

DESCRIPTION OF THE PLATES.

PLATE I.

- Fig. 1. Side view of skull and maxilla of *Hyæna crocuta*.
 Fig. 2. View of basis cranii.

PLATE II.

- Fig. 1. Palate of Hyæna with molar teeth.
 Fig. 2. Side view of maxilla (*bis*), right side.
 Fig. 3. Portion of the corresponding left maxilla.
 Fig. 4. Occipital area with foramen magnum and condyles.

PLATE III.

- Fig. 1. Right ramus of mandible of *F. pardus*.
 Fig. 2. Fragment of corresponding left maxilla.
 Figs. 3*a, b, c, d*. Different views of under jaw of *F. pardina*.
 Fig. 4. Anterior portion of right mandible of *F. pardina*.
 Fig. 5. Posterior portion of left mandible of *F. pardina*.
 Figs. 6*a, b, c*. Left mandible of *F. caligata* seu *bubastes*.
 Fig. 7. Right mandible of *Canis vulpes*.
 Fig. 8. Fragment of maxilla of *Meles taxus* (human period).
 Fig. 9. Right mandible of young of *Meles taxus*.

PLATE IV.

- Figs. 1, 2. Right mandible of *Ursus*?
 Figs. 3, 4. Anterior part of right mandible, containing the fourth premolar.

PLATE V.

- Fig. 1. Left ulna of *Ursus* —— ?
 Fig. 2. Portion of right mandible of young *Ursus* —— ?
 Fig. 3. Fragment of maxilla of same.
 Figs. 4, 5. Hinder part of left mandible, containing the third molar *in situ*. Fig. 7 is the second molar of the same jaw.
 Fig. 6. A detached canine.

PLATE VI.

- Fig. 1. Second right metacarpal of *Ursus*. Fig. 2. Fifth right metacarpal of *Ursus*.
 Fig. 3. Fifth right metacarpal of *Ursus*. Fig. 4. Second right metacarpal of *Ursus*.
 Fig. 5. Fifth right metacarpal of *Ursus*. Fig. 6. Fourth right metacarpal of *Ursus*.
 Figs. 7-9. Different views of axis of *Ursus*. Fig. 10. Fifth metacarpal of *Felis pardus*.

PLATE VII.

- Fig. 1. Left maxilla &c. of young Horse. Fig. 2. Crown surface of deciduous teeth.
 Fig. 3. A small first phalanx.

PLATE VIII.

- Fig. 1. Portion of scapula of *Equus caballus*.
 Fig. 2. The glenoid fossa.

PLATE IX.

- Fig. 1. Head of humerus of *Equus caballus*.
 Fig. 2. Distal articular surface of femur. Fig. 3. Portion of the calcaneum.
 Fig. 4. Magnified view of a detached third deciduous upper molar.

PLATE X.

- Figs. 1-3. Different views of upper molar of *Rhinoceros*.
 Figs. 4, 5. Dorsal and crown aspects of right second upper molar.
 Figs. 6, 7. Same views of corresponding (?) left upper molar.
 Fig. 8. Upper molar, enamel detached.

PLATE XI.

- Fig. 1. Proximal epiphyses of humerus of *Rhinoceros*, naturally detached.
 Fig. 2. Outline sketch of third metacarpal of *R. hemitæchus*, from Ilford.

PLATE XII.

Upper portion of right femur of *Rhinoceros*, anterior view.

PLATE XIII.

The same, viewed from behind.

PLATE XIV.

- Fig. 1. Right radius of *Rhinoceros*. Fig. 2. Proximal articular surface.
 Fig. 3. Proximal articular surface of *R. hemitæchus*, from Ilford.
 Fig. 4. Right tibia.

PLATE XV.

- Figs. 1-3. Astragalus of *Rhinoceros*. Figs. 4-8. Os lunare of *Rhinoceros*.

PLATE XVI.

- Fig. 1. The entire third and a portion of the fourth metatarsal, in natural apposition,
 of *Rhinoceros*.
 Fig. 2. Posterior view of the third metatarsal.
 Fig. 3. The proximal articular surfaces. Fig. 4. The distal articular surfaces.

Fig. 3. Portion of humerus, with the distal articular end entire.

Fig. 4. An entire radius, with the lower portion of the ulna *in situ*: *a*, proximal articular surface; *b*, distal articular surface.

PLATE XXV.

Fig. 1. Right femur of *Ibex*: *a*, head.

Fig. 2. A right femur of the largest size.

Fig. 3. A right tibia: *a*, proximal articular surface; *b*, distal articular surface.

Fig. 4. The distal end of a tibia of the largest size: *a*, distal articular surface.

Figs. 5 *a*, *b*, *c*. Different aspects of the astragalus.

Figs. 6 *a*, *b*, *c*. Different aspects of an ungual phalanx.

PLATE XXVI.

Figs. 1-4. Metacarpals of *Ibex*, of various sizes.

Figs. 5, 6. Metatarsals.

PLATE XXVII.

ODONTOGRAMS.

NOTE.—The diagrammatic figures termed “Odontograms” (see Proc. Roy. Soc. vol. xviii. p. 544, 1870) are intended to supply the place of tables of measurements of the teeth, and at the same time to exhibit graphically their proportional dimensions in each case. The figures also serve to indicate which of the teeth of the typical series are absent or present. They are to be read thus:—

The squares in each transverse series contain the odontogram of the upper or lower (molar) dentition, or, in the case of the smaller animals, both, in which case the maxillary is marked *a*, and the mandibular *b*; and on the left-hand margin the name of the tooth with which each horizontal line throughout the series corresponds, is indicated. In the figures themselves each dark horizontal line corresponds with a single tooth, whose antero-posterior diameter, or length, is shown by the light shade, and transverse diameter or thickness by the dark shade. As the paper upon which the figures are laid down is divided into 20ths of an inch (0.05, = 0.00126 metre), the dimensions of the teeth can be read off at once.

Fig. 1. Maxillary molar dentition of *Hyæna spelæa*.

Fig. 2. Maxillary molar dentition of *H. crocuta* (Gibraltar).

Fig. 3. Maxillary molar dentition of *H. crocuta*.

Fig. 4. Maxillary molar dentition of *H. brunnea*.

Fig. 5. Maxillary molar dentition of *H. striata*.

Figs. 6 and 6*a*. Maxillary and mandibular dentition of *Ursus ferox fossilis*.

Figs. 7 and 7*a*. Maxillary and mandibular dentition of *U. ferox* s. *horribilis*.

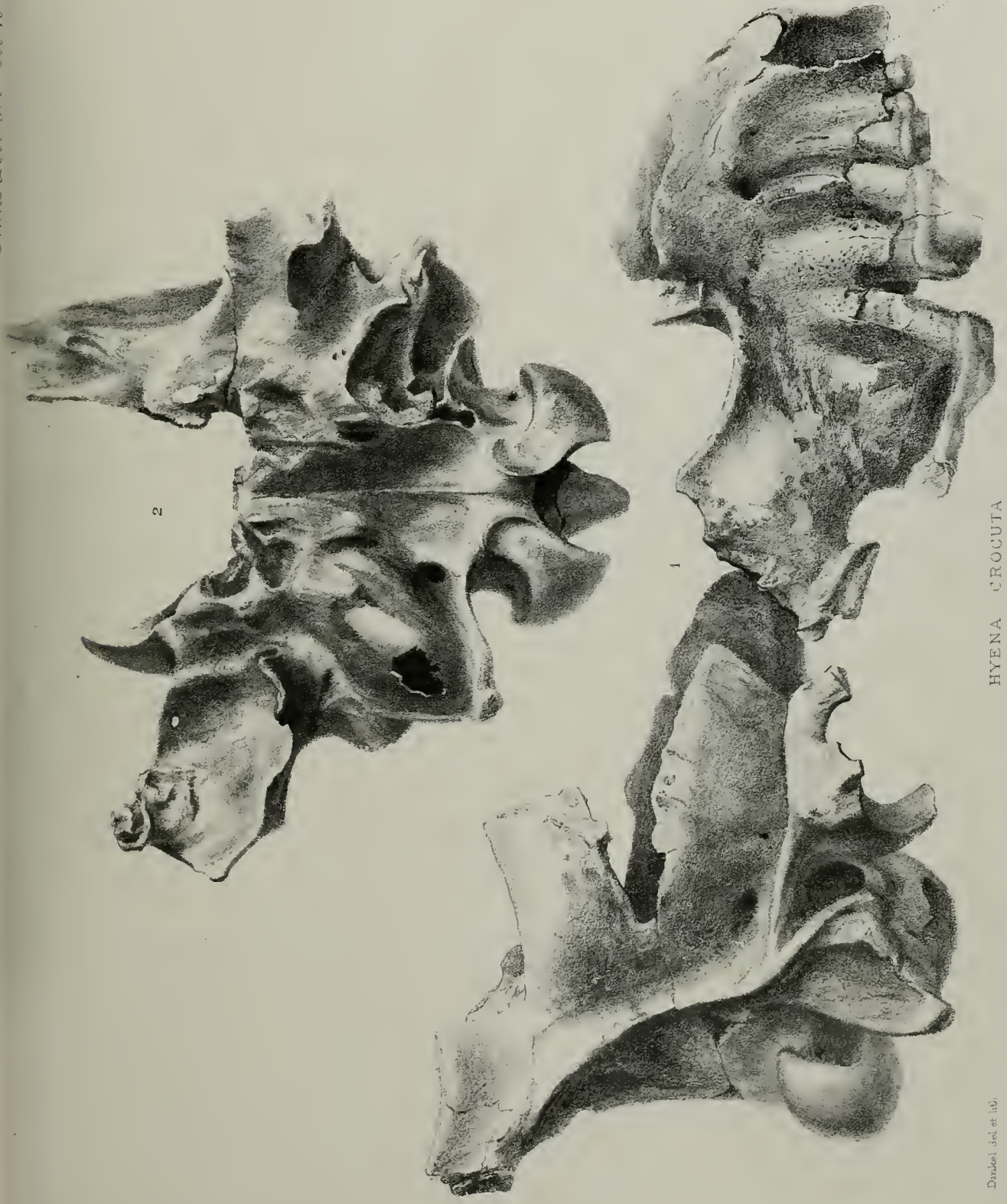
Figs. 8 and 8*a*. Maxillary and mandibular dentition of the Gibraltar *Ursus*.

