fig. 5. Abactinal aspect; magnified 4 diameters.

Fig. 6. Actinal aspect; magnified 4 diameters.

(The young contained in the nidamental cavity may be seen through the membrane, and are exposed at the rent in one of the interradianal areas.)

[For magnified details of this species see Pl. XCI. figs. 13-15.]



F.H. Michael del.

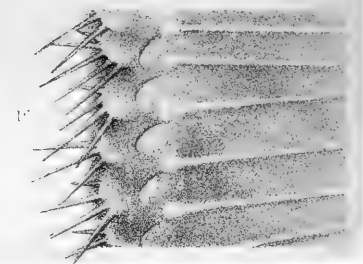
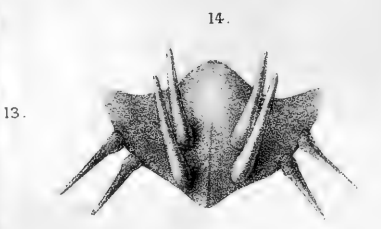
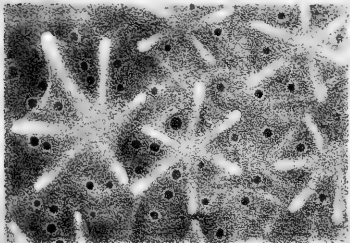
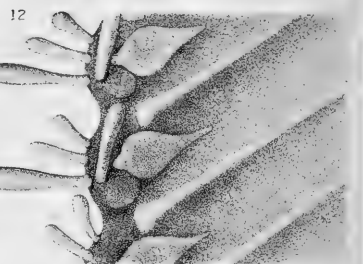
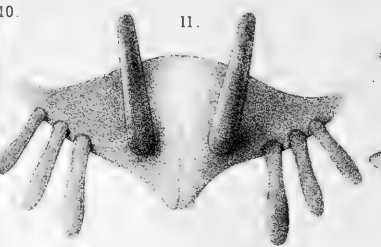
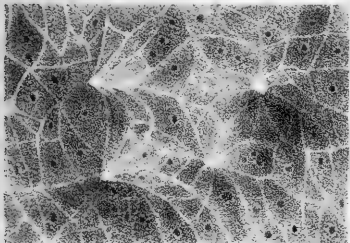
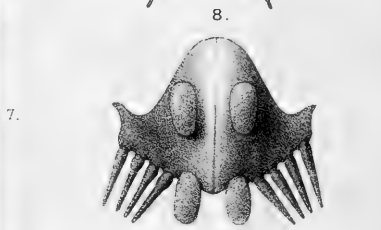
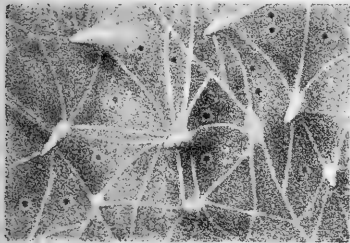
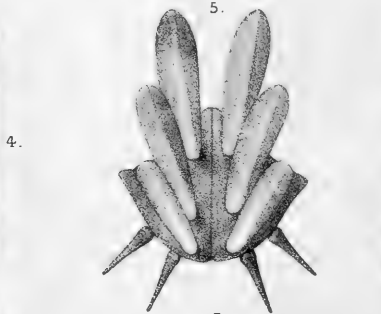
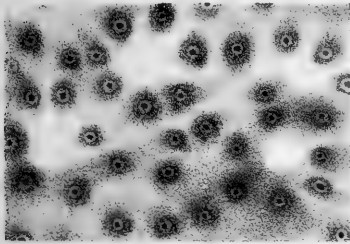
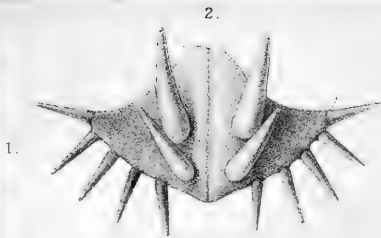
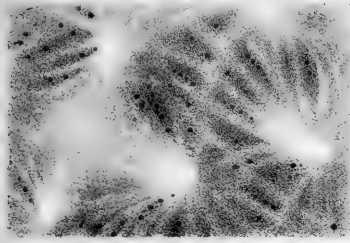
F. Roth, Lith. Edin.

1-2. *HYMENASTER GRANIFERUS*, n. sp. 3-4. *HYMENASTER COCCINATUS*, n. sp.
5-6. *HYMENASTER PRÆCOQUIS*, n. sp.

PLATE XCI.

PLATE XCI.

	Page
Figs. 1-3. <i>HYMENASTER CRUCIFER</i> , n. sp.	511
Fig. 1. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 2. Mouth-plates ; magnified.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified 5 diameters.	
[For macroscopic figures of this species see Pl. LXXXIX. figs. 1, 2.]	
Figs. 4-6. <i>HYMENASTER ANOMALUS</i> , n. sp.	512
Fig. 4. A portion of the supradorsal membrane ; magnified 30 diameters.	
Fig. 5. Mouth-plates ; magnified.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. LXXXIX. figs. 3, 4.]	
Figs. 7-9. <i>HYMENASTER GRANIFERUS</i> , n. sp.	517
Fig. 7. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 8. Mouth-plates ; magnified.	
Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XC. figs. 1, 2.]	
Figs. 10-12. <i>HYMENASTER COCCINATUS</i> , n. sp.	522
Fig. 10. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 11. Mouth-plates ; magnified.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XC. figs. 3, 4.]	
Figs. 13-15. <i>HYMENASTER PRÆCOQUIS</i> , n. sp.	524
Fig. 13. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 14. Mouth-plates ; magnified.	
Fig. 15. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XC. figs. 5, 6.]	



F. H. Michael del.

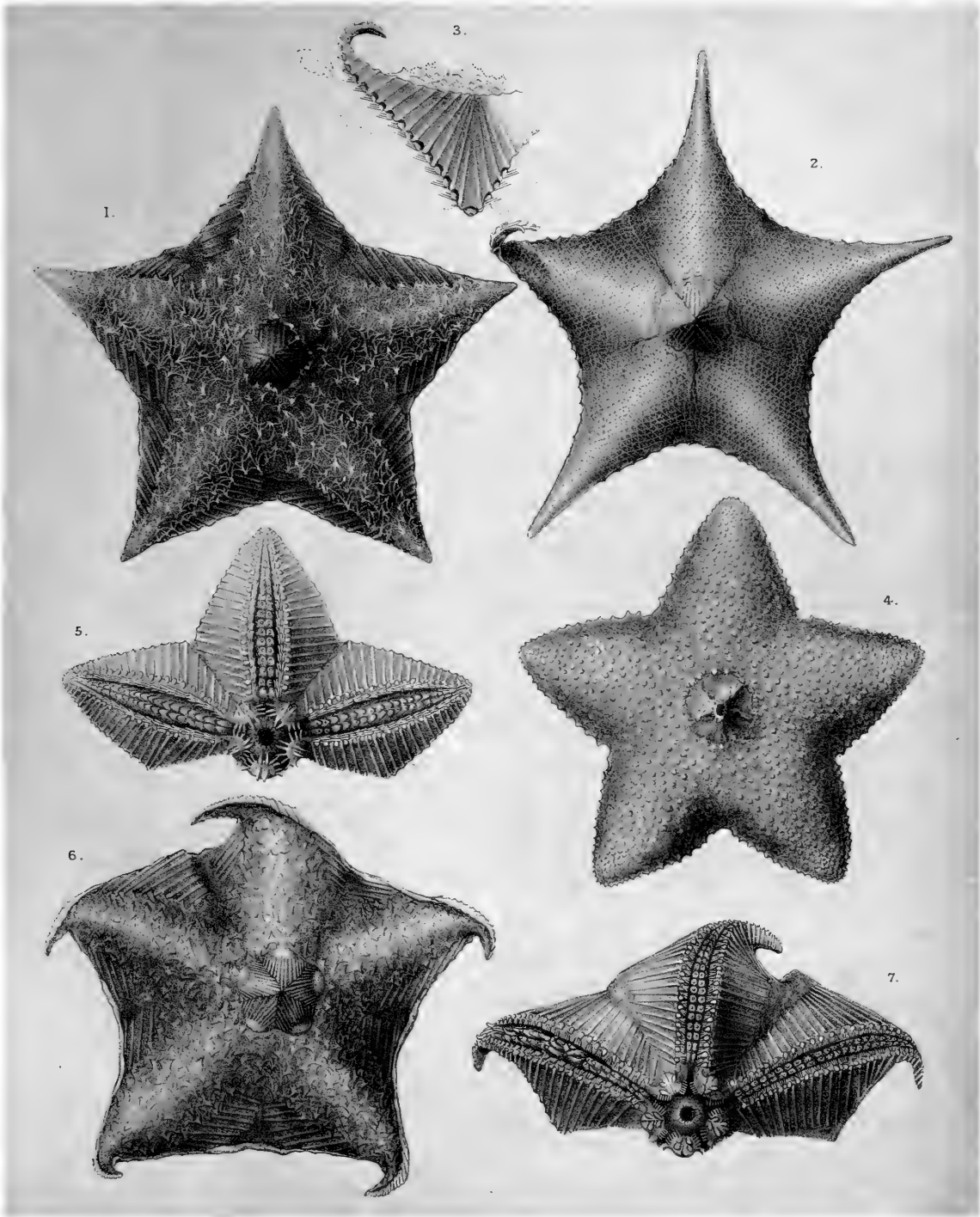
F. Kohl, Lith. Edin.

1-3. HYMENASTER CRUCIFER, n.sp. 4-6. HYMENASTER ANOMALUS, n.sp. 7-9. HYMENASTER GRANIFERUS, n.sp.
10-12. HYMENASTER COCCINATUS, n.sp. 13-15. HYMENASTER PRÆCOQUIS, n.sp.

PLATE XCII.

PLATE XCII.

	Page
Fig. 1. <i>HYMENASTER PULLATUS</i> , n. sp.	519
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters. [For magnified details of this species see Pl. XCIII. figs. 1-3.]	
Figs. 2, 3. <i>HYMENASTER GEOMETRICUS</i> , n. sp.	518
Fig. 2. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 3. Profile view, showing the actinal interradiar area (partly diagrammatic) ; magnified $1\frac{1}{2}$ diameters. [For magnified details of this species see Pl. XCIII. figs. 4-6.]	
Figs. 4, 5. <i>HYMENASTER LATEBROSUS</i> , n. sp.	514
Fig. 4. Abactinal aspect ; magnified 2 diameters.	
Fig. 5. Actinal aspect ; magnified 2 diameters. [For magnified details of this species see Pl. XCIII. figs. 7-9.]	
Figs. 6, 7. <i>HYMENASTER MEMBRANACEUS</i> , Wyville Thomson,	521
Fig. 6. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 7. Actinal aspect ; magnified $1\frac{1}{2}$ diameters. [For magnified details of this species see Pl. XCIII. figs. 10-12.]	



F.H. Michael del.

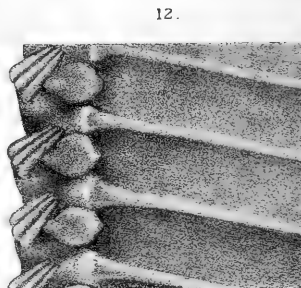
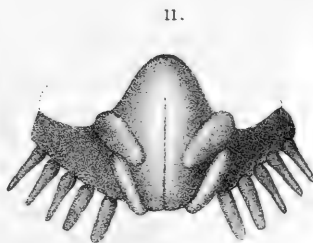
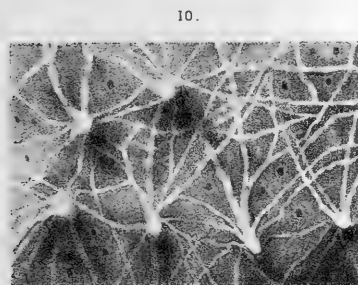
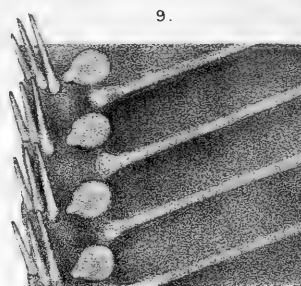
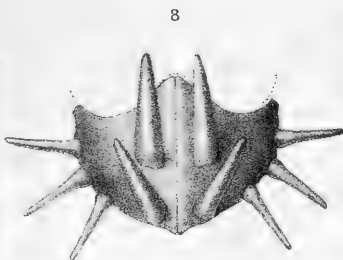
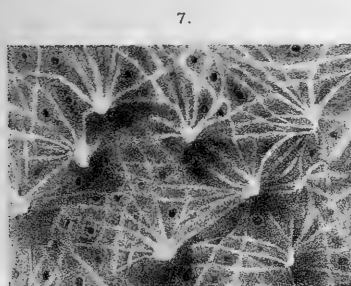
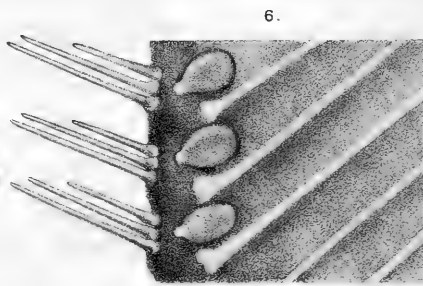
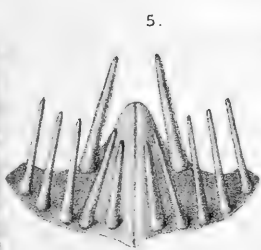
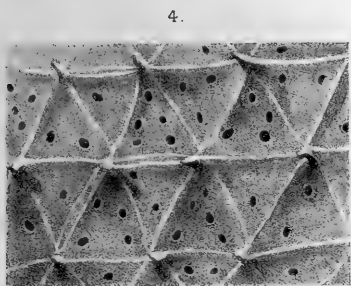
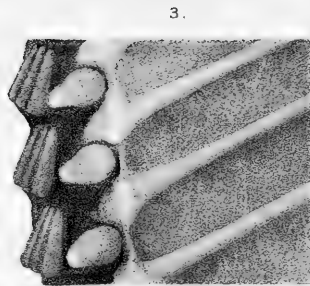
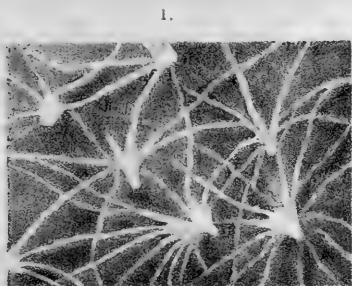
F. Hutch. Lith. Edin'

1. HYMENASTER PULLATUS, n. sp. 2-3. HYMENASTER GEOMETRICUS, n. sp.
 4-5. HYMENASTER LATEBROSUS, n. sp. 6-7. HYMENASTER MEMBRANACEUS, Wyville Thomson.

PLATE XCIII.

PLATE XCIII.

	Page
Figs. 1-3. <i>HYMENASTER PULLATUS</i> , n. sp.	519
Fig. 1. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 2. Mouth-plates ; magnified.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For a macroscopic figure of this species see Pl. XCII. fig. 1.]	
Figs. 4-6. <i>HYMENASTER GEOMETRICUS</i> , n. sp.	518
Fig. 4. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 5. Mouth-plates ; magnified.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 5 diameters.	
[For macroscopic figures of this species see Pl. XCII. figs. 2, 3.]	
Figs. 7-9. <i>HYMENASTER LATEBROSUS</i> , n. sp.	514
Fig. 7. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 8. Mouth-plates ; magnified.	
Fig. 9. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XCII. figs. 4, 5.]	
Figs. 10-12. <i>HYMENASTER MEMBRANACEUS</i> , Wyville Thomson,	521
Fig. 10. A portion of the supradorsal membrane ; magnified 15 diameters.	
Fig. 11. Mouth-plates ; magnified.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 8 diameters.	
[For macroscopic figures of this species see Pl. XCII. figs. 6, 7.]	

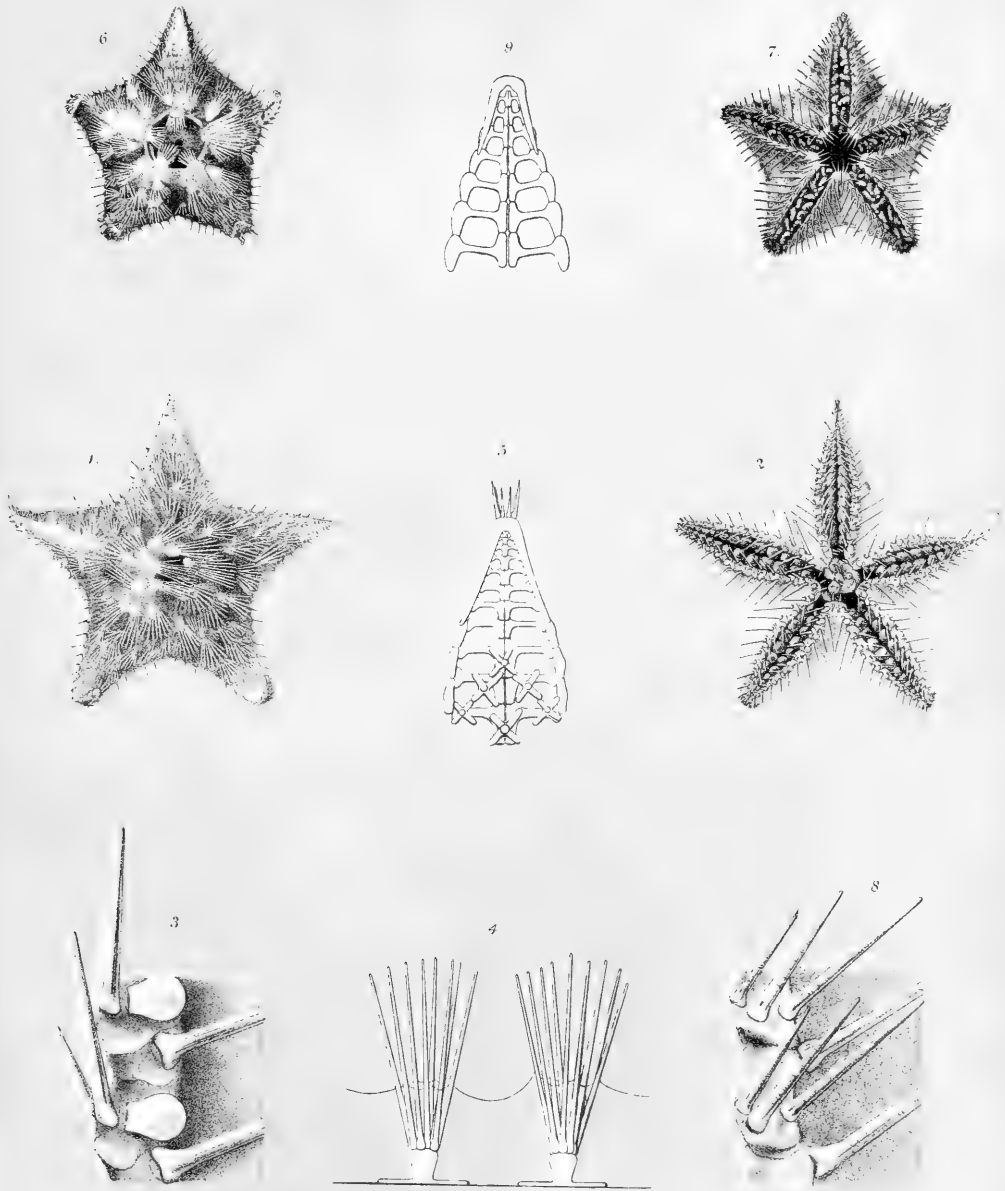


1-3. HYMENASTER PULLATUS, n. sp. 4-6. HYMENASTER GEOMETRICUS, n. sp
 7-9. HYMENASTER LATEBROSUS, n. sp. 10-12. HYMENASTER MEMBRANACEUS, Wyville Thomson.

PLATE XCIV.

PLATE XCIV.

	Page
Figs. 1-5. <i>BENTHASTER WYVILLE-THOMSONI</i> , n. sp.	527
Fig. 1. Abactinal aspect; magnified 2 diameters.	
Fig. 2. Actinal aspect; magnified 2 diameters.	
Fig. 3. Adambulacral plates and adjacent portion of the actinal surface; magnified 18 diameters.	
Fig. 4. Diagrammatic view of the abactinal paxillæ and rudimentary supradorsal membrane, seen in profile; magnified.	
Fig. 5. Diagram of the plates on the outer part of a ray; magnified.	
Figs. 6-9. <i>BENTHASTER PENICILLATUS</i> , n. sp.	529
Fig. 6. Abactinal aspect; magnified 2 diameters.	
Fig. 7. Actinal aspect; magnified 2 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface; magnified.	
Fig. 9. Diagram of the plates on the outer part of a ray; magnified.	



F.H. Michael del. Hillebrand lith.

Hannert imp.

1-5. BENTHASTER WYVILLE-THOMSONI, n.sp.

6-9. BENTHASTER PENICILLATUS, n.sp.

PLATE XCV.

PLATE XCV.

Figs. 1-5. *PYTHONASTER MURRAYI*, n. sp. Page
532

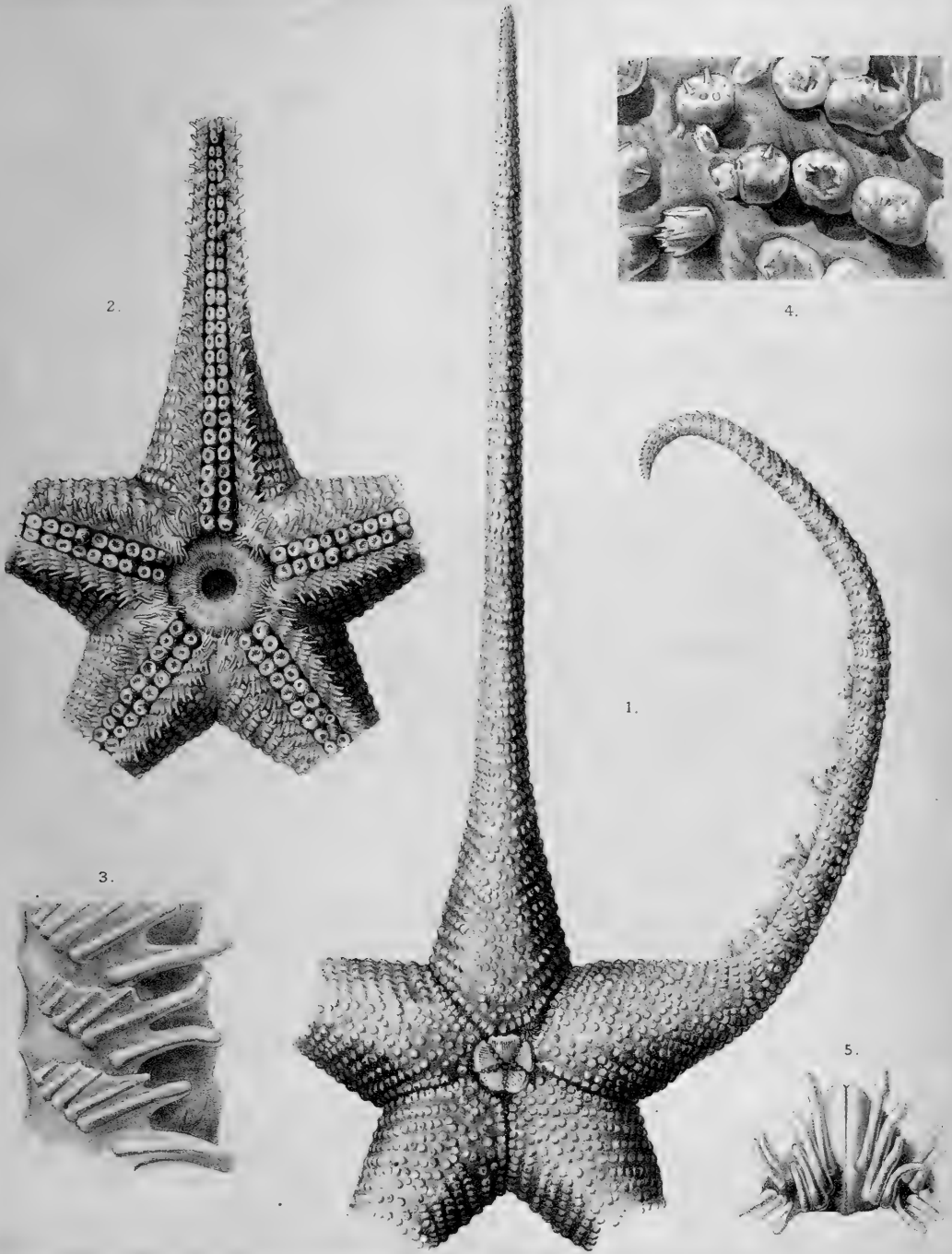
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. Adambulacral plates and adjacent portion of the actinal surface; magnified
9 diameters.

Fig. 4. A portion of the abactinal surface; magnified 9 diameters.

Fig. 5. Mouth-plates; magnified 5 diameters.



F. H. Michael del.

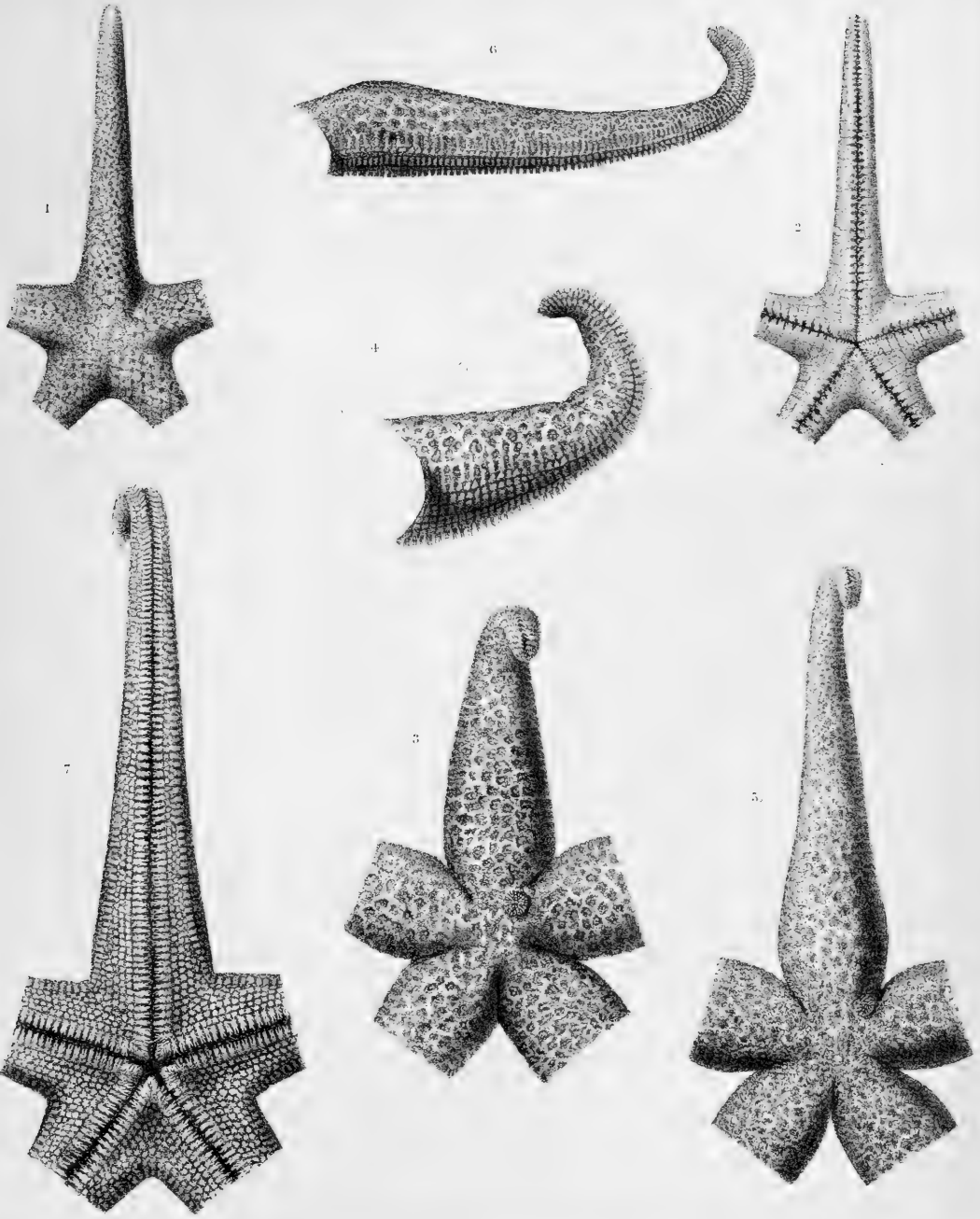
F. H. Michael del.

PYTHONASTER MURRAYI, n. sp.

PLATE XCVI.

PLATE XCVI.

	Page
Figs. 1, 2. <i>CRIBRELLA COMPACTA</i> , n. sp.	543
Fig. 1. Abactinal aspect ; magnified 4 diameters.	
Fig. 2. Actinal aspect ; magnified 4 diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 3, 4.]	
Figs. 3, 4. <i>CRIBRELLA OBESA</i> , n. sp.	544
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Profile view of a ray ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 5, 6.]	
Figs. 5, 6. <i>CRIBRELLA SUFFLATA</i> , n. sp.	549
Fig. 5. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 6. Profile view of a ray ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 1, 2.]	
Fig. 7. <i>CRIBRELLA PRÆSTANS</i> , n. sp.	545
Fig. 7. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 7, 8.]	



F.H. Michael del. et lith.

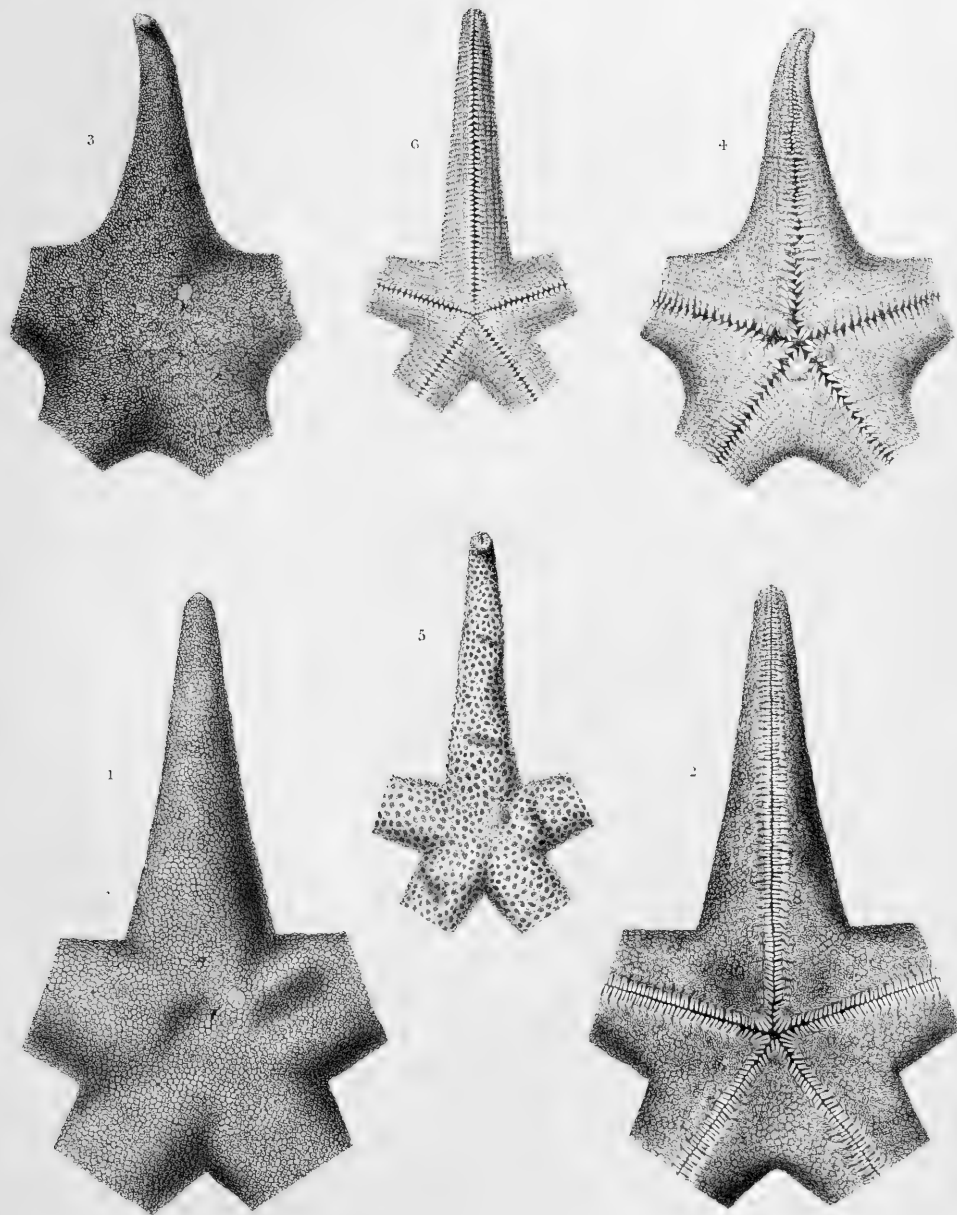
Muséum, Paris imp.