Fig. 9. Maxillary dentition of *U. letourneuxianus*.

Fig. 9*a*. Mandibular dentition of *U. faidherbianus*.

- Figs. 10 and 10*a*. Maxillary and mandibular dentition of *U. arctos*, var. *isabellinus*.
 Fig. 11. Maxillary and mandibular dentition of *Felis pardina* (Gibraltar).
 Fig. 12. Maxillary and mandibular dentition of *F. pardina* (R.C.S.).
 Fig. 13. Maxillary and mandibular dentition of *F. lynx* (R.C.S.).
 Fig. 14. Mandibular dentition of *F. bubastes*, from Blainville's figure.
 Fig. 15. Mandibular dentition of *F. caligata* (Gibraltar).
 Fig. 16. Mandibular dentition of *F. maniculata fera*, from Blainville's figure.
 Fig. 17. Mandibular dentition of *F. (Chaus) caffra*, Gray.
 Fig. 18. Mandibular dentition of *F. chaus*, from Blainville's figure (mummy).
 Fig. 19. Mandibular dentition of *F. serval*, from Blainville's figure.
 Fig. 20. Mandibular dentition of *F. domestica*.
 Fig. 21. Maxillary and mandibular dentition of *F. pardus* (Gibraltar).
 Fig. 22. Maxillary and mandibular dentition of *F. pardus* (R.C.S.).
 Fig. 23. Maxillary and mandibular dentition of *F. antiqua*, from Gervais's figure.
 Fig. 24. Mandibular dentition (mean) of *Cervus elaphus* (Gibraltar).
 Fig. 25. Mandibular dentition (mean) of *C. elaphus* (Thames valley).
 Figs. 26 *a, b*. Maxillary and mandibular dentition of *Capra hispanica*.
 Figs. 27 *a, b*. Maxillary and mandibular dentition of *C. hispanica* (Gibraltar, A).
 Figs. 28 *a, b*. Maxillary and mandibular dentition of *C. hispanica* (Gibraltar, B).
 Figs. 29 *a, b*. Maxillary and mandibular dentition of *C. ibex* (Alpine).
 Fig. 30. Mandibular dentition of *Sus scrofa* (Gibraltar).
 Fig. 31. Mandibular dentition of German Wild Boar.
 Fig. 32. Mandibular dentition of common Pig.
 Fig. 33. Mandibular dentition of *Cervus dama* (Gibraltar).
 Fig. 34. Mandibular dentition of *C. dama* (R.C.S.).
 Fig. 35. Mandibular dentition of *C. elaphus* (Scotland).
 Fig. 36. Mandibular dentition of *C. elaphus? minor* (Thames valley).

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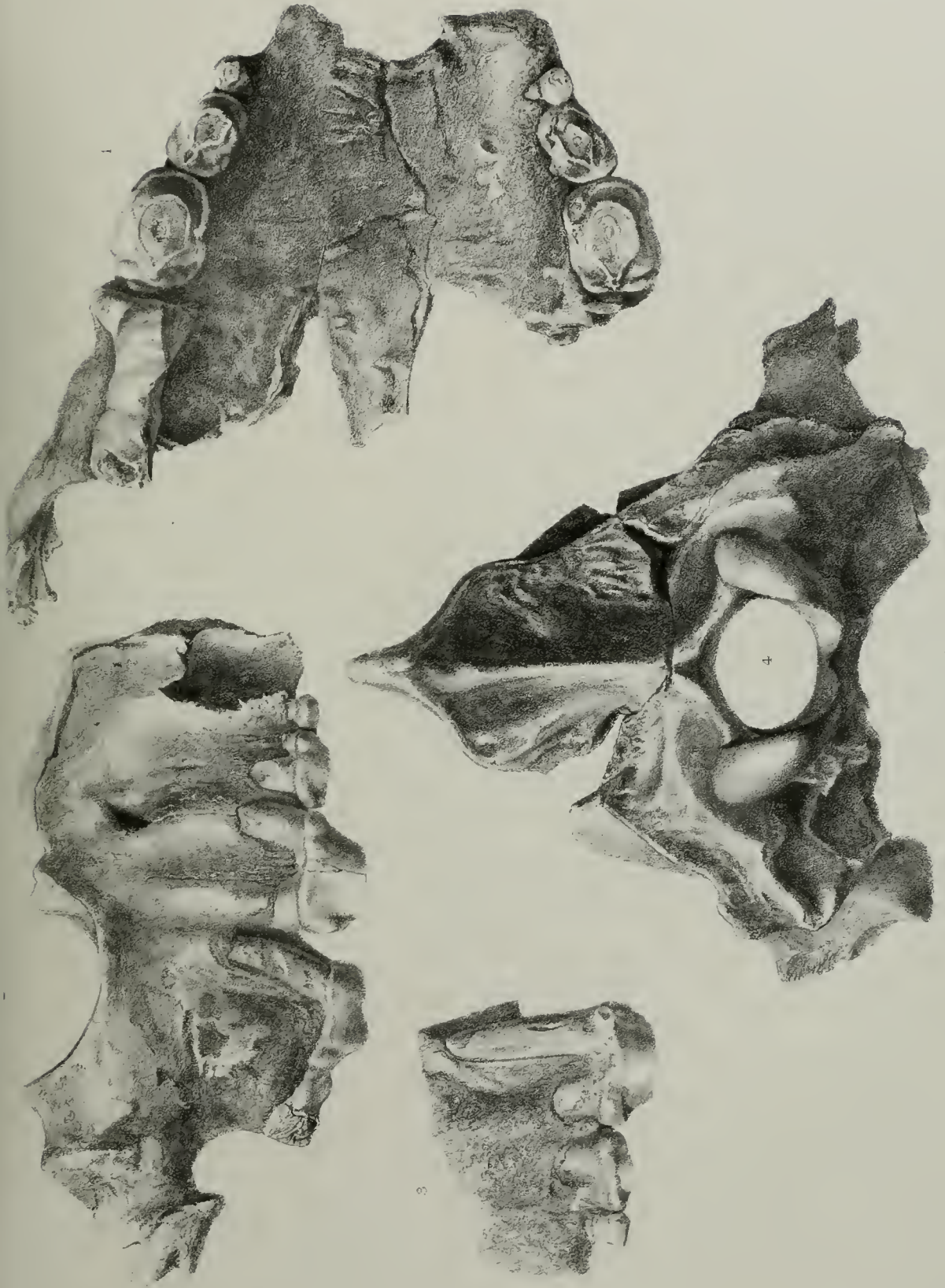


HYENA CROCUTA

Darwin, Sci. et. lib.