1-2. CRIBRELLA COMPACTA, n.sp. 3-4. CRIBRELLA OBESA, n.sp.
 5-6. CRIBRELLA SUFFLATA, n.sp. 7. CRIBRELLA PRÆSTANS, n.sp.

PLATE XCVII.

PLATE XCVII.

	Page
Figs. 1, 2. PERKMASTER DENSUS, n. sp.	552
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 11, 12.]	
Figs. 3, 4. PERKMASTER FUSCUS, n. sp.	551
Fig. 3. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. LXII. fig. 1.]	
Figs. 5, 6. CRIBRELLA SIMPLEX, n. sp.	547
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. XCVIII. figs. 9, 10.]	

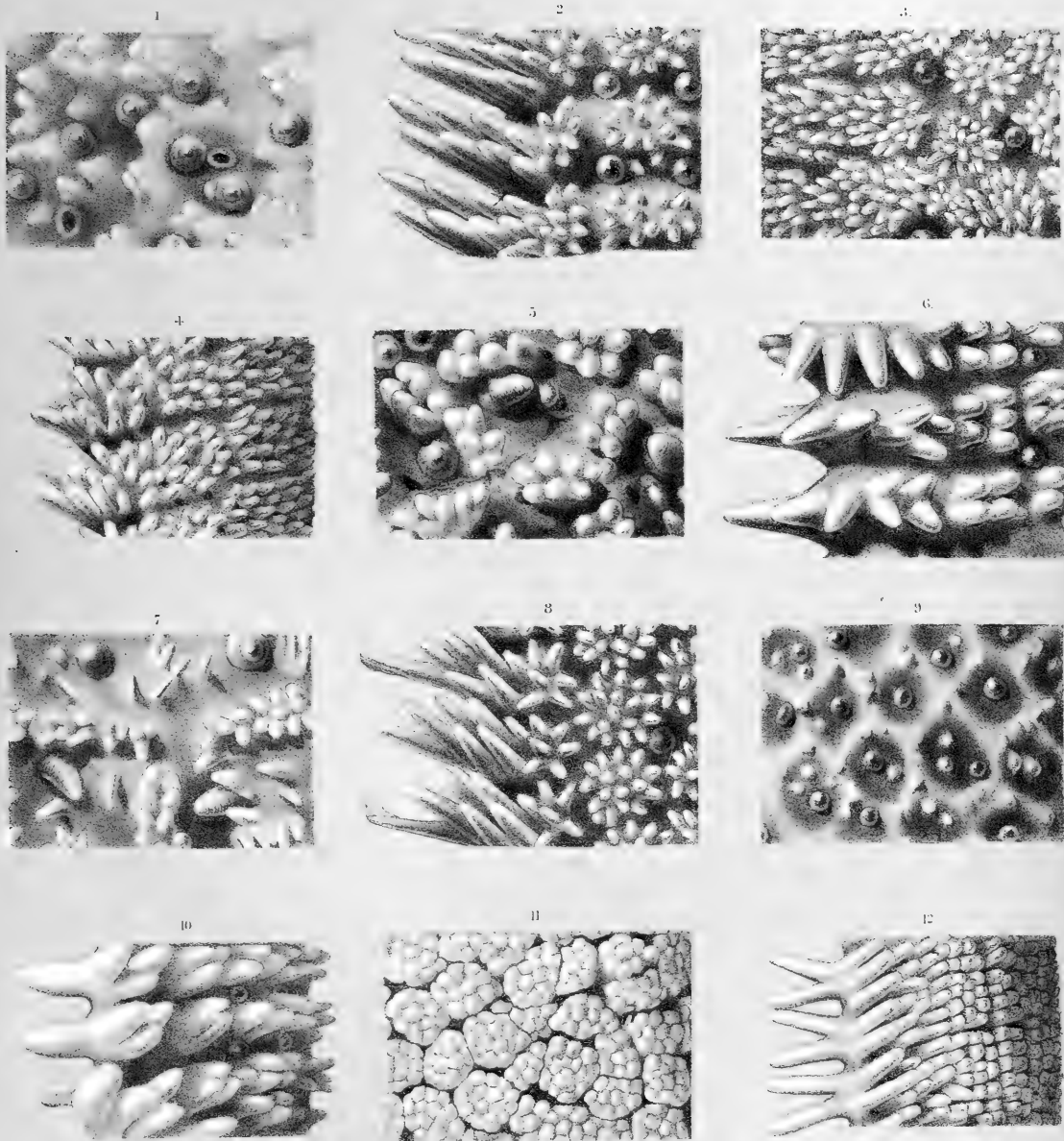


1-2. PERKMASTER DENSUS, n.sp. 3-4. PERKMASTER FUSCUS, n.sp.
5-6. CRIBRELLA SIMPLEX, n.sp.

PLATE XCVIII.

PLATE XCVIII.

	Page
Figs. 1, 2. <i>CRIBRELLA SUFFLATA</i> , n. sp.	549
Fig. 1. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XCVI. figs. 5, 6.]	
Figs. 3, 4. <i>CRIBRELLA COMPACTA</i> , n. sp.	543
Fig. 3. A portion of the abactinal surface ; magnified 35 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 35 diameters.	
[For macroscopic figures of this species see Pl. XCVI. figs. 1, 2.]	
Figs. 5, 6. <i>CRIBRELLA OBESA</i> , n. sp.	544
Fig. 5. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. XCVI. figs. 3, 4.]	
Figs. 7, 8. <i>CRIBRELLA PRÆSTANS</i> , n. sp.	545
Fig. 7. A portion of the abactinal surface ; magnified 16 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified 18 diameters.	
[For a macroscopic figure of this species see Pl. XCVI. fig. 7.]	
Figs. 9, 10. <i>CRIBRELLA SIMPLEX</i> , n. sp.	547
Fig. 9. A portion of the abactinal surface ; magnified 16 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 20 diameters.	
[For macroscopic figures of this species see Pl. XCVII. figs. 5, 6.]	
Figs. 11, 12. <i>PERKMASTER DENSUS</i> , n. sp.	552
Fig. 11. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. XCVII. figs. 1, 2.]	



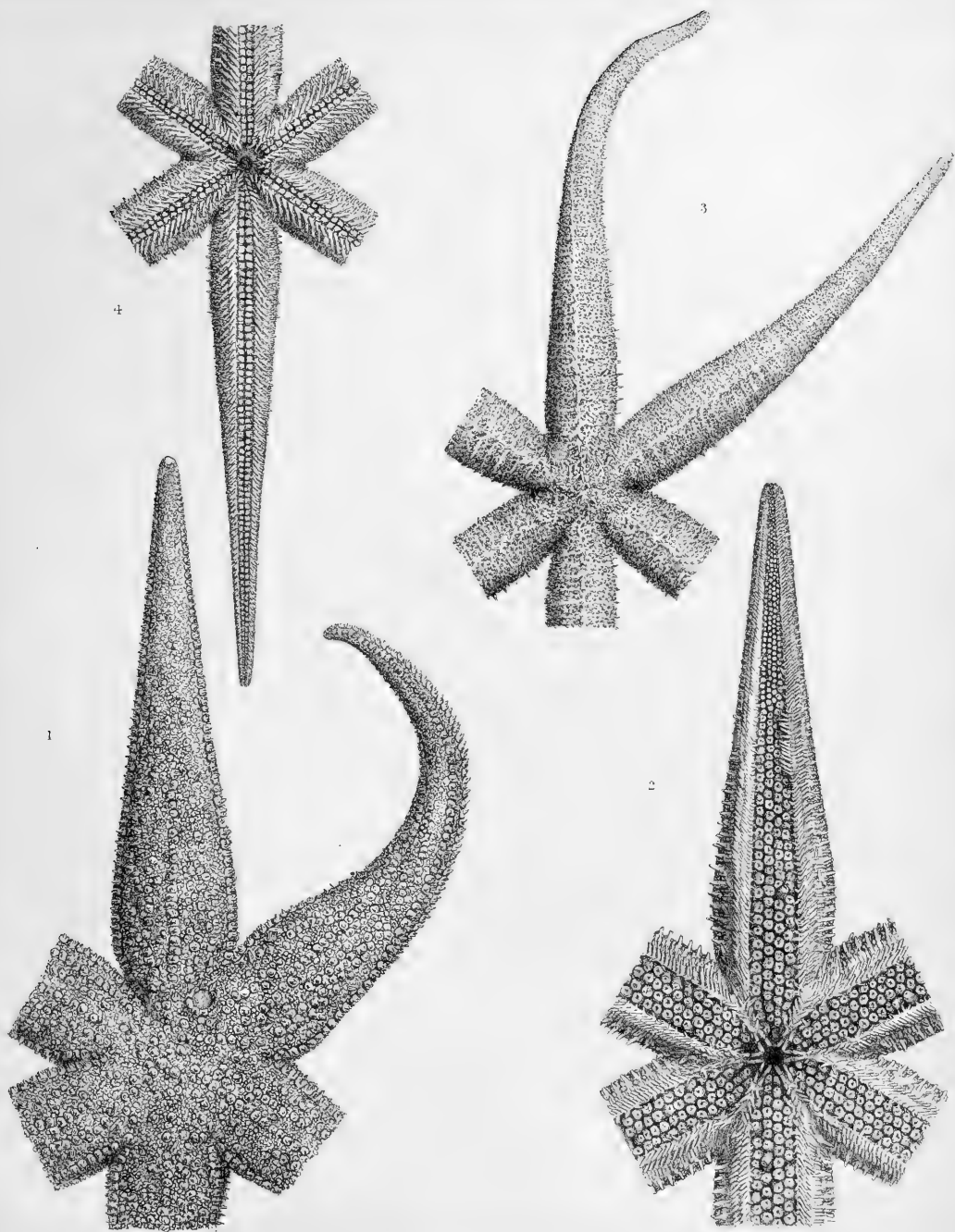
1-2. CRIBRELLA SUFFLATA, n. sp.
 5-6. CRIBRELLA OBESA, n. sp.
 9-10. CRIBRELLA SIMPLEX, n. sp.

3-4. CRIBRELLA COMPACTA, n. sp.
 7-8. CRIBRELLA PRÆSTANS, n. sp.
 11-12. PERKNASTER DENSUS, n. sp.

PLATE XCIX.

PLATE XCIX.

	Page
Figs. 1, 2. <i>ASTERIAS VESICULOSA</i> , n. sp.	568
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. CIII. figs. 9, 10.]	
Figs. 3, 4. <i>ASTERIAS (HYDRASTERIAS) OPHIDION</i> , n. sp.	581
Fig. 3. Abactinal aspect; magnified 2 diameters.	
Fig. 4. Actinal aspect; magnified 2 diameters.	
[For magnified details of this species see Pl. CIII. figs. 3, 4.]	



F. H. Michael del. et lith.

Mintern Press imp.

1-2. *ASTERIAS VESICULOSA*, n. sp.

3-4. *ASTERIAS (HYDRASTERIAS) OPHIDION*, n. sp.

PLATE C.

PLATE C.

Figs. 1-3. *STICHAETER POLYGRAMMUS*, n. sp. Page
434

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. Profile view of a ray; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. CIII. figs. 5, 6.]

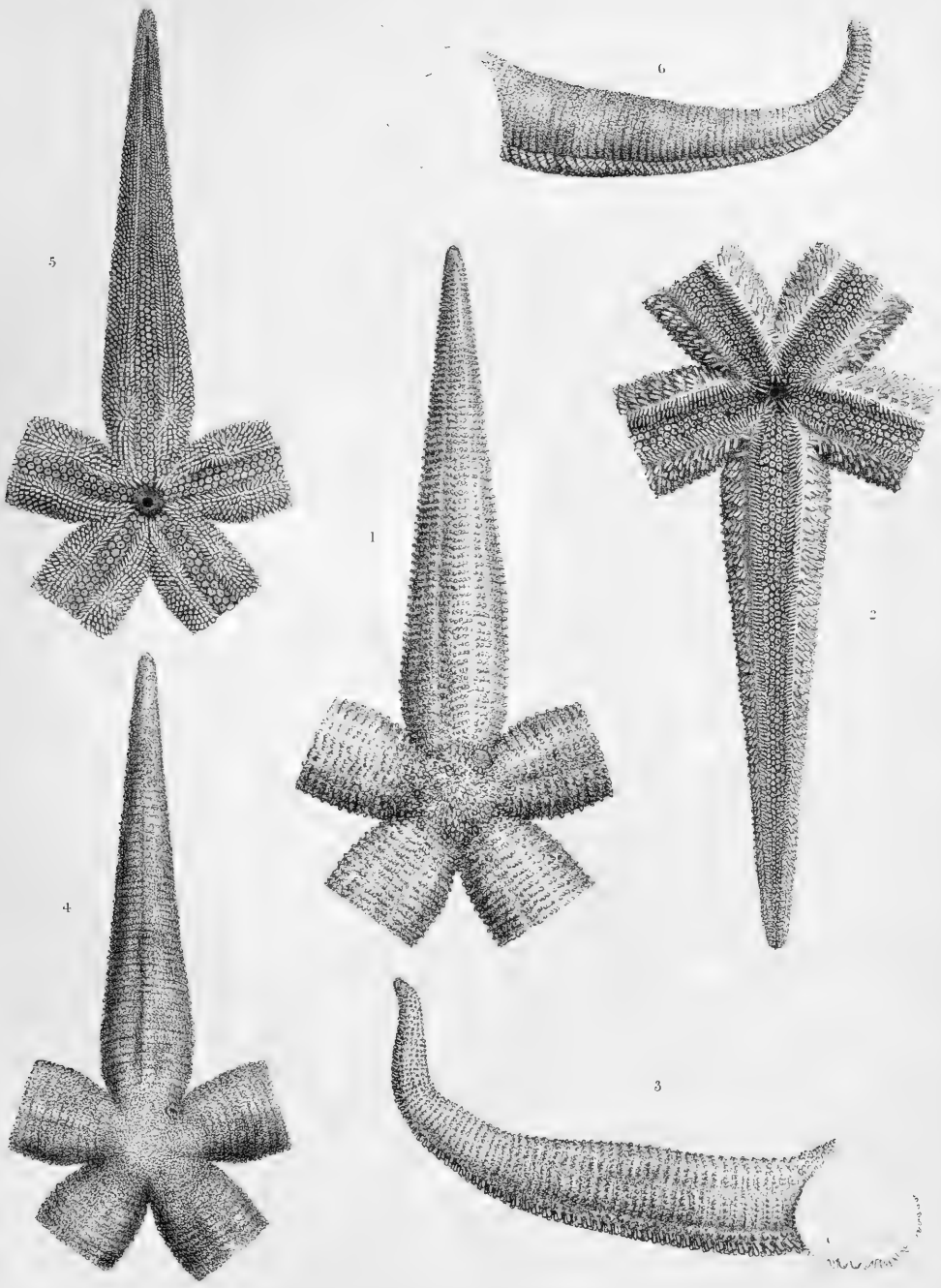
Figs. 4-6. *ASTERIAS (SMILASTERIAS) SCALPRIFERA*, n. sp. 578

Fig. 4. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 5. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 6. Profile view of a ray; magnified $1\frac{1}{2}$ diameters.

[For magnified details of this species see Pl. CIII. figs. 1, 2.]



F.H. Michael & W.H. Crother del et lith

Master Proc imp

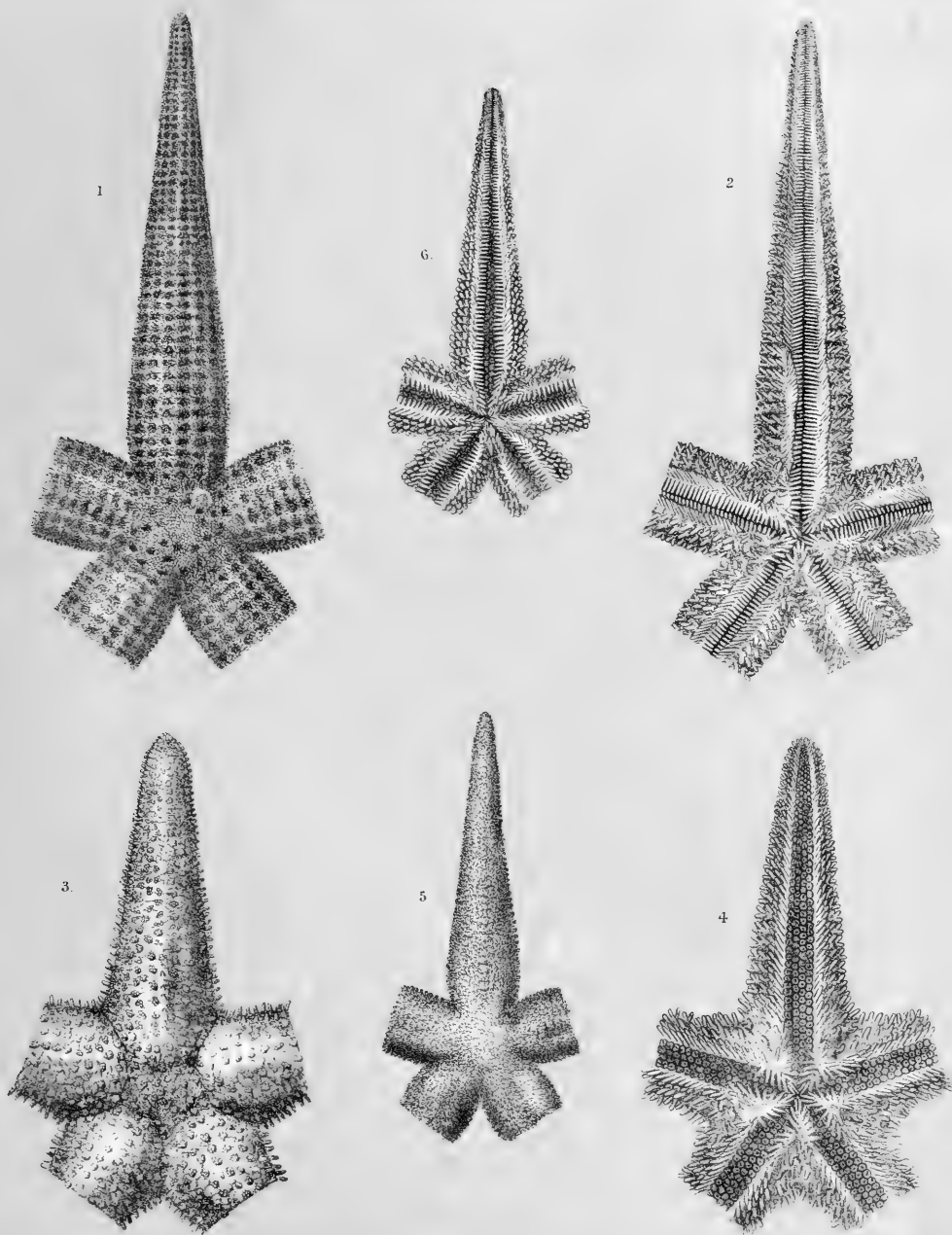
1-3. *STICHAETER POLYGRAMMUS*, n. sp.

4-6. *ASTERIAS (SMILASTERIAS) SCALPRIFERA*, n. sp.

PLATE CI.

PLATE CL.

	Page
Figs. 1, 2. <i>STICHASTER FELIPES</i> , n. sp.	433
Fig. 1. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. CIII. figs. 7, 8.]	
Figs. 3, 4. <i>CALVASTERIAS STOLIDOTA</i> , n. sp.	590
Fig. 3. Abactinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 4. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
[For magnified details of this species see Pl. CIII. figs. 11, 12.]	
Figs. 5, 6. <i>ASTERIAS (SMILASTERIAS) TRIREMIS</i> , n. sp.	579
Fig. 5. Abactinal aspect ; magnified 2 diameters.	
Fig. 6. Actinal aspect ; magnified 2 diameters.	
[For magnified details of this species see Pl. CII. figs. 5, 6.]	



H. Crowther del et lith

Mintern, Eras. imp

1-2. *STICHAETER FELIPES*, n. sp. 3-4. *CALVASTERIAS STOLIDOTA*, n. sp.
5-6. *ASTERIAS (SMILASTERIAS) TRIREMIS*, n. sp.

PLATE CII.

PLATE CII.

Figs. 1-4. *ASTERIAS TORQUATA*, n. sp. Page
570

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 12 diameters.

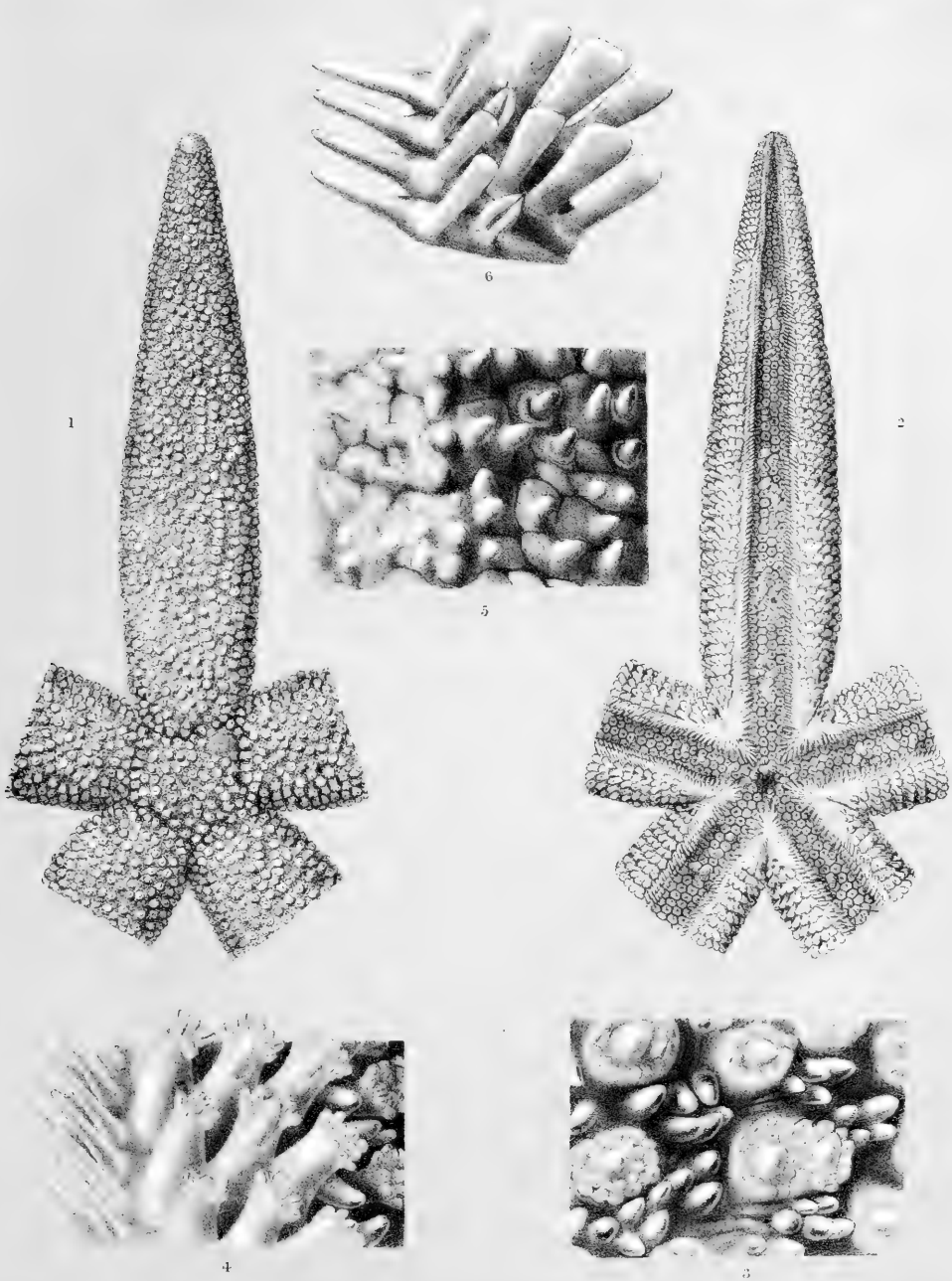
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified 10 diameters.

Figs. 5, 6. *ASTERIAS (SMILASTERIAS) TRIREMIS*, n. sp. 579

Fig. 5. A portion of the abactinal surface; magnified 20 diameters.

Fig. 6. Adambulacral plates and adjacent portion of the actinal surface; magnified 20 diameters.

[For macroscopic figures of this species see Pl. CI. figs. 5,-6.]



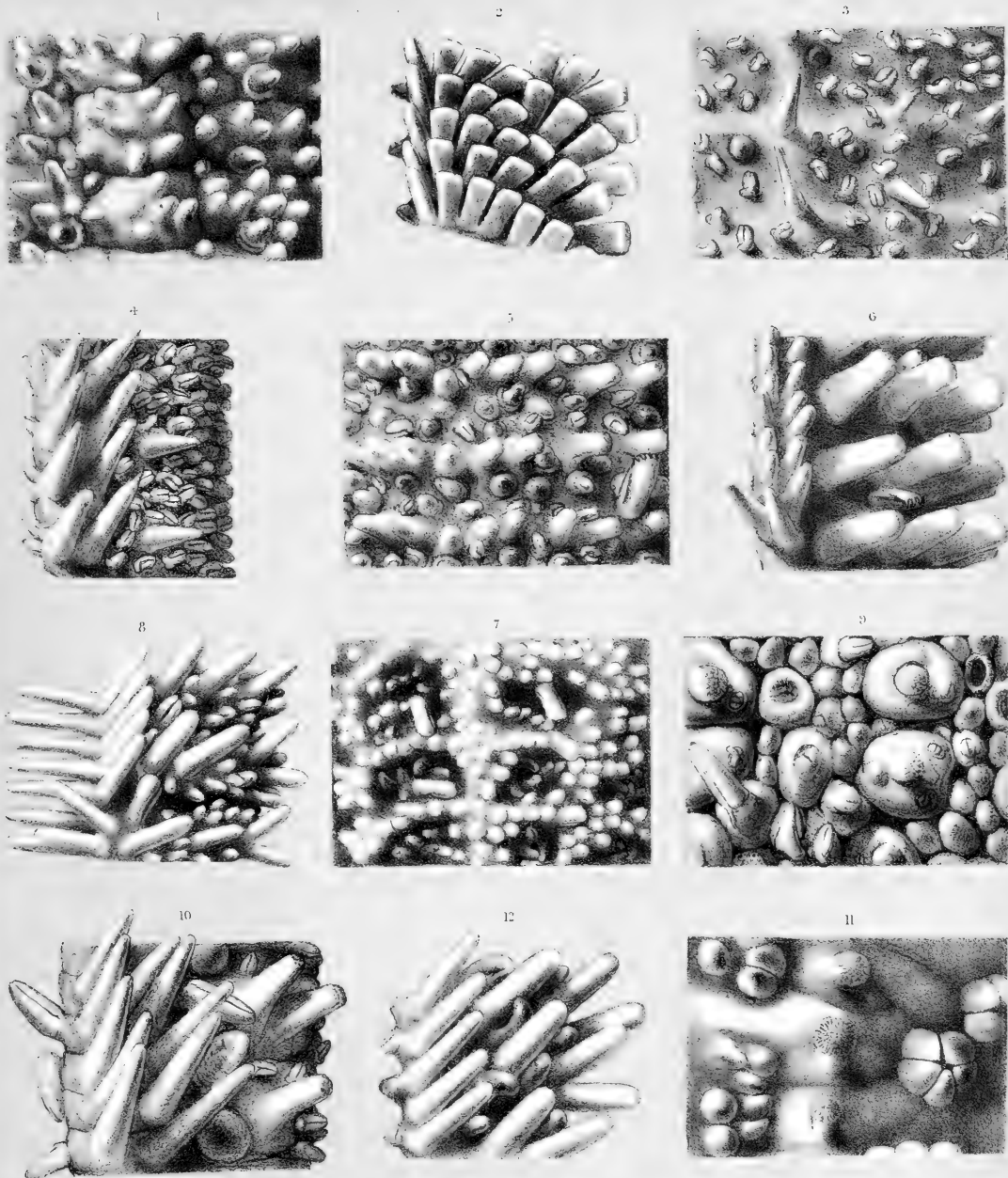
1-4. ASTERIAS TORQUATA, n. sp.

5-6. ASTERIAS (SMILASTERIAS) TRIREMIS, n. sp.

PLATE CIII.

PLATE CIII.

	Page
Figs. 1, 2. <i>ASTERIAS (SMILASTERIAS) SCALPRIFERA</i> , n. sp.	578
Fig. 1. A portion of the abactinal surface ; magnified 15 diameters.	
Fig. 2. Adambulacral plates and adjacent portion of the actinal surface ; magnified 15 diameters.	
[For macroscopic figures of this species see Pl. C. figs. 4-6.]	
Figs. 3, 4. <i>ASTERIAS (HYDRASTERIAS) OPHIDION</i> , n. sp.	581
Fig. 3. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 4. Adambulacral plates and adjacent portion of the actinal surface ; magnified 14 diameters.	
[For macroscopic figures of this species see Pl. XCIX. figs. 3, 4.]	
Figs. 5, 6. <i>STICHAETER POLYGRAMMUS</i> , n. sp.	434
Fig. 5. A portion of the abactinal surface ; magnified 12 diameters.	
Fig. 6. Adambulacral plates and adjacent portion of the actinal surface ; magnified 10 diameters.	
[For macroscopic figures of this species see Pl. C. figs. 1-3.]	
Figs. 7, 8. <i>STICHAETER FELIPES</i> , n. sp.	433
Fig. 7. A portion of the abactinal surface ; magnified 10 diameters.	
Fig. 8. Adambulacral plates and adjacent portion of the actinal surface ; magnified 9 diameters.	
[For macroscopic figures of this species see Pl. CI. figs. 1, 2.]	
Figs. 9, 10. <i>ASTERIAS VESICULOSA</i> , n. sp.	568
Fig. 9. A portion of the abactinal surface ; magnified 13 diameters.	
Fig. 10. Adambulacral plates and adjacent portion of the actinal surface ; magnified 13 diameters.	
[For macroscopic figures of this species see Pl. XCIX. figs. 1, 2.]	
Figs. 11, 12. <i>CALVASTERIAS STOLIDOTA</i> , n. sp.	590
Fig. 11. A portion of the abactinal surface ; magnified 14 diameters.	
Fig. 12. Adambulacral plates and adjacent portion of the actinal surface ; magnified 14 diameters.	
[For macroscopic figures of this species see Pl. CI. figs. 3, 4.]	



1-2. ASTERIAS (SMILASTERIAS) SCALPRIFERA, n. sp.
 5-6. STICHAETER POLYGRAMMUS, n. sp.
 9-10. ASTERIAS VESICULOSA, n. sp.

3-4. ASTERIAS (HYDRASTERIAS) OPHIDION, n. sp.
 7-8. STICHAETER FELIPES, n. sp.
 11-12. CALVASTERIAS STOLIDOTA, n. sp.

PLATE CIV.

PLATE CIV.

Figs. 1-4. *ASTERIAS VERSICOLOR*, n. sp. Page
573

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 7 diameters.

Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified
8 diameters.