W. West & Co. Inc.



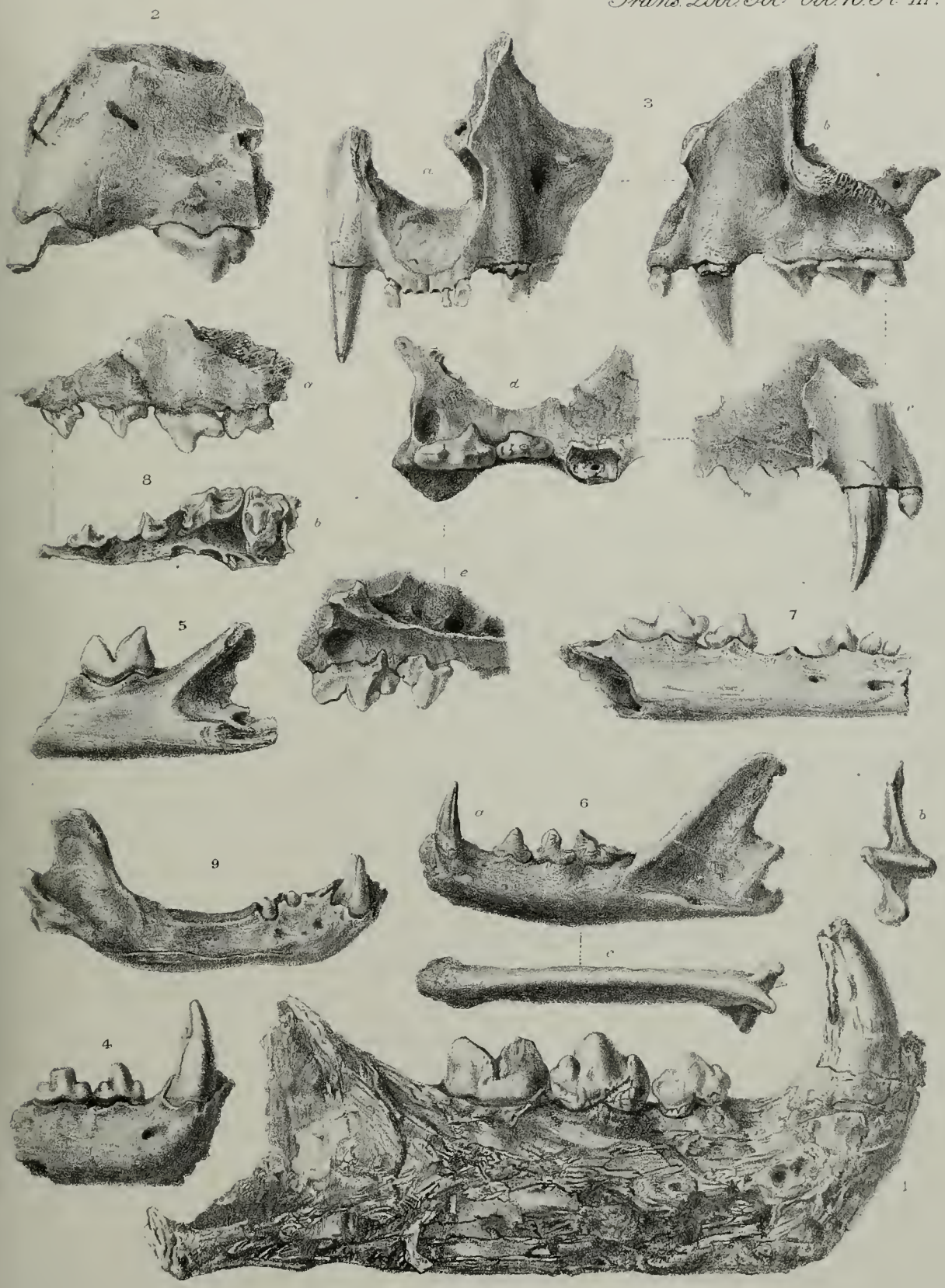


HYENA CROCUTA

Dinkel del. et. lith

W. West & C^o. imp







URSUS ARCTOS

Dinkel del. et lith.



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2

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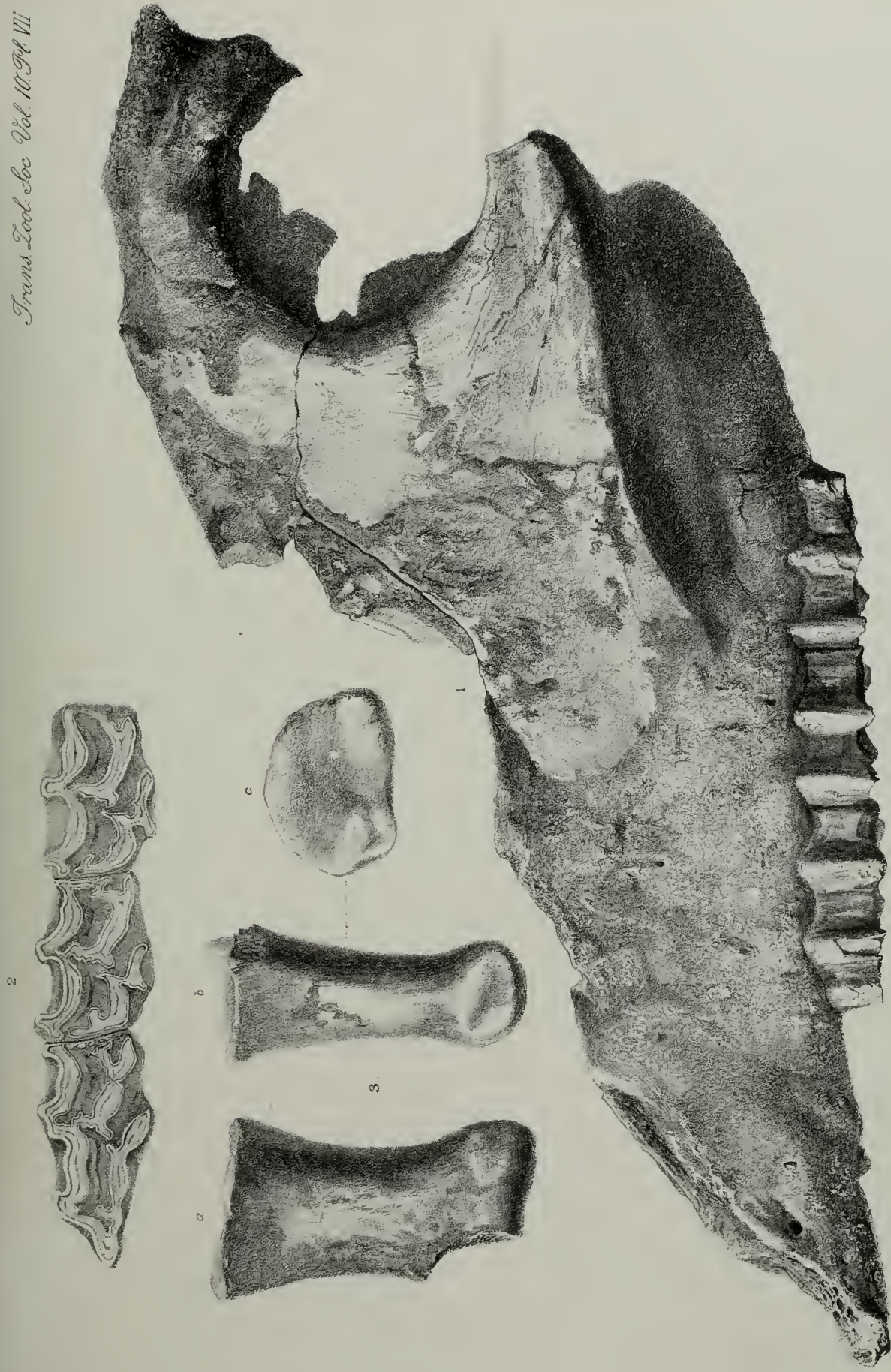


URSUS ARCTOS

Dinkel, del et lith

W West & Co imp





EQUUS CABALLUS.

W. West & Co. imp.

EMB dal. Dinkel lith.



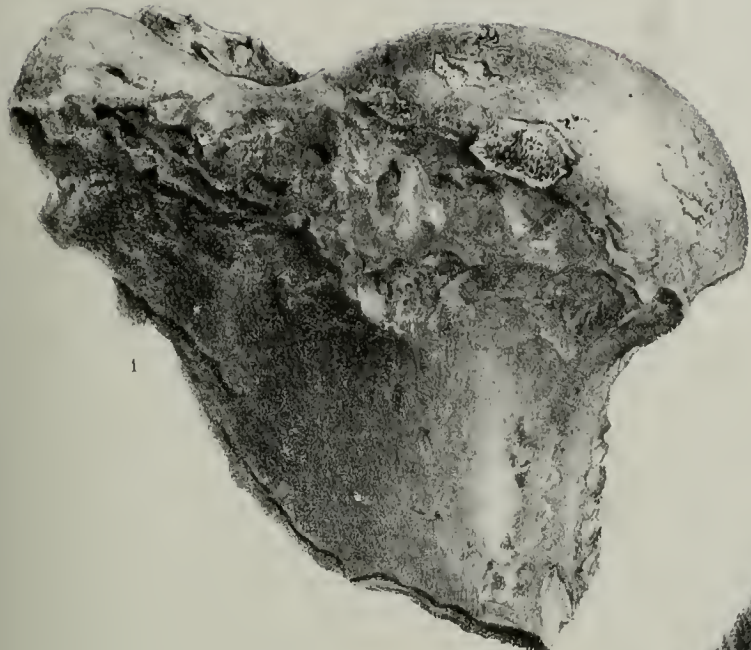
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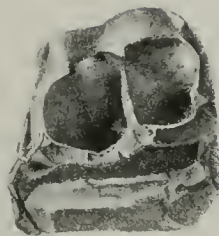
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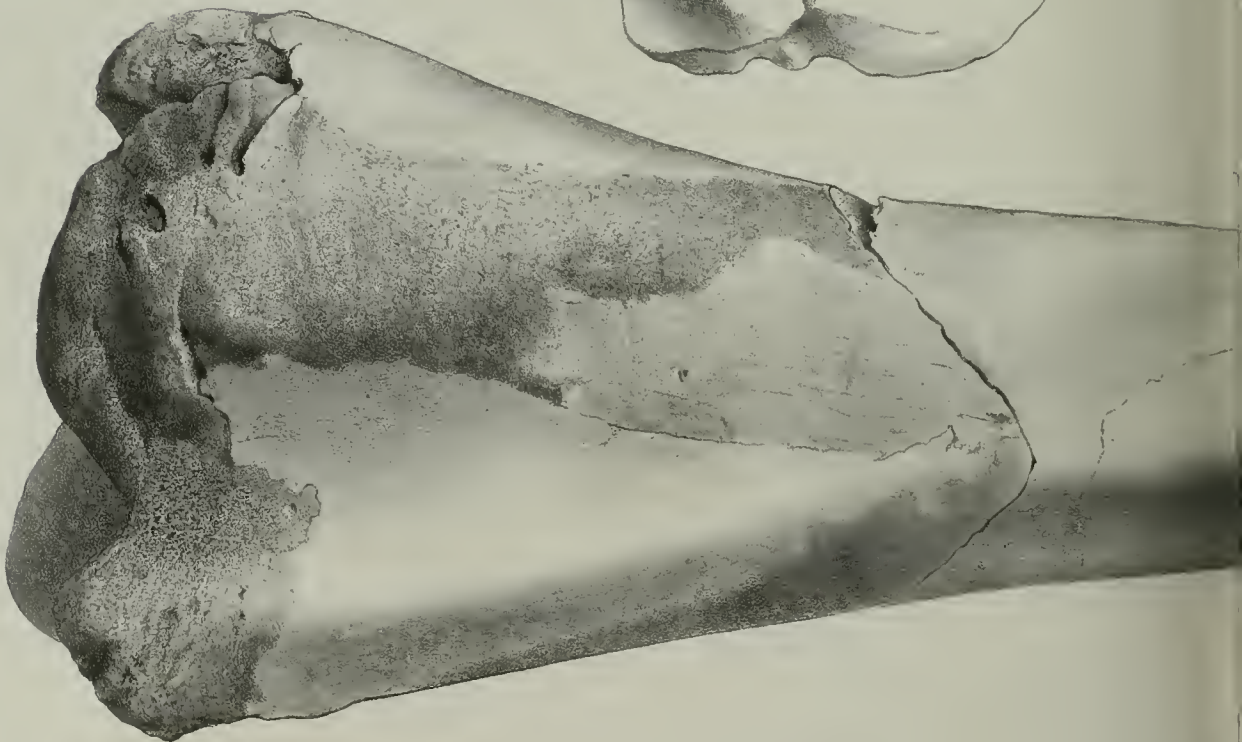
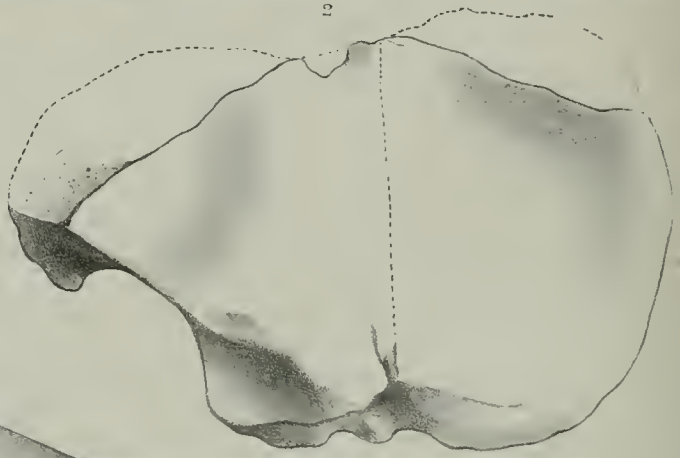


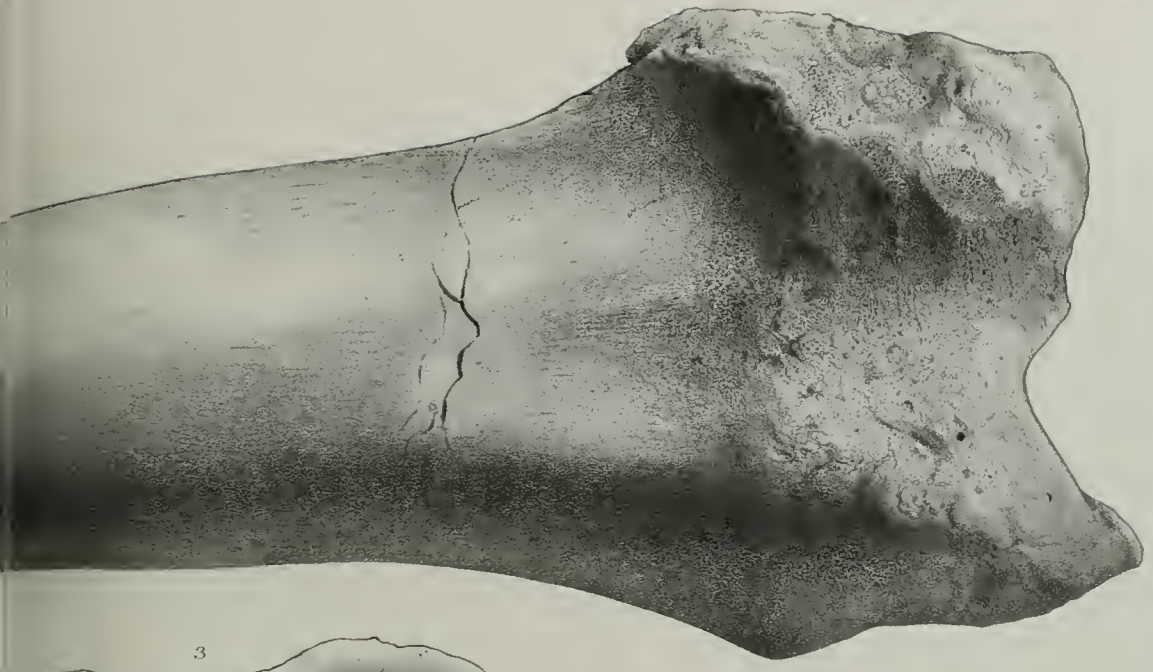




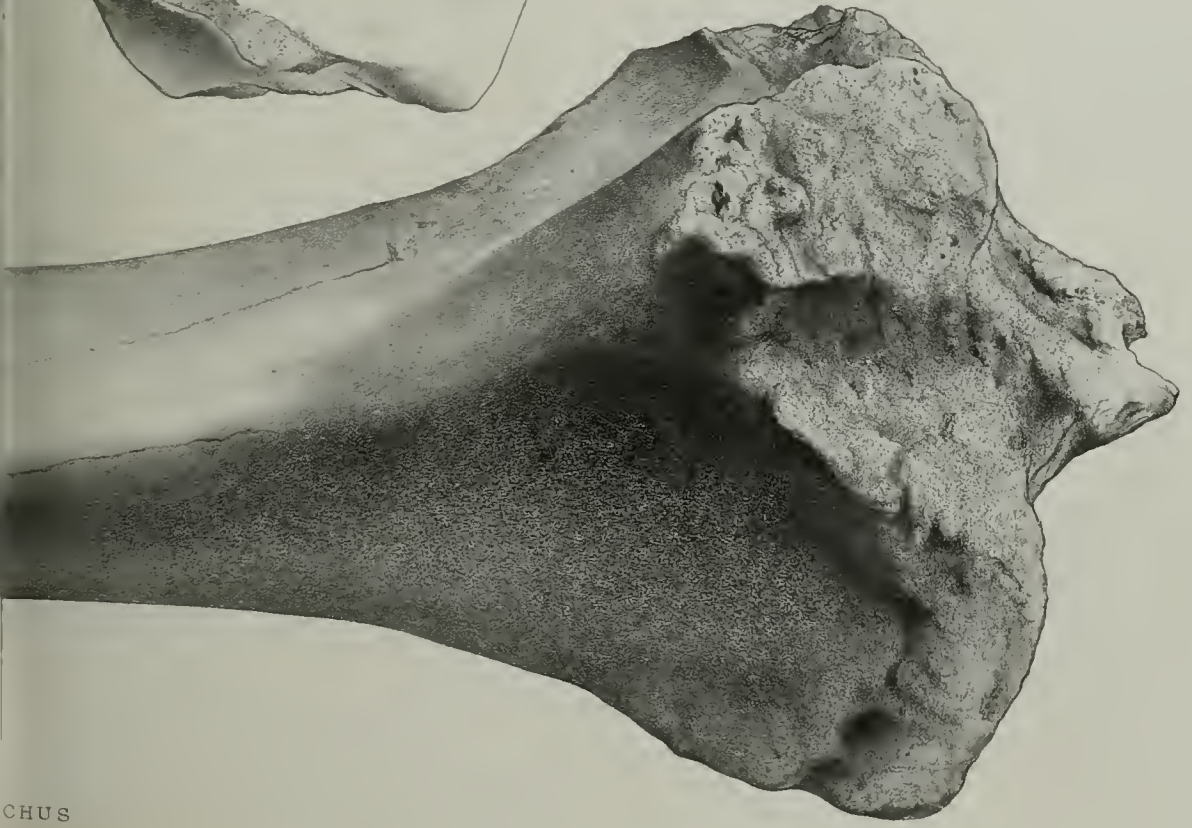
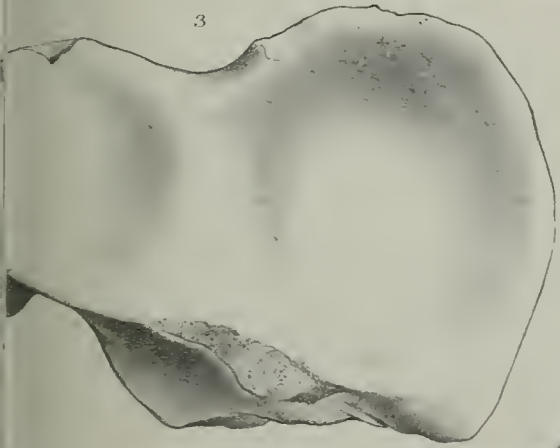