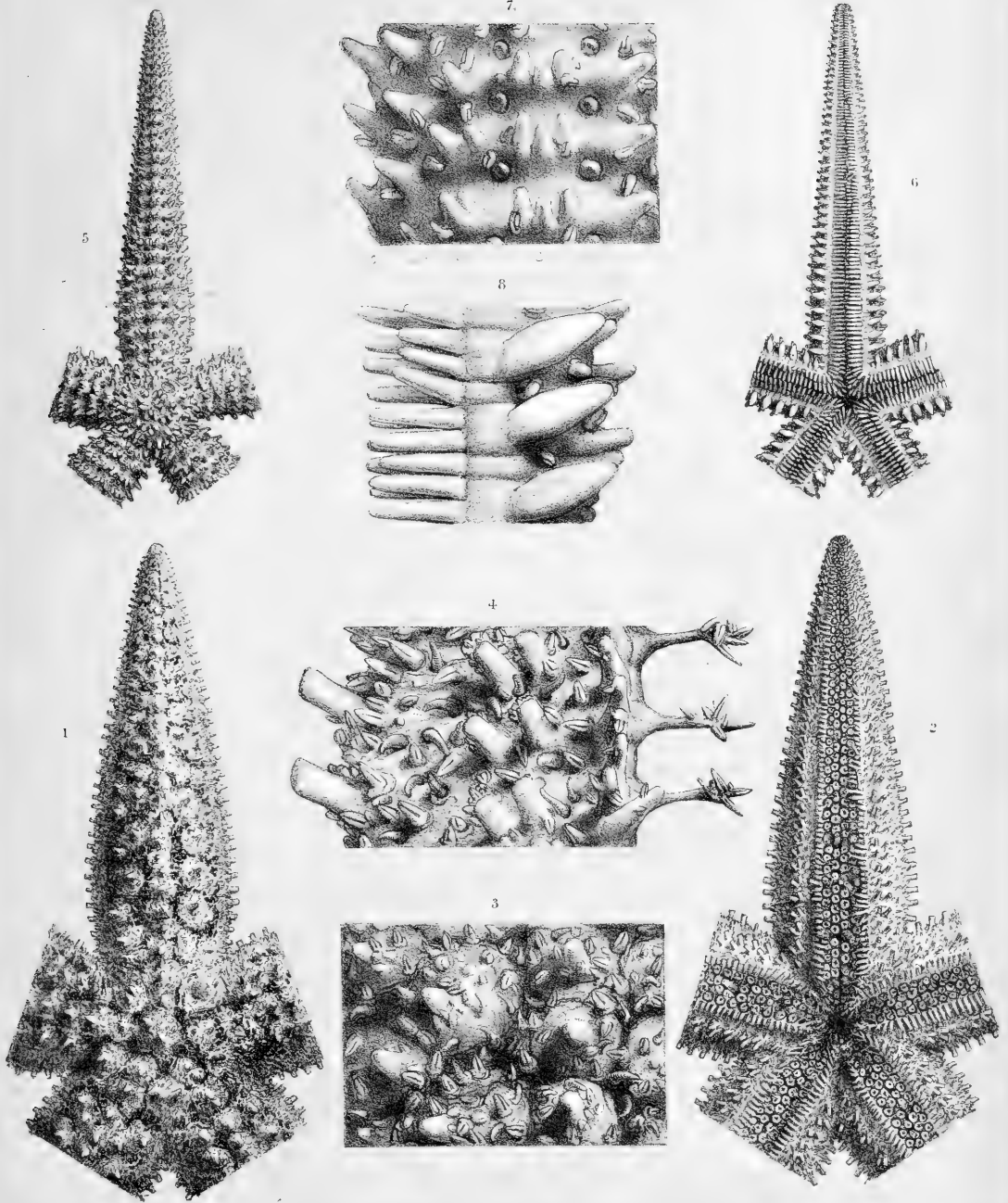
Figs. 5-8. *TARSASTER STOICHODES*, n. sp. 440

Fig. 5. Abactinal aspect; magnified 2 diameters.

Fig. 6. Actinal aspect; magnified 2 diameters.

Fig. 7. A portion of the abactinal surface; magnified 10 diameters.

Fig. 8. Adambulacral plates and adjacent portion of the actinal surface; mag-
nified 13 diameters.



F. H. Michael del et lith.

Museum. Eros. imp.

1-4. ASTERIAS VERSICOLOR, n. sp.

5-8. TARSASTER STOICHODES, n. sp.

PLATE CV.

PLATE CV.

Figs. 1-4. *ASTERIAS GLOMERATA*, n. sp. Page
571

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 8 diameters.

Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified
8 diameters.

Figs. 5-7. *PEDICELLASTER HYPERNOTIUS*, n. sp. 558

Fig. 5. Abactinal aspect; magnified 3 diameters.

Fig. 6. A portion of the abactinal surface; magnified 20 diameters.

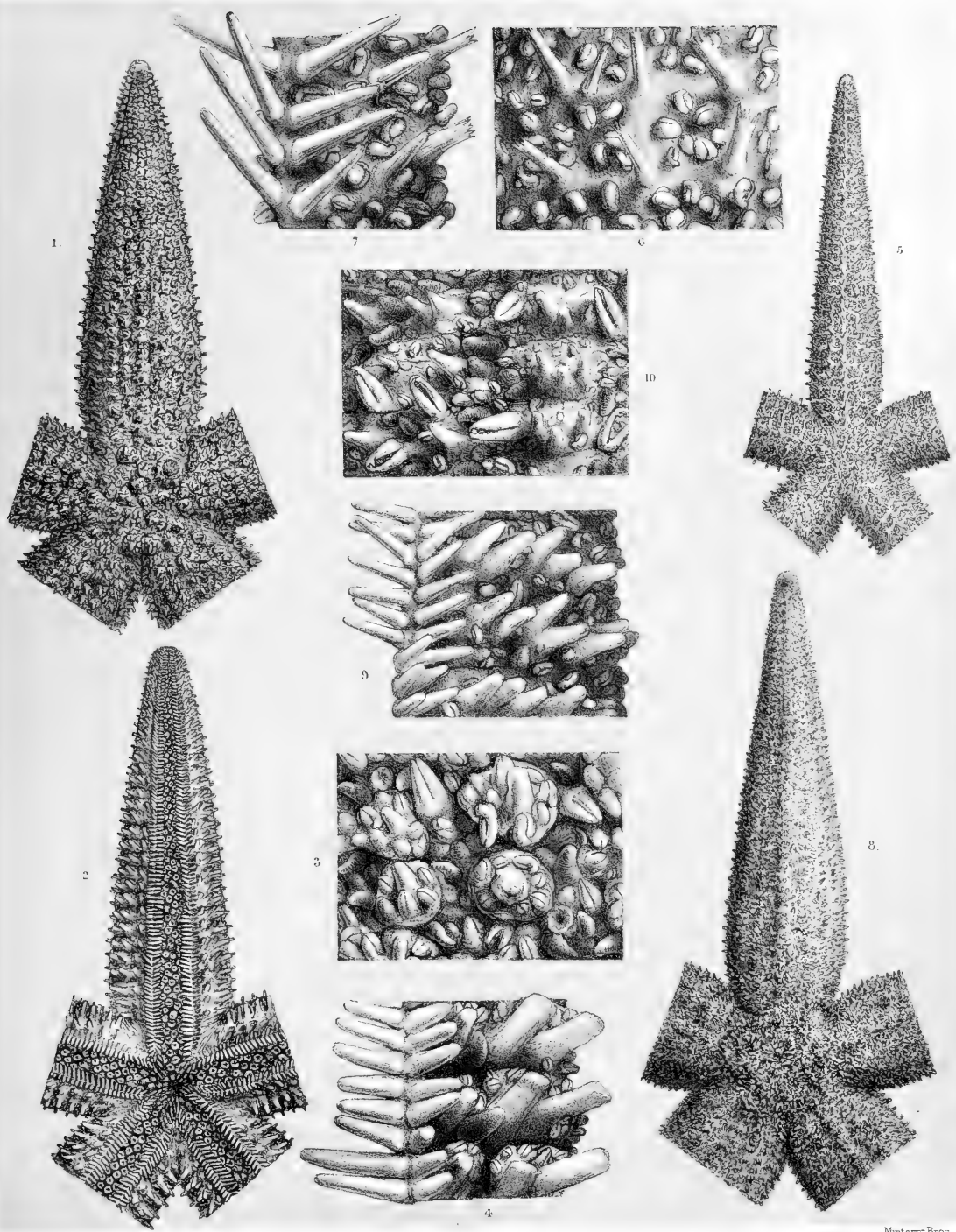
Fig. 7. Adambulacral plates and adjacent portion of the actinal surface; magnified
18 diameters.

Figs. 8-10. *ASTERIAS (COSMASTERIAS) TOMIDATA*, n. sp. 576

Fig. 8. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 9. Adambulacral plates and adjacent portion of the actinal surface; magnified
8 diameters.

Fig. 10. A portion of the abactinal surface; magnified 8 diameters.



1-4. *ASTERIAS GLOMERATA*, n. sp. 5-7. *PEDICELLASTER HYPERNOTIUS*, n. sp.
 8-10. *ASTERIAS (COSMASTERIAS) TOMIDATA*, n. sp.

F. H. Michael del. et lith.

Minterr. Broc. imp.

PLATE CVI.

PLATE CVI.

Figs. 1-4. *ASTERIAS (STOLASTERIAS) STICHANTHA*, n. sp. Page
586

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 4 diameters.

Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified
4 diameters.

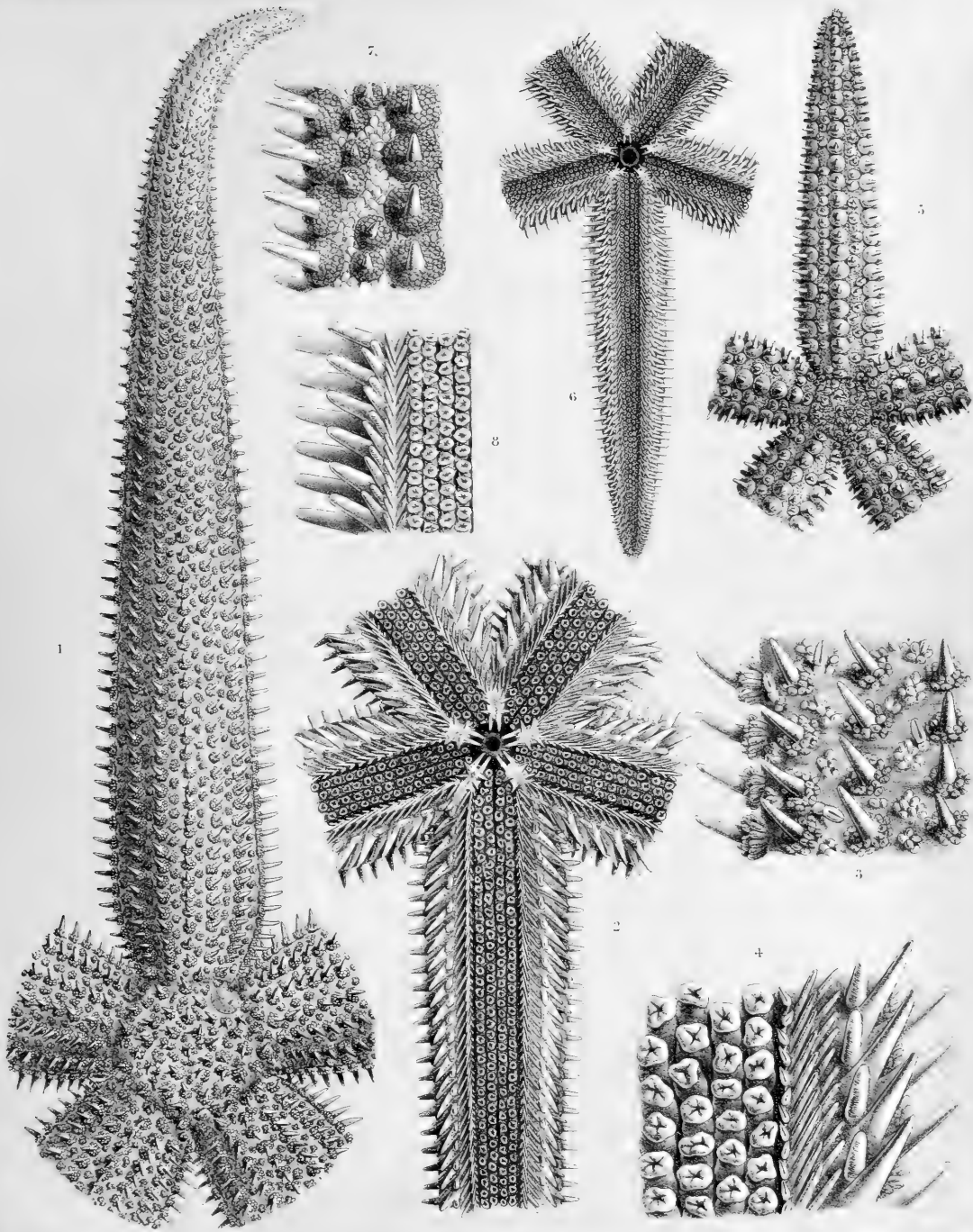
Figs. 5-8. *ASTERIAS (STOLASTERIAS) EUSTYLA*, n. sp. 587

Fig. 5. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 6. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 7. A portion of the abactinal surface; magnified 4 diameters.

Fig. 8. Adambulacral plates and adjacent portion of the actinal surface; magnified
4 diameters.



Minton Proc. ac. et sci.

1-4. ASTERIAS (STOLASTERIAS) STICHANTHA, n. sp.

5-8. ASTERIAS (STOLASTERIAS) EUSTYLA, n. sp.

PLATE CVII.

PLATE CVII.

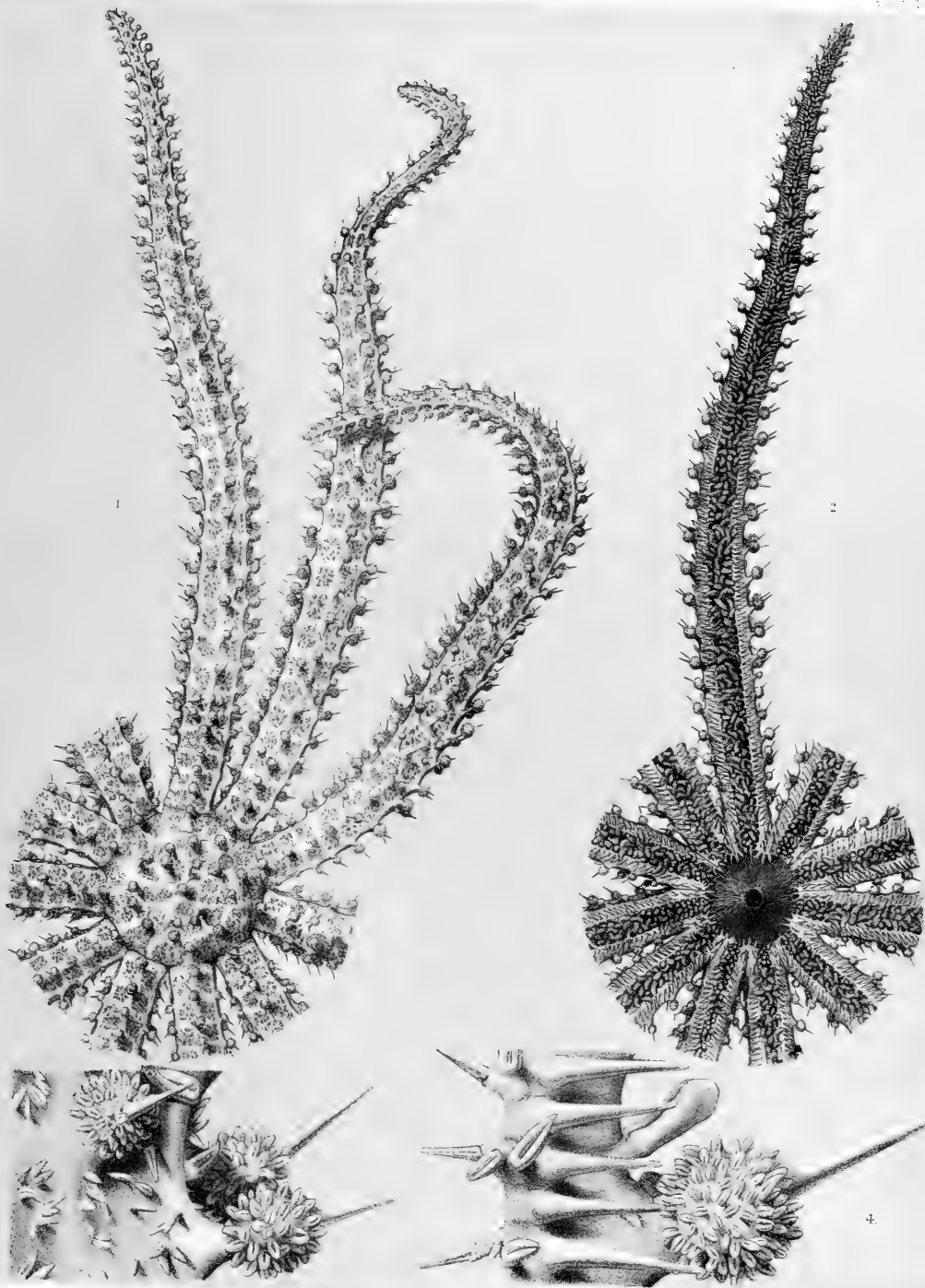
Figs. 1-4. *ASTERIAS (STOLASTERIAS) VOLSELLATA*, n. sp. . . . Page
584

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface; magnified 9 diameters.