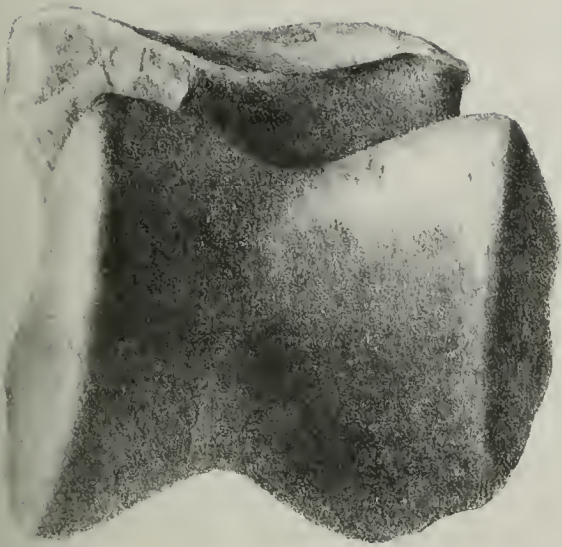
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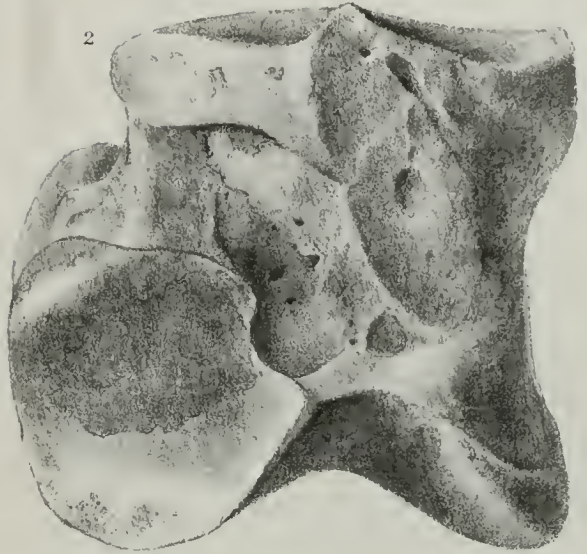
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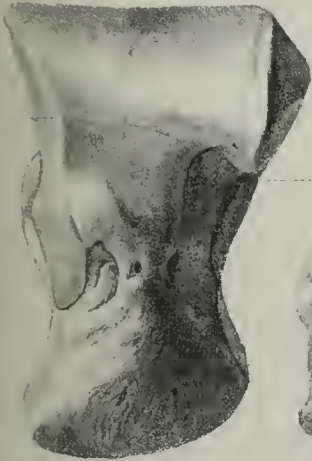
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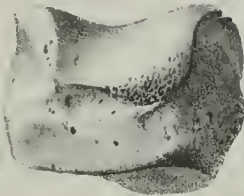
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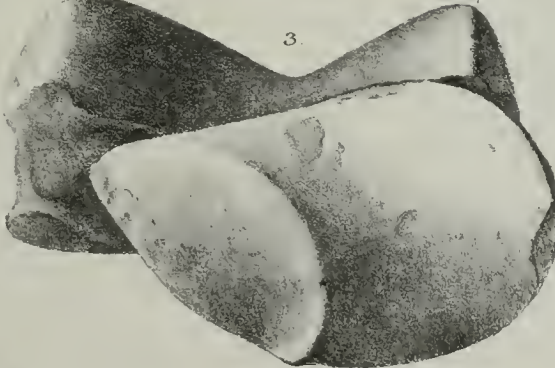
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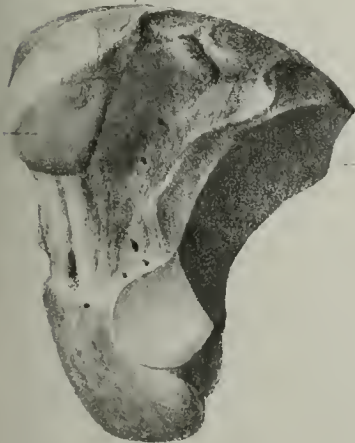
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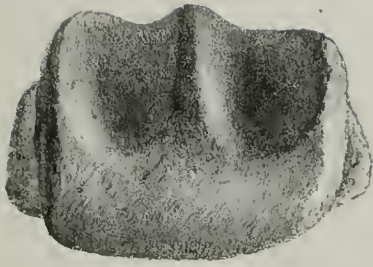


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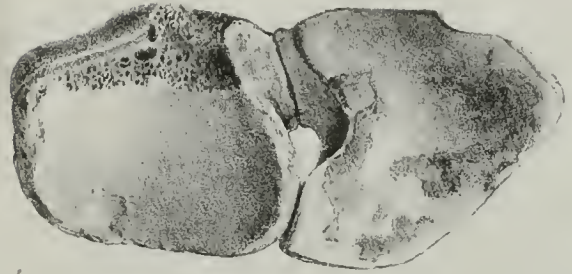




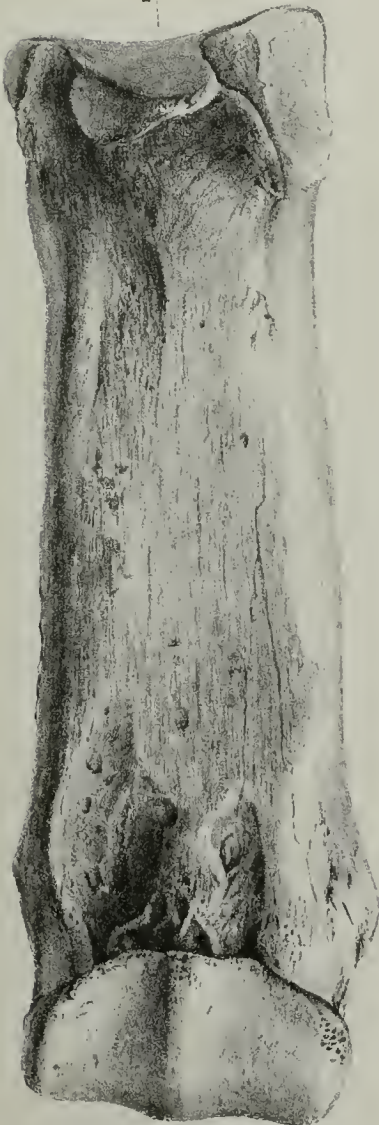
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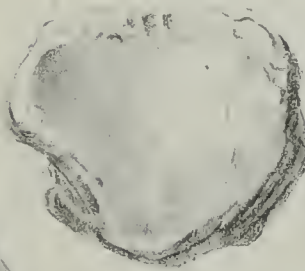
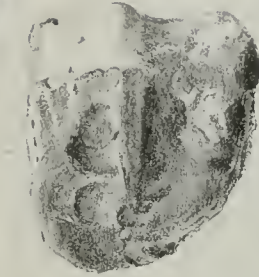
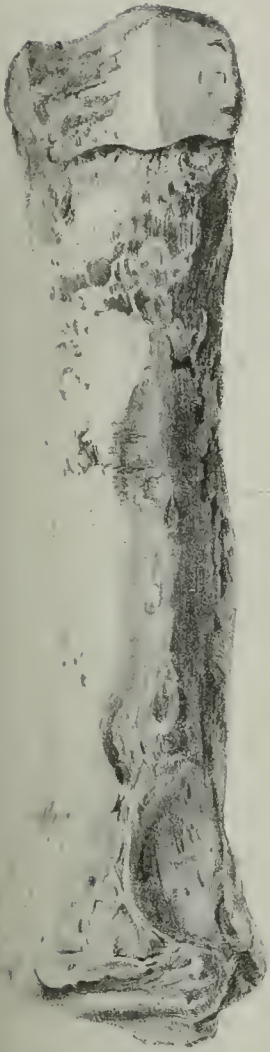
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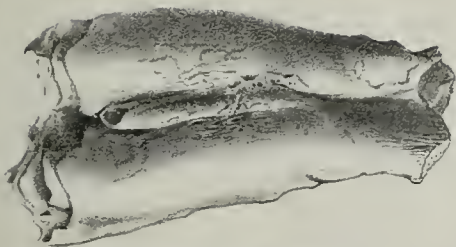
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8



RHINOCEROS HEMITÆCHUS





1-2. RHINOCEROS 3 EQUUS 4-5 BOS



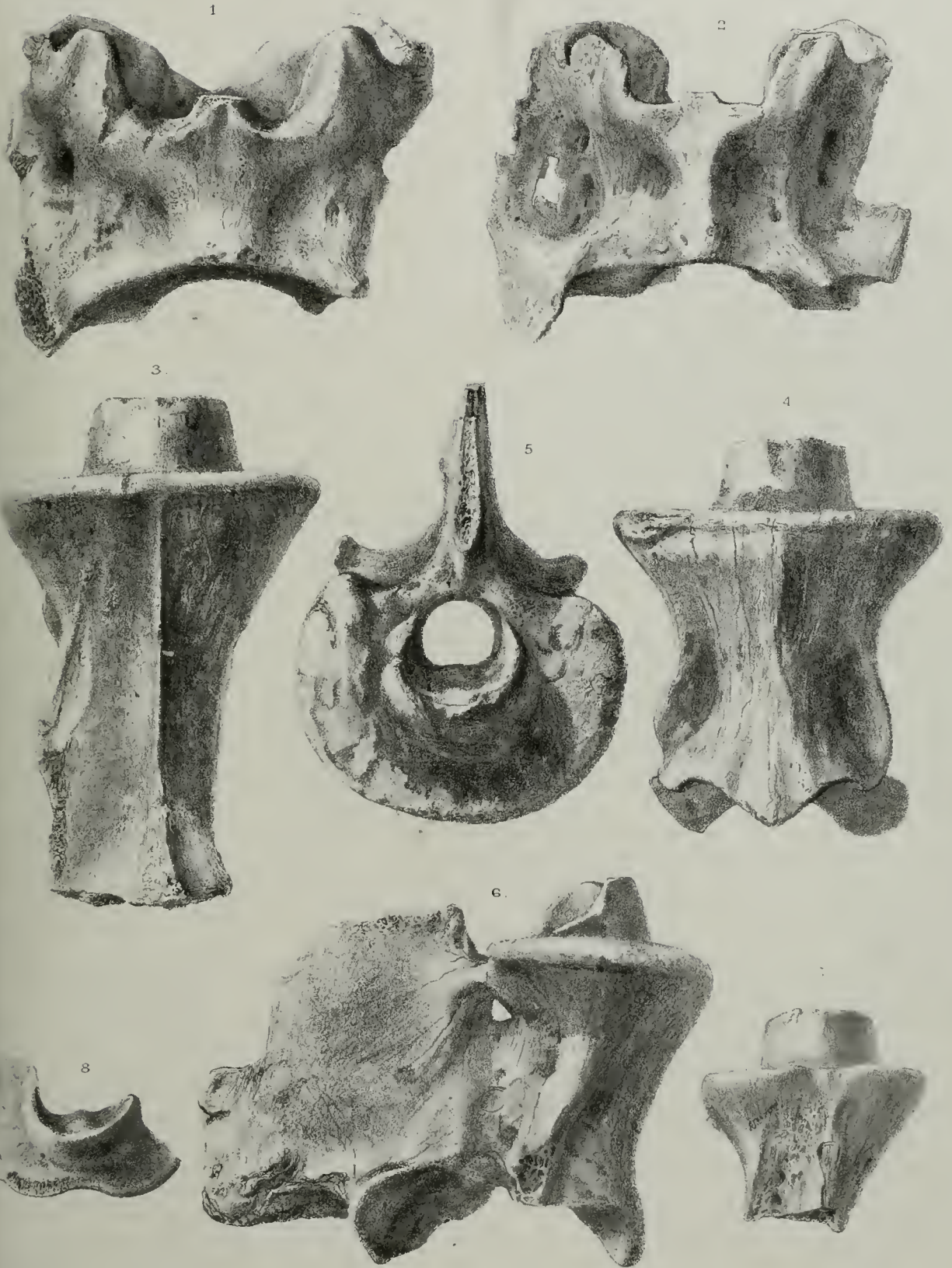


E. M. B. del. Dunkel lith

CERVUS DAMA

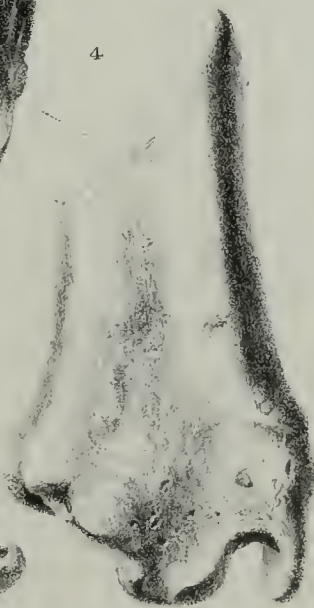
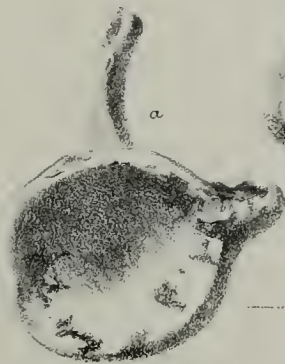
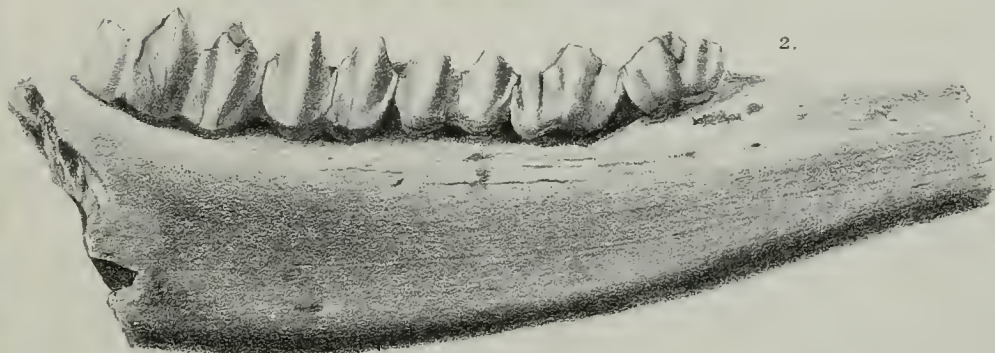
W. West & Co. imp.





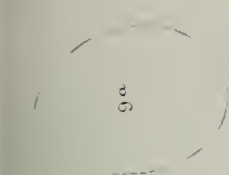
1 2 3 CERVUS BARBARUS 1 to 8 IBEX



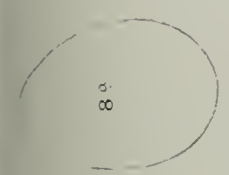


CERVUS BARBARUS





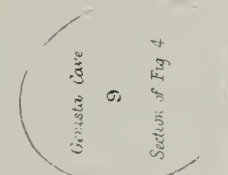
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8a



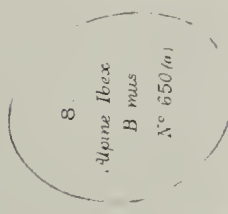
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Gravata Cave

Section of Fig 4

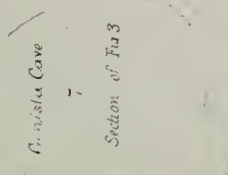


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Alpine Ibex

B mus

N° 650 (m)



7

Gravata Cave

Section of Fig 3

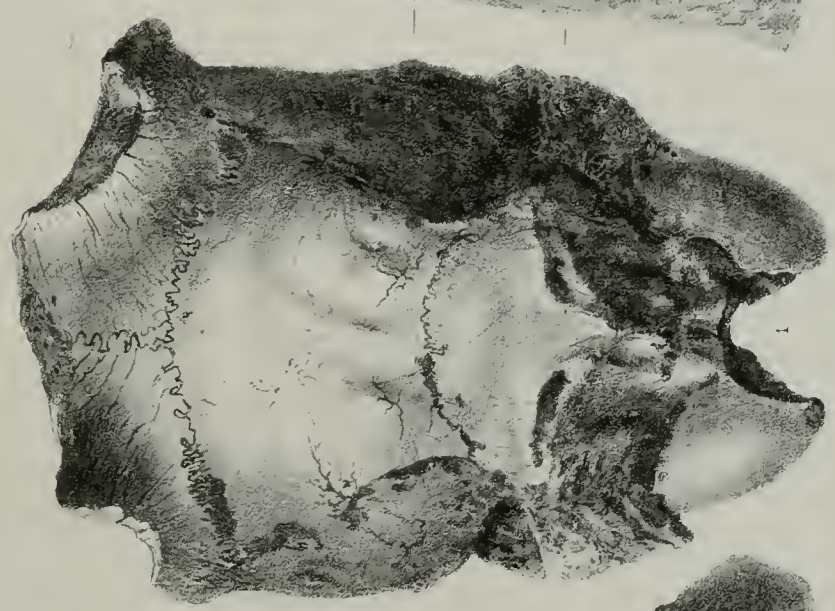


5 (α)