Fig. 4. Adambulacral plates and adjacent portion of the actinal surface; magnified 15 diameters.



ASTERIAS (STOLASTERIAS) VOLSELLATA, n. sp.

Western Zoology

PLATE CVIII.

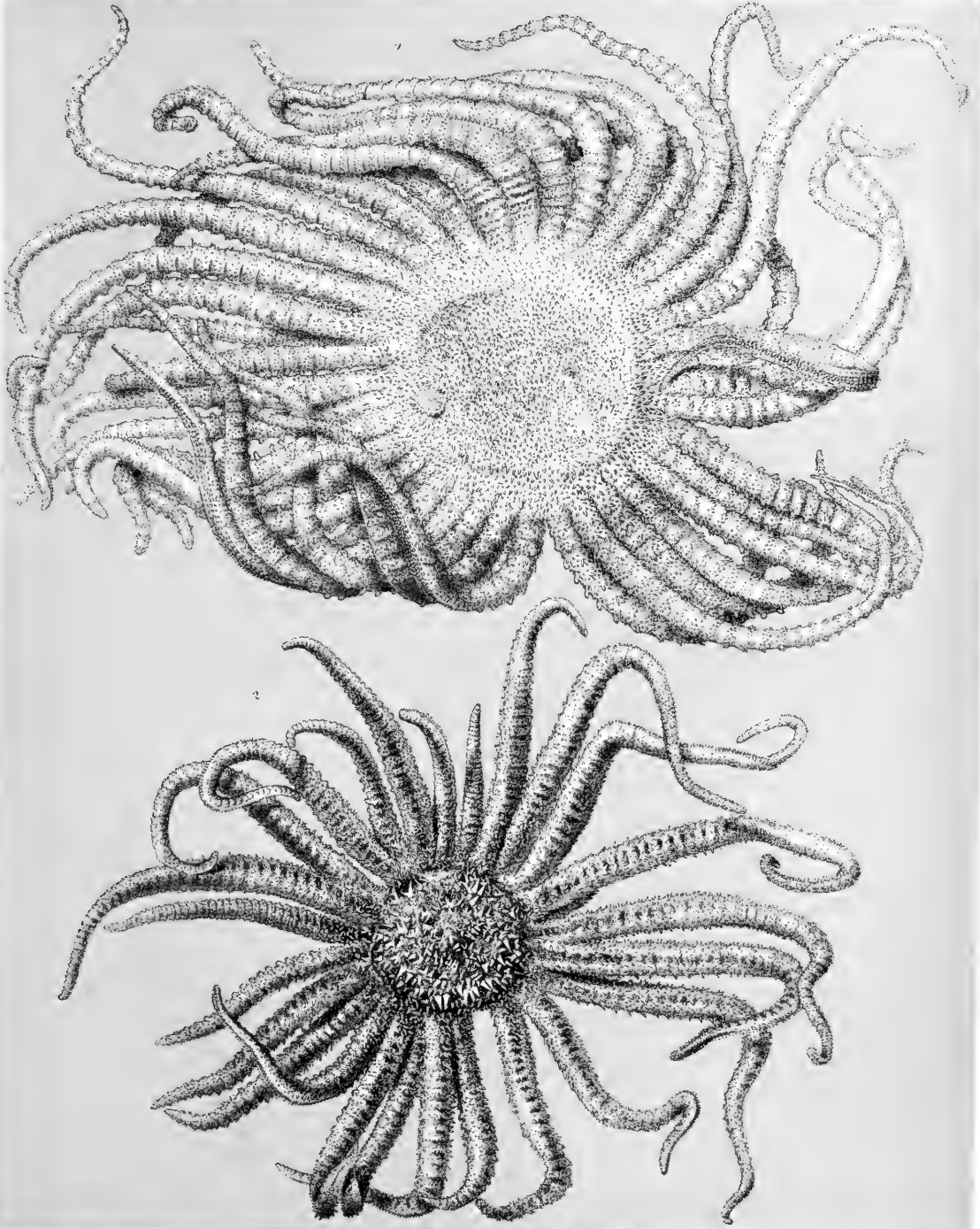
PLATE CVIII.

Fig. 1. LABIDIASTER ANNULATUS, n. sp. Page
595

Fig. 1. Abactinal aspect ; natural size.

Fig. 2. LABIDIASTER RADIOSUS (Lovén), Lütken, 595

Fig. 2. Abactinal aspect ; natural size.



F.H. Michael del. Hollick lith.

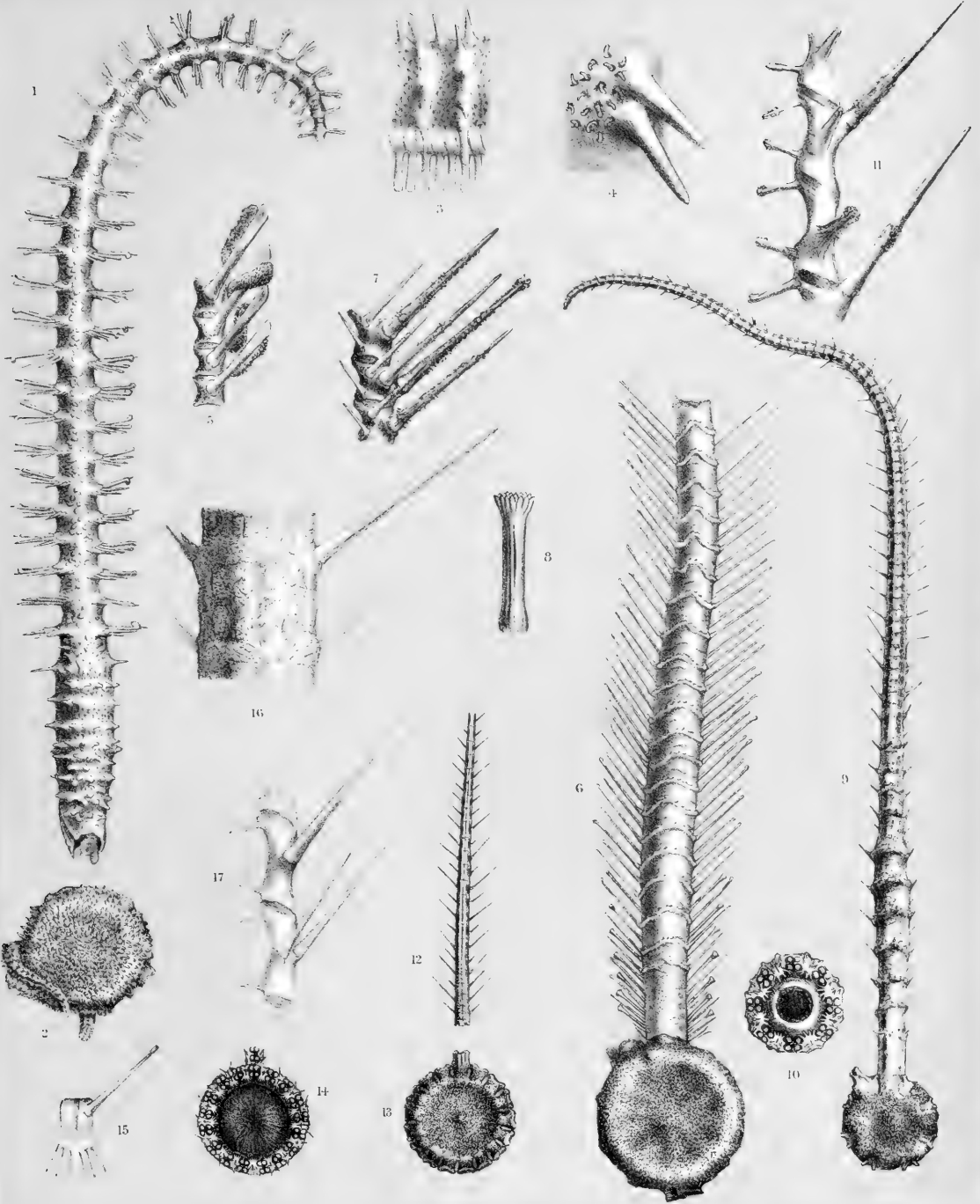
Hanhart imp.

1. LABIDASTER ANNULATUS, n. sp. 2. LABIDASTER RADIOSUS, (Lovén), Lütken

PLATE CIX.

PLATE CIX.

	Page
Figs. 1-5. <i>ODINIA PANDINA</i> , n. sp.	598
Fig. 1. Abactinal aspect of a ray ; natural size.	
Fig. 2. Abactinal aspect of the disk ; natural size.	
Fig. 3. A portion of a ray, lateral view ; magnified 2 diameters.	
Fig. 4. Part of the same more highly magnified, to show the papulæ ; magnified 4 diameters.	
Fig. 5. Adambulacral plates ; magnified 4 diameters.	
Figs. 6-8. <i>BRISINGA CRICOPHORA</i> , n. sp.	606
Fig. 6. Abactinal aspect of a ray and the disk ; magnified $1\frac{1}{2}$ diameters.	
Fig. 7. Adambulacral plates ; magnified 4 diameters.	
Fig. 8. An actinal spine from an adambulacral plate near the base of a ray ; magnified.	
Figs. 9-11. <i>BRISINGA VERTICILLATA</i> , n. sp.	604
Fig. 9. Abactinal aspect of a ray and the disk ; magnified $1\frac{1}{2}$ diameters.	
Fig. 10. Actinal aspect of the disk ; magnified $1\frac{1}{2}$ diameters.	
Fig. 11. Adambulacral plates ; magnified 12 diameters.	
Figs. 12-17. <i>FREYELLA POLYCNEMA</i> , n. sp.	621
Fig. 12. Abactinal aspect of a ray ; magnified 2 diameters.	
Fig. 13. Abactinal aspect of the disk ; magnified 2 diameters.	
Fig. 14. Actinal aspect of the disk ; magnified 2 diameters.	
Fig. 15. Mouth-plates ; magnified 6 diameters.	
Fig. 16. A portion of the abactinal surface of a ray ; magnified 12 diameters.	
Fig. 17. Adambulacral plates ; magnified 12 diameters.	



F H Michael & W H Crowther del et lith

Microscopium

1-5. ODINIA PANDINA, n. sp.
9-11. BRISINGA VERTICILLATA, n. sp.

6-8. BRISINGA CRICOPHORA, n. sp.
12-17. FREYELLA POLYCNEMA, n. sp.

PLATE CX.

PLATE CX.

	Page
Figs. 1-3. <i>BRISINGA ARMILLATA</i> , n. sp.	608
Fig. 1. Abactinal aspect of a ray and the disk ; magnified $1\frac{1}{2}$ diameters.	
Fig. 2. Actinal aspect ; magnified $1\frac{1}{2}$ diameters.	
Fig. 3. Adambulacral plates ; magnified 5 diameters.	
Figs. 4-7. <i>BRISINGA DISCINCTA</i> , n. sp.	613
Fig. 4. Abactinal aspect of a ray ; magnified $1\frac{1}{2}$ diameters.	
Fig. 5. Actinal aspect of a portion of a ray ; magnified $1\frac{1}{2}$ diameters.	
Fig. 6. Abactinal aspect of a portion of a ray ; magnified 8 diameters.	
Fig. 7. Adambulacral plates ; magnified 8 diameters.	
Figs. 8, 9. <i>BRISINGA MEMBRANACEA</i> , n. sp.	611
Fig. 8. Abactinal aspect of a portion of a ray ; magnified $1\frac{1}{2}$ diameters.	
Fig. 9. Abactinal aspect of a portion of a ray ; magnified 8 diameters.	



W. H. Cressler del. et lit.

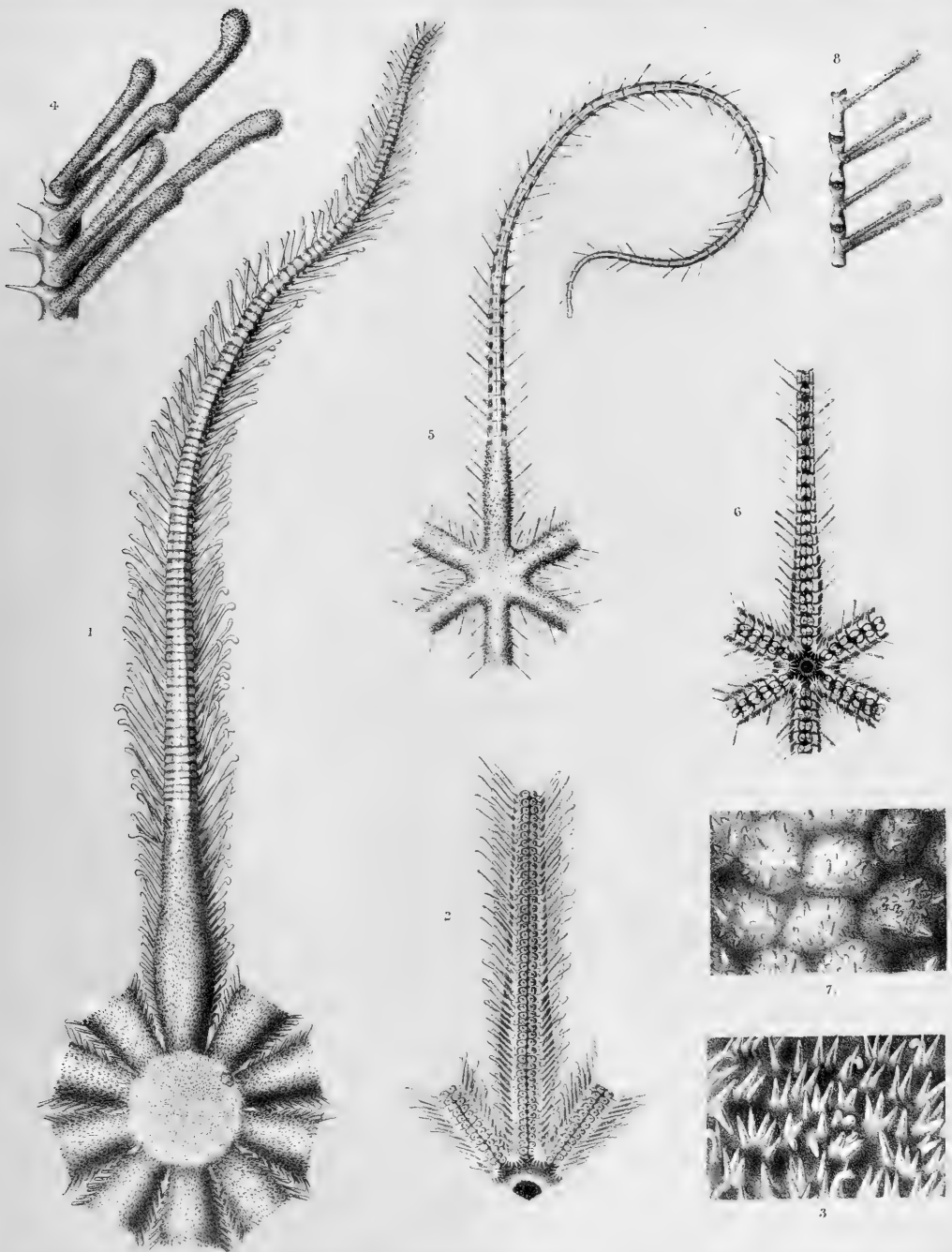
Western Publishing Co.

1-3. BRISINGA ARMILLATA, n. sp. 4-7. BRISINGA DISCINCTA, n. sp.
 8-9. BRISINGA MEMBRANACEA, n. sp.

PLATE CXI.

PLATE CXI.

	Page
Figs. 1-4. <i>FREYELLA PENNATA</i> , n. sp.	618
Fig. 1. Abactinal aspect; natural size.	
Fig. 2. Actinal aspect; natural size.	
Fig. 3. A portion of the abactinal surface of an ovarian region; magnified 10 diameters.	
Fig. 4. Adambulacral plates; magnified 5 diameters.	
Figs. 5-8. <i>FREYELLA BENTHOPHILA</i> , n. sp.	641
Fig. 5. Abactinal aspect; magnified 2 diameters.	
Fig. 6. Actinal aspect; magnified 2 diameters.	
Fig. 7. A portion of the abactinal surface of an ovarian region; magnified 20 diameters.	
Fig. 8. Adambulacral plates; magnified 6 diameters.	