Málaga 3 up

5

Málaga 3 up



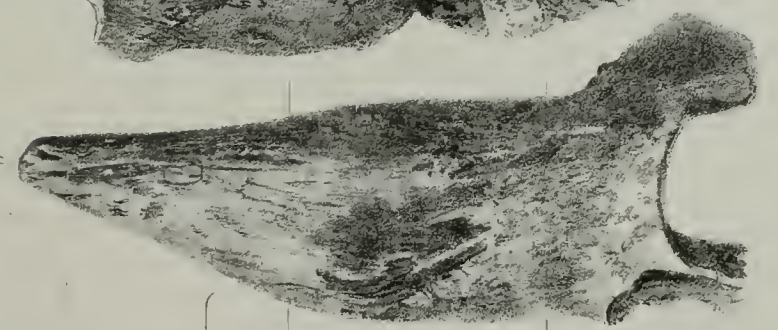
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IBEX

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Byrean Ibex

B Mus



3

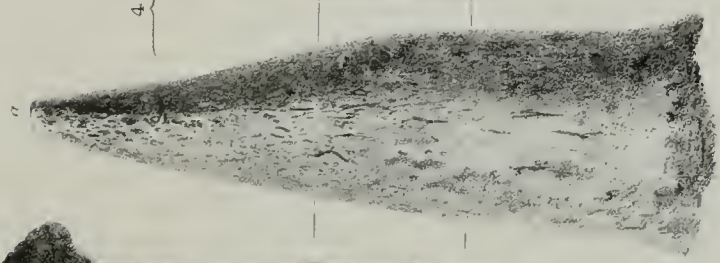
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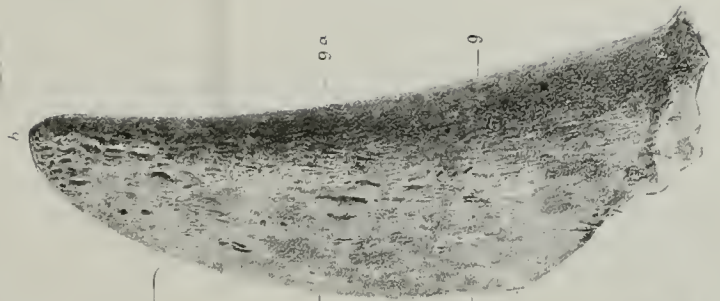
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a



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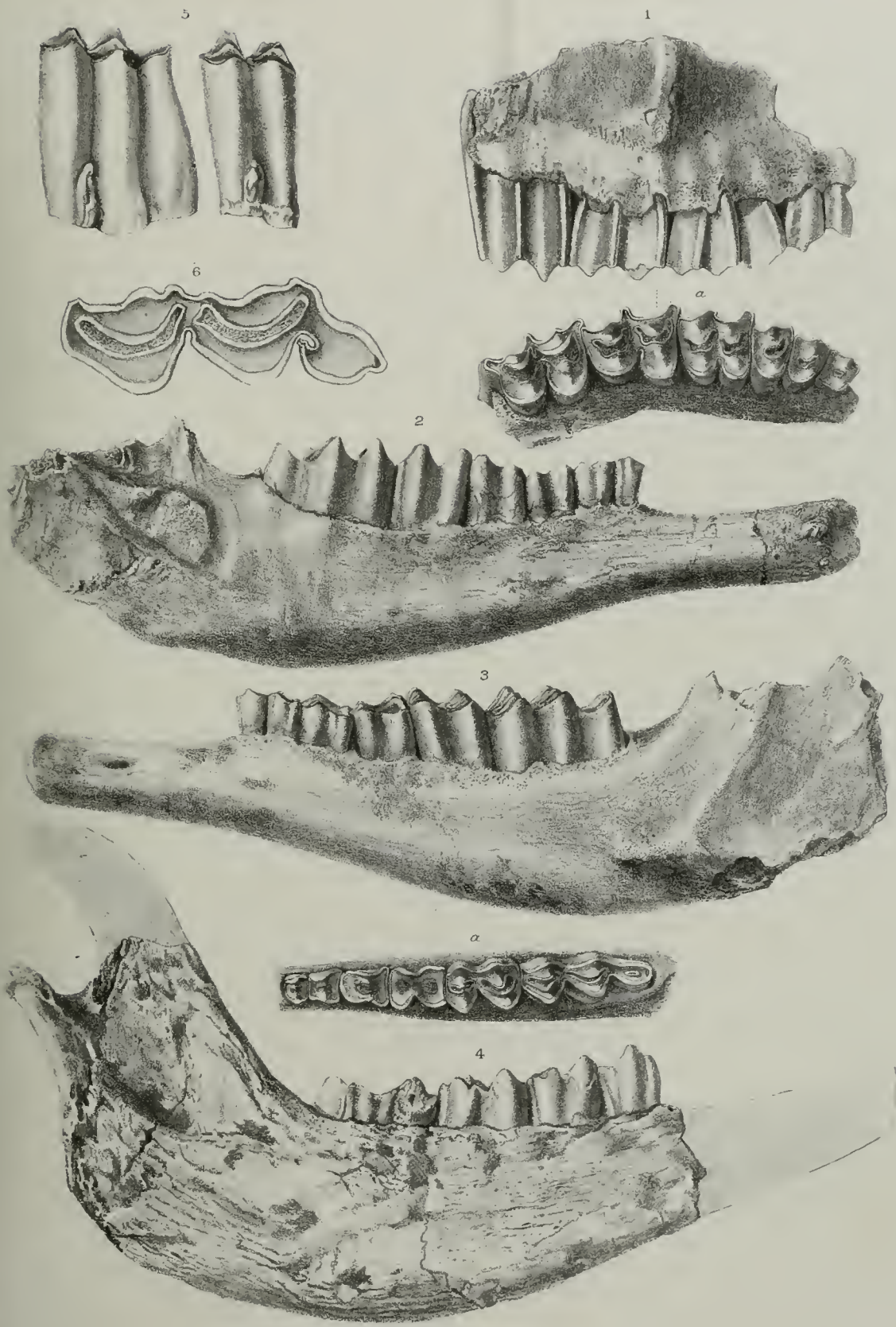
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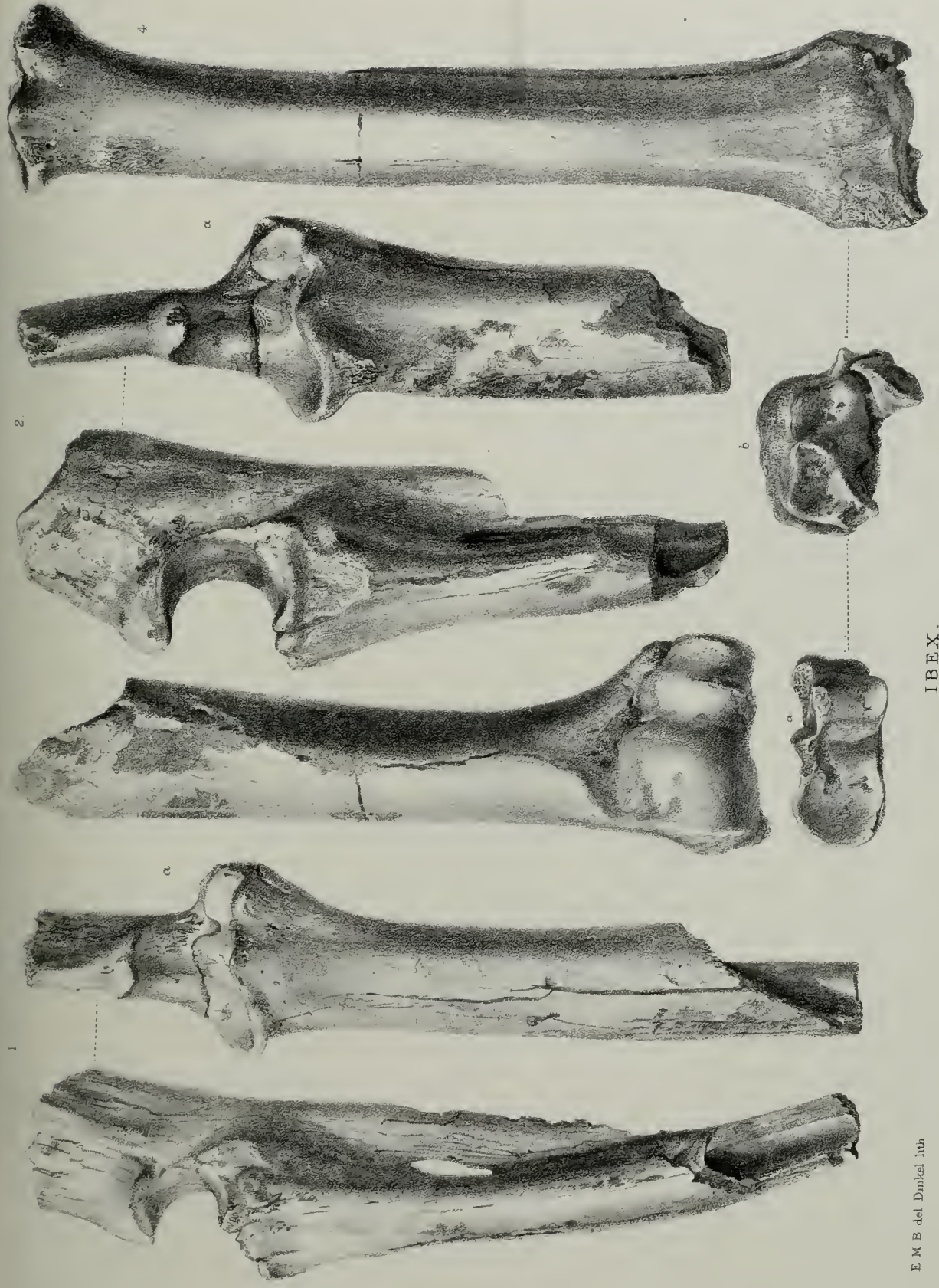




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I BEX.