1-4. FREYELLA PENNATA, n sp.

5-8. FREYELLA BENTHOPHILA, n sp.

PLATE CXII.

PLATE CXII.

Figs. 1-5. FREYELLA ECHINATA, n. sp. Page
623

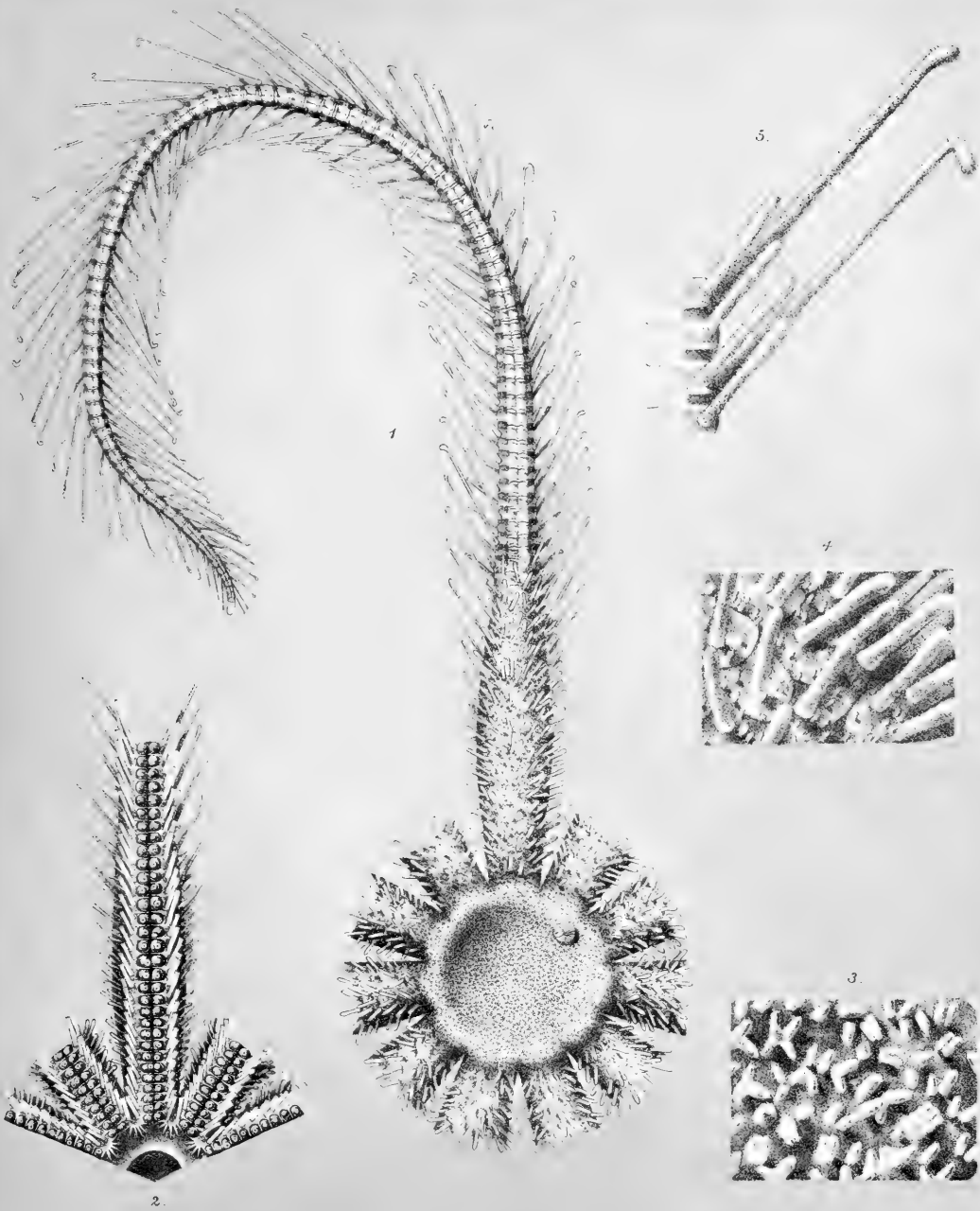
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface of the disk; magnified 15 diameters.

Fig. 4. A portion of the abactinal surface of an ovarial region; magnified 5
diameters.

Fig. 5. Adambulacral plates; magnified 4 diameters.



FREYELLA ECHINATA, n. sp.

PLATE CXIII.

PLATE CXIII.

Figs. 1-4. *FREYELLA FRAGILISSIMA*, n. sp. Page
626

Fig. 1. Abactinal aspect; natural size.

Fig. 2. Actinal aspect; natural size.

Fig. 3. A portion of the abactinal surface of an ovarial region; magnified 10
diameters.

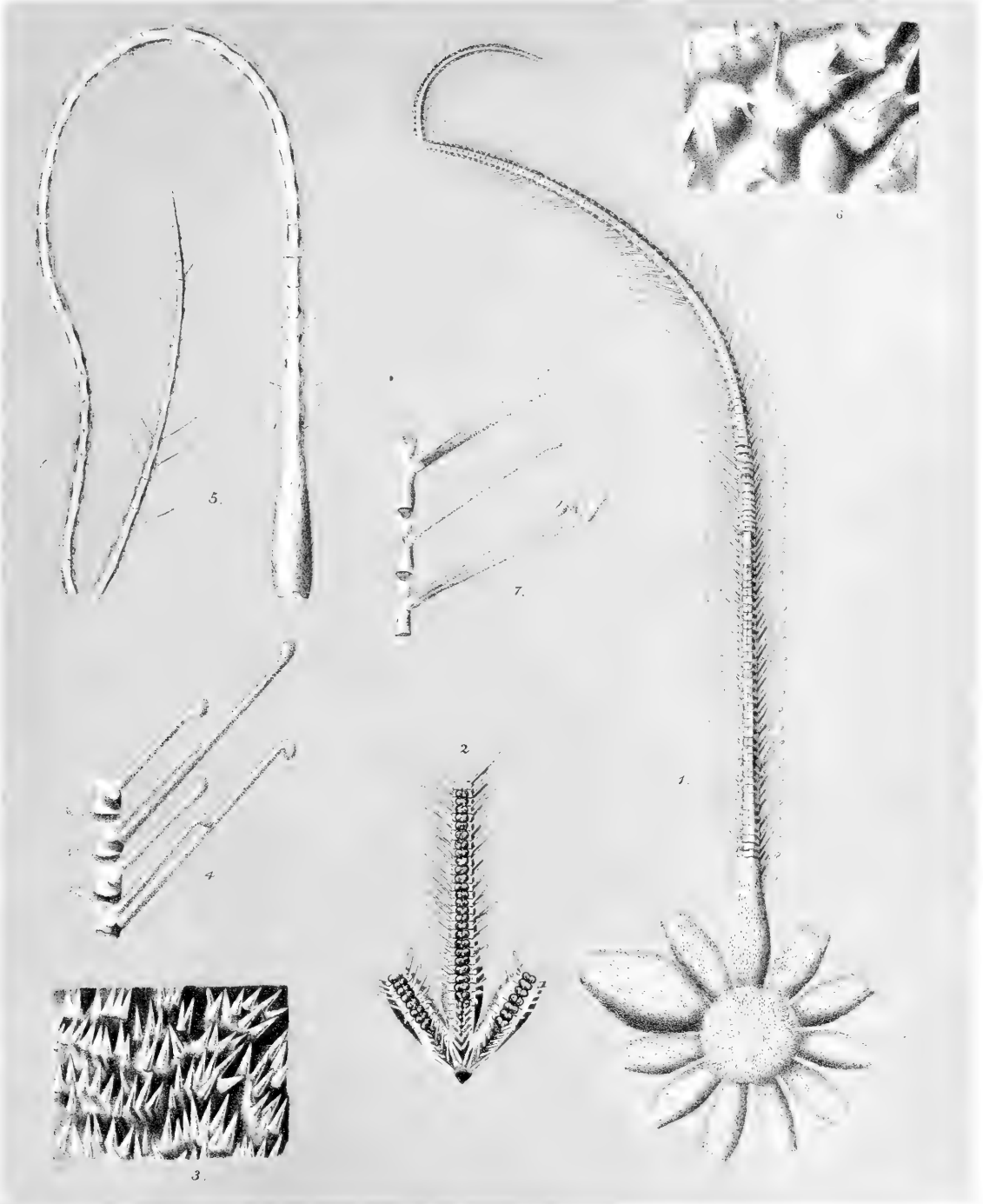
Fig. 4. Adambulacral plates; magnified 5 diameters.

Figs. 5-7. *FREYELLA ATTENUATA*, n. sp. 645

Fig. 5. Abactinal aspect of a ray; magnified 2 diameters.

Fig. 6. A portion of the abactinal surface of an ovarial region; magnified 16
diameters.

Fig. 7. Adambulacral plates; magnified 4 diameters.



W.H. Crowther del. Hollick lith.

Hanhart imp.

1-4. FREYELLA FRAGILISSIMA, n. sp. 5-7. FREYELLA ATTENUATA, n. sp.

PLATE CXIV.

PLATE CXIV.

Figs. 1-4. *FREYELLA BRACTEATA*, n. sp. Page
629

Fig. 1. Abactinal aspect; natural size.

Fig. 2. Actinal aspect; natural size.

Fig. 3. A portion of the abactinal surface of an ovarial region; magnified 10
diameters.

Fig. 4. Adambulacral plates; magnified 5 diameters.

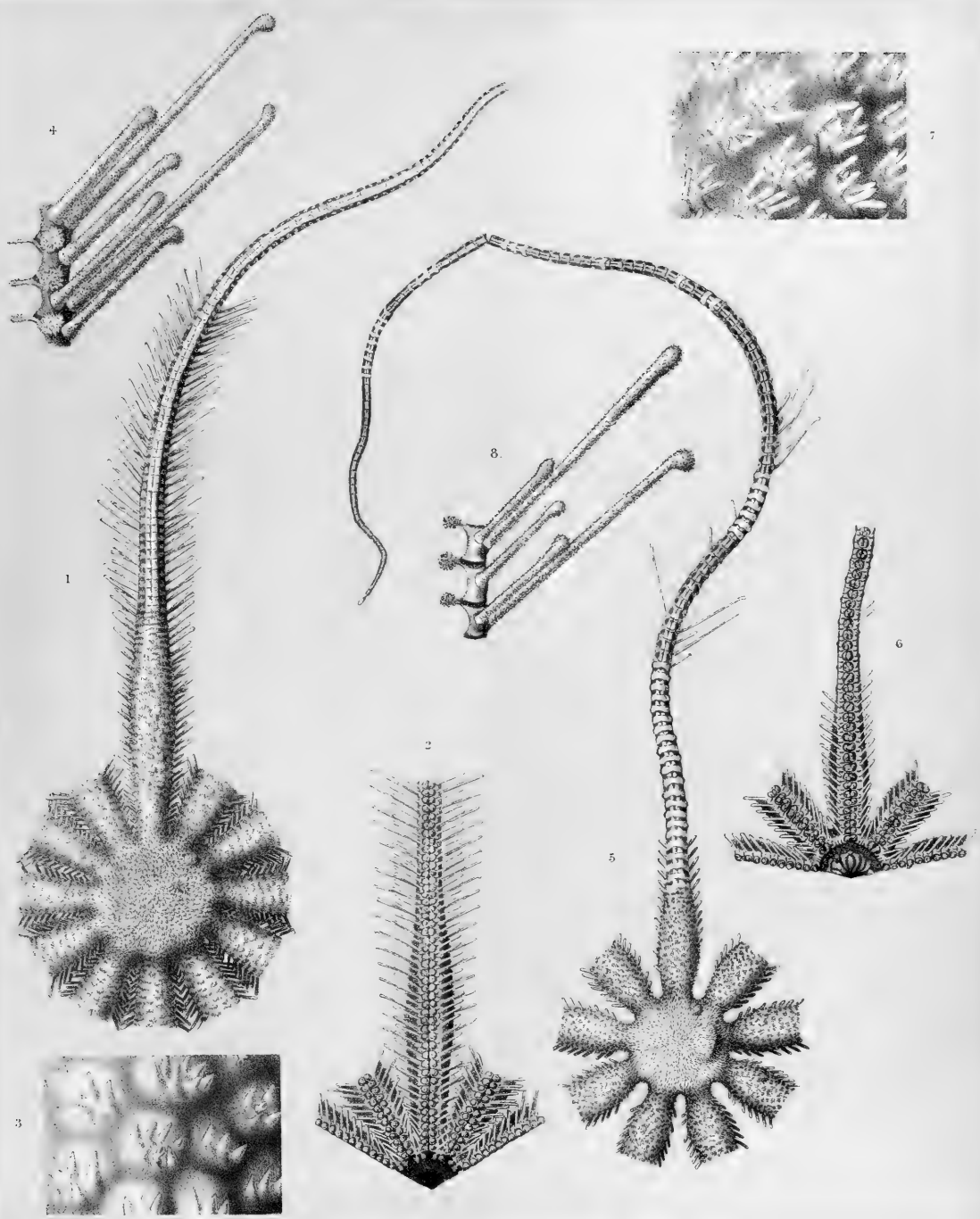
Figs. 5-8. *FREYELLA HEROINA*, n. sp. 643

Fig. 5. Abactinal aspect; natural size.

Fig. 6. Actinal aspect; natural size.

Fig. 7. A portion of the abactinal surface of an ovarial region; magnified 12
diameters.

Fig. 8. Adambulacral plates; magnified 4 diameters.



W. H. Crowther del et lith.

Mintern Bros imp.

1-4 FREYELLA BRACTEATA, n. sp. 5-8. FREYELLA HEROINA, n. sp.

PLATE CXV.

PLATE CXV.

Figs. 1-5. FREYELLA DIMORPHA, n. sp. Page
632

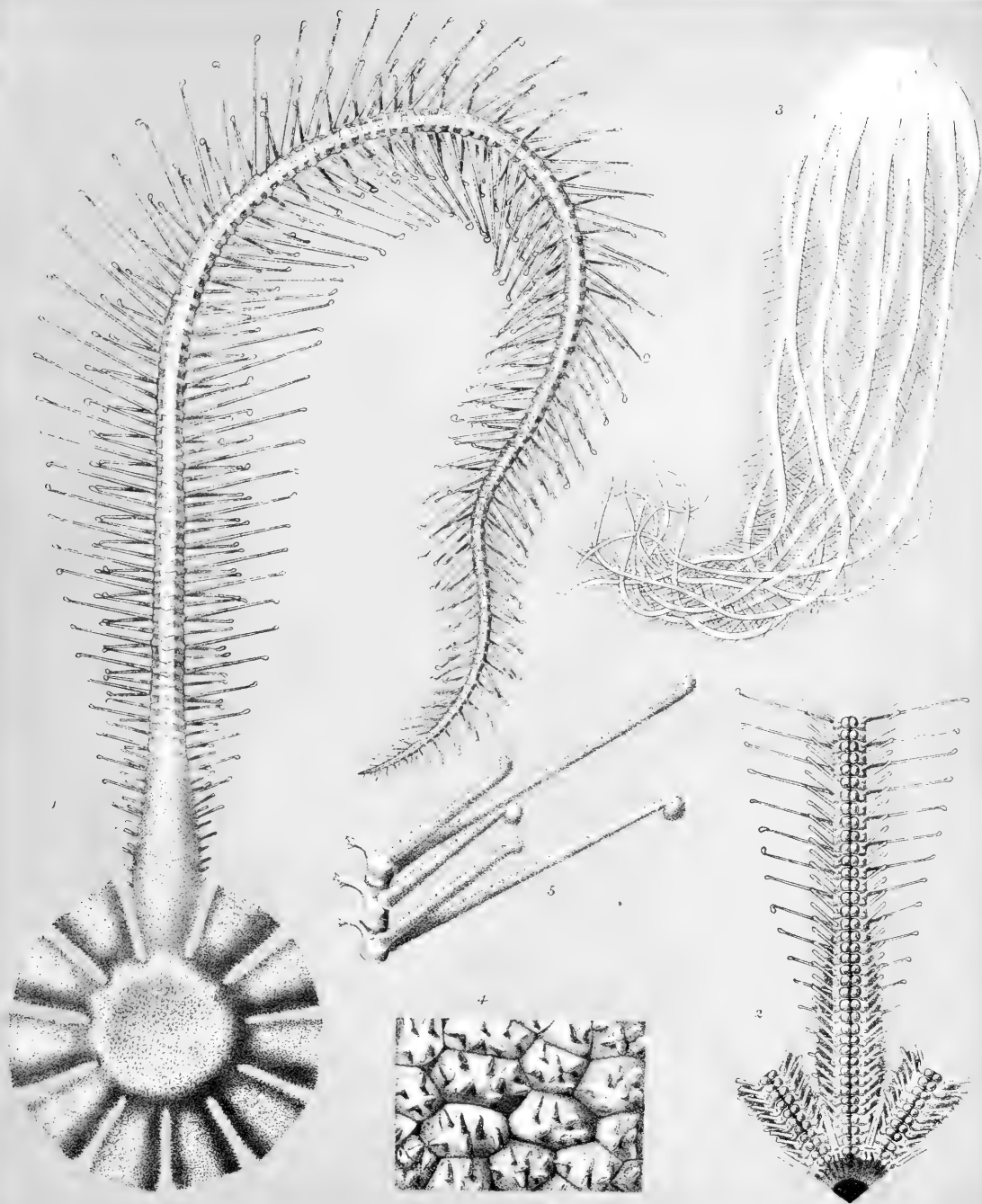
Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. Profile view in outline; two-thirds of natural size.

Fig. 4. A portion of the abactinal surface of an ovarial region; magnified 10 diameters.

Fig. 5. Adambulacral plates; magnified 3 diameters.



W. H. Cressler del. Hillebrand lit.

FREYELLA DIMORPHA, n. sp.

Plate art. imp.

PLATE CXVI.

PLATE CXVI.

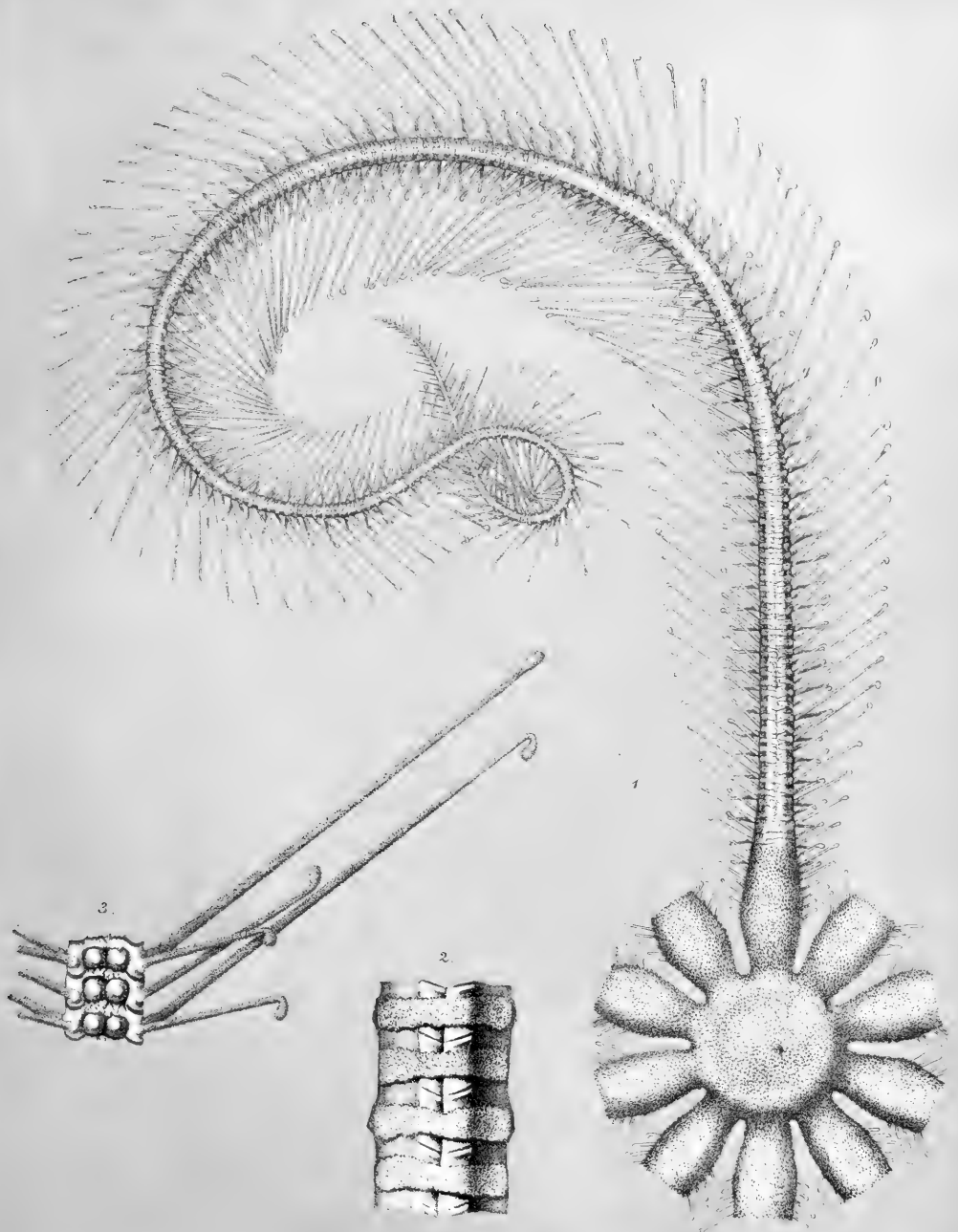
Figs. 1-3. FREYELLA REMEX, n. sp.

Page
635

Fig. 1. Abactinal aspect; natural size.

Fig. 2. Abactinal aspect of a portion of a ray; magnified 3 diameters.

Fig. 3. Actinal aspect of a portion of a ray; magnified 5 diameters.



W.H. Crowther del. Hollick del.

FREYELLA REMEX, n. sp

Hanhart 1896

PLATE CXVII.

PLATE CXVII.

Figs. 1-3. FREYELLA TUBERCULATA, n. sp. Page
638

Fig. 1. Abactinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 2. Actinal aspect; magnified $1\frac{1}{2}$ diameters.

Fig. 3. A portion of the abactinal surface of an ovarial region; magnified 12
diameters.

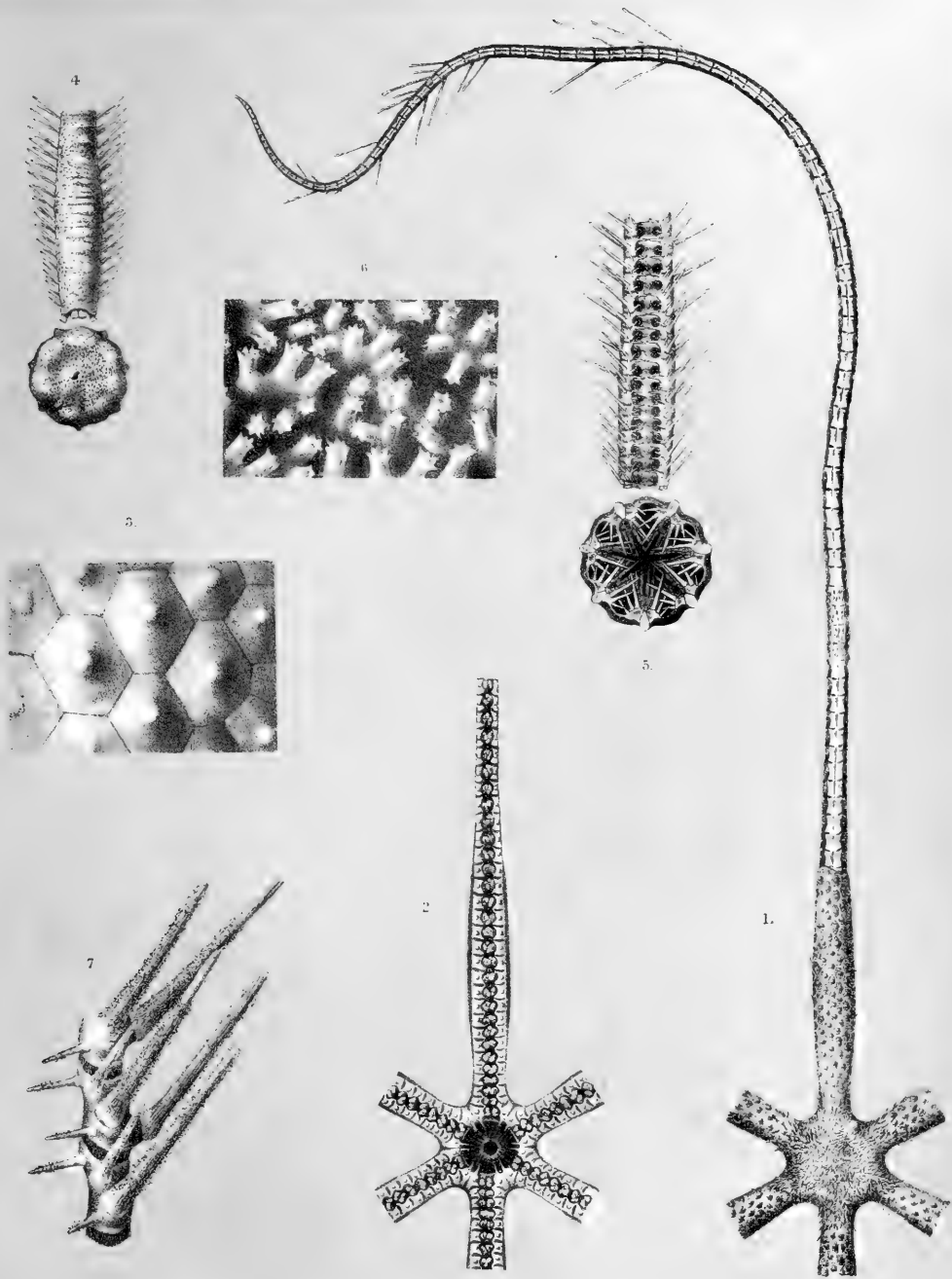
Figs. 4-7. COLPASTER SCUTIGERULA, n. sp. 648

Fig. 4. Abactinal aspect of a portion of a ray and the disk; magnified $1\frac{1}{2}$ diameters.

Fig. 5. Actinal aspect of a portion of a ray and the disk; magnified 2 diameters.

Fig. 6. A portion of the abactinal surface of the disk; magnified 20 diameters.

Fig. 7. Adambulacral plates; magnified 10 diameters.



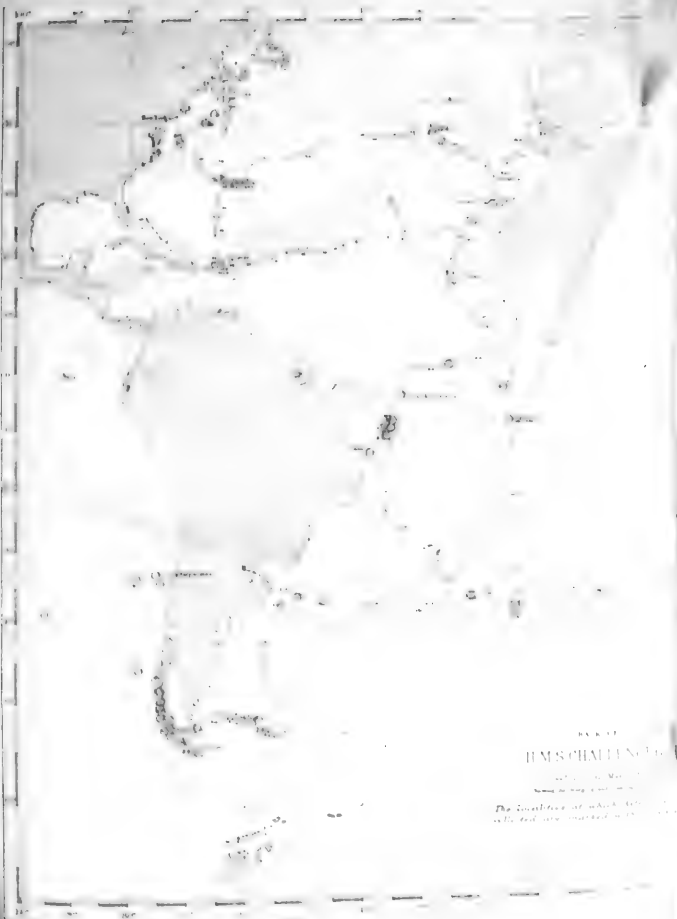
W.H. Crowther del. et lith.

Museum. Bras. imp.

1-3. FREYELLA TUBERCULATA, n. sp.

4-7. COLPASTER SCUTIGERULA, n. sp.



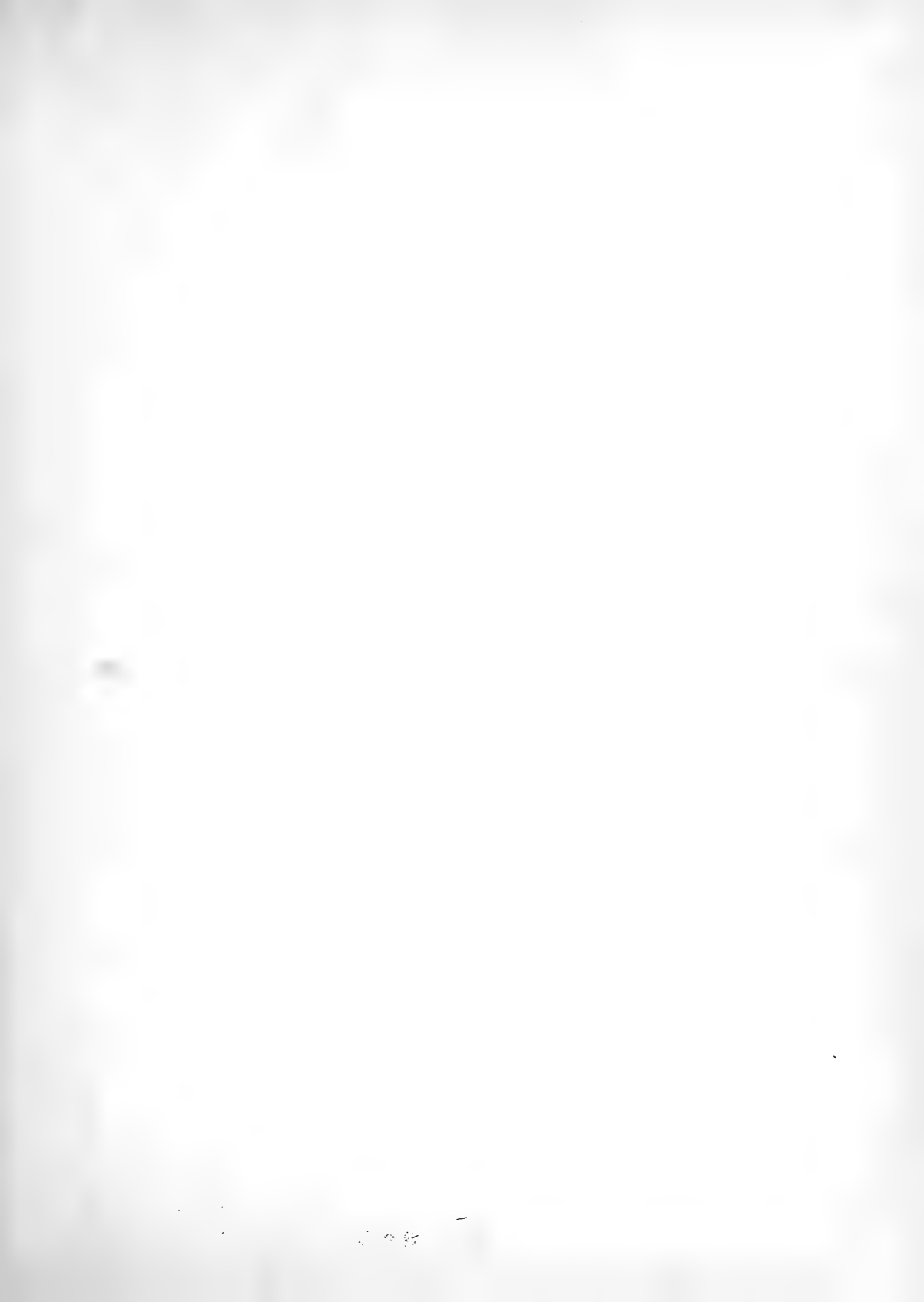


THE CHALLENGER
 1873-76
 The positions of which were
 determined by the Challenger



Mr. J. W.

900 (2)







SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00722 1377