W. West & Co. imp.



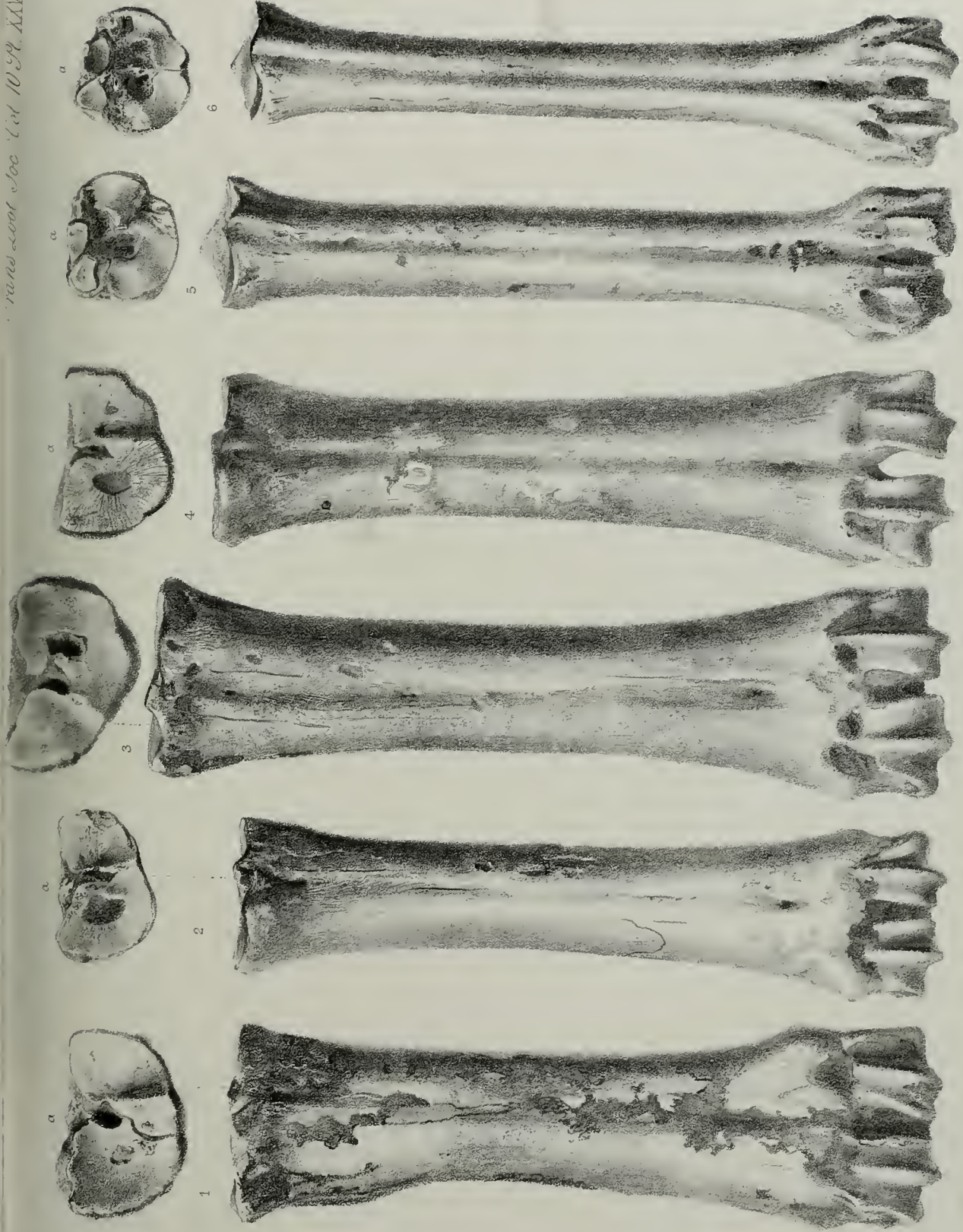


E. M. B. del. Dinkel lith.

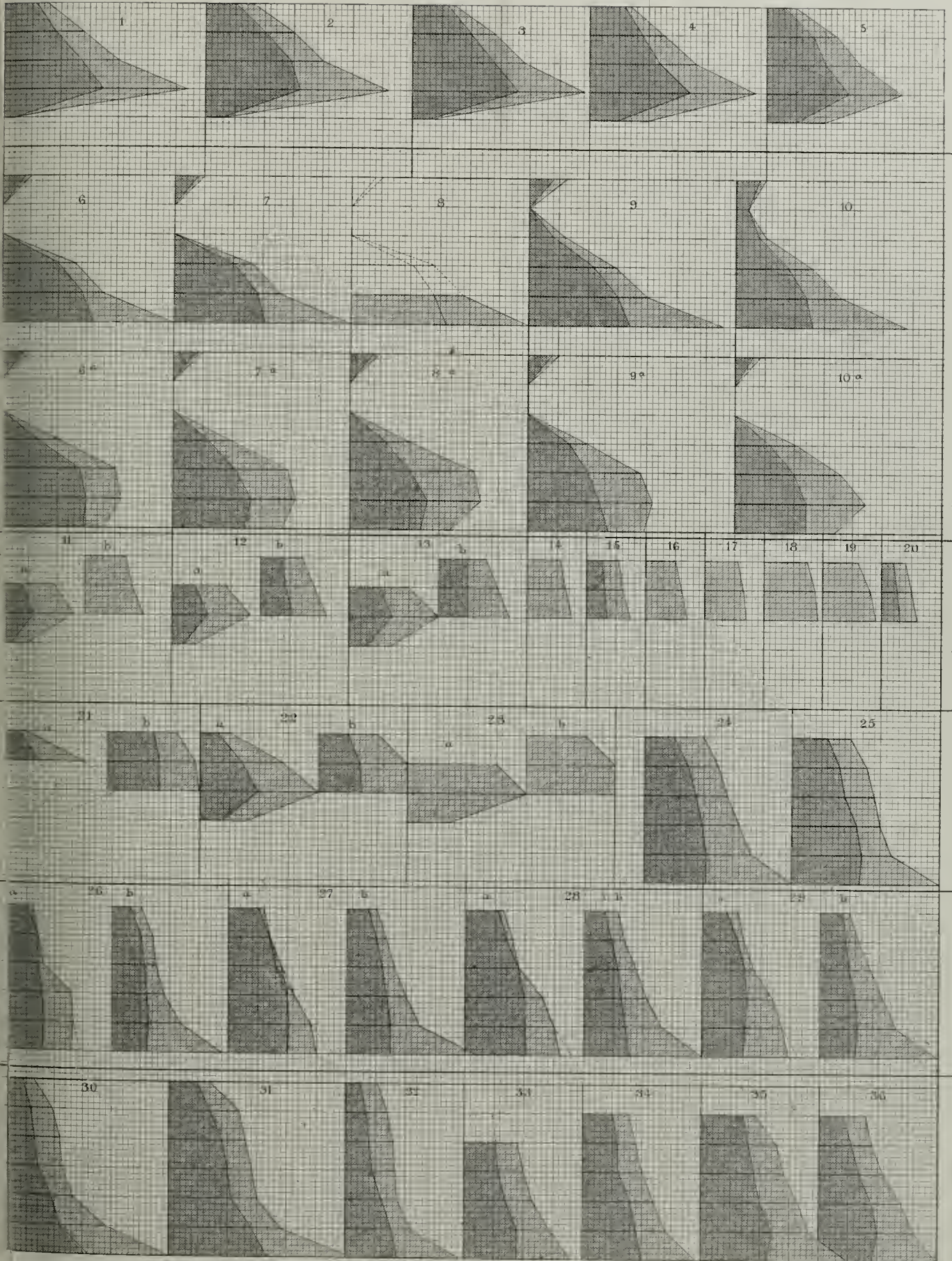
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W. Vest & Co. imp.









Odontograms.