

EXPLANATION OF THE REFERENCE LETTERS USED IN THE PLATES.

[NOTE.—In many instances in Dr. Sagemeh's article the letters in his text do not agree with the reference letters of the figures in his plate; then, again, Franque used a different system of letters, as did the writer. This gave much trouble; but it is hoped that in the explanation of these letters, here given, the references will all be made clear, both for the text and the figures.—R. W. S.]

- a. Admaxillary; frontal (Fig. 7, Plate II); also one of the ossifications of Meckel's cartilage (see Plate V, Figs. 17 and 18), and α a ligament between nasal and frontal. [Franque.]
- αg . Angular. [Bridge.] (See Plate V, Figs. 17 and 18.) Also *Ang.* (Plate III and others.)
- An.* Preorbital (Plate IV, Fig. 16); antorbital.
- an.* Angular (Plate VII).
- Art.* Articular (P^6 , os condyloideum of Franque, Plate X).
- As.* Alisphenoid.
- Ast.* Actinosts.
- β . *Ossa in cutem immissa* (Franque), supratemporal of the author
- b.* Parietal of Franque (Fig. 7).
- b.* One of the ossifications of Meckel's cartilage (Plate V, Fig. 17).
- b. a.* Branchial arches.
- B. O.* Basioccipital.
- Brs. R.* Branchiostegal rays.
- B. S.* Basisphenoid.
- Bs. b.* Basibranchials.
- c.* One of the ossifications of Meckel's cartilage in Plate V.
- a.* Os mastoideum (Franque), the squamosal of the other figures; *Sq.*
- ca.* Carotid foramen.
- cb.* Vascular canal of the occiput (in basioccipital).
- ce.* External semicircular canal.
- C. hy.* Cerato-hyal.
- cp.* Posterior semicircular canal.
- cr.* Coronary cartilage (Bridge), Plate V, Fig. 17.
- Cs.* Anterior semicircular canal.
- c. v.* Neural arch of first vertebra in *Albula* and the co-ossified first vertebra in *Megalops*.
- D.* Dentary.
- d.* One of the ossifications in Meckel's cartilage. (Bridge.) Plate V.
- d.* Nasal. (Franque.) Pl. II, Fig. 7.
- d'.* Os alare (Franque); the author's antorbital, while Franque's antorbital h I have the lacrymal.
- δ' . Posterior nasal aperture. (Franque.)
- e.* Ethmoid of Franque. (Pl. II, Fig. 7.)
- Ecpt.* Ectopterygoid.
- E. hy.* Epihyal.

- Expt.* Entopterygoid.
E. O. Exoccipital. (See also *Ex.*, Fig. 1.)
ep. Epiphysial crest.
Ep. O. Epiotic.
Esc. Extrascapula. (Sagemehl.) Fig. 1.
Eth. Ethmoid.
Ex. Exoccipital. (Sagemehl.)
F. Frontal.
f. Superior maxilla. (Franque.) Pl. X, Fig. 26.
fa. Foramen for exit of facial nerve.
fh. Hypophysial foramen.
g. Intermaxillary. (Franque.)
G. hy. Glossohyal.
gph. Foramen for glossopharyngeal nerve.
G. pl. Gular plate.
h. Antorbital. (Franque.) Pl. II, Fig. 7.
H. hy. Hypohyal.
H. M. Hyomandibular.
hm. Articular facet for hyomandibular.
Hyo. c. Hypocoracoid.
Hyp. c. Hypercoracoid.
i. Infraorbital bones. (Franque.) (Pl. X, Fig. 26.)
ih. Interhyal.
I. Op. Interoperculum.
Jc. Intercalare (opisthotic). Dr. Sagemehl evidently meant *Io.* to appear on his figures, and this must be a mistake of his engraver.
jf. Continuation of interspinal bones. (Not previously described.)
jn. Membranous tract extending between frontals and nasals.
k. Postorbital. (Franque.) Pl. II, Fig. 7.
k, k', k''. Designate, with a small unnumbered piece above them, a disconnected chain of bones, that are sometimes found in *Amia*, between the postorbitals and preoperculum. (Plate IV, Fig. 16.)
La. Lacrymal.
n. c. Meckel's cartilage in Plate III, Fig. 15.
mk. Meckel's cartilage. (Bridge.) Plate V, Fig. 17.
M. Pt. Metapterygoid.
mt. mk. Mento-Meckelian bone.
Mz. Maxillary.
n. Suprascapula. (Franque.) Plate II, Fig. 7.
Na. Nasal.
Na². A semicartilaginous piece of bone found in *Albula vulpes*. Figs. 29, 30.
Ob. Basioccipital. (Sagemehl.)
Oc. I, Oc. II. First and second occipital arches of *Amia*. (Sagemehl.)
oc. I, oc. II, and oc. III. Foramina of exit of the first to the third occipital nerves in *Amia*. (Sagemehl.)
oc. r. Occipital ribs in *Micropterus*. (Shufeldt.)
Ol. Occipitale laterale. (Sagemehl.)
ol. Opening for nasal nerves.
Op. Operculum.
op. Optic foramen.
Os. Orbitosphenoid.
P. Inframaxilla. (Franque.)
P1. Dentary.
P3. Coronoid.
P5. Os condyloideum.

- Pa.* Parietal.
- Pe.* Petrosal. (Sagemehl.)
- Pf.* Pectoral fin.
- pl.* Dr. Sagemehl gives this in his figures, but not in his list.
- Pmx.* Premaxillary.
- P. Op.* Preoperculum.
- P. or.* } Postorbitals.
- P. or^l.* }
- Prf.* Prefrontal.
- Pr. O.* Proötic.
- Pr. S.* Parasphenoid.
- P. Sc.* or *P's.* Proscapula (Plate XIV, Fig. 35). *P's.* Parasphenoid of Sagemehl.
- Paf.* Postfrontal.
- Psto. T.* Posterotemporal.
- Pst. T.* Posttemporal.
- Pt. O.* Pterotic.
- Pv.* Pelvis.
- q.* Operculum. (Franque.)
- q¹.* Interoperculum. (Franque.)
- q².* Suboperculum. (Franque.)
- q³.* Preoperculum. (Franque.)
- Qu.* Quadrate.
- ro.* Facet for articulation with operculum.
- s.* Os pterygoideum externum seu transversum. (Franque.)
- Sag.* or *S. Ang.* Surangular.
- Sb. o.* and *Sb. o^l.* Suborbitals.
- So.* Suprascapula.
- S. eth.* Supraethmoid.
- sl.* Supralinear.
- Smx* or *Sm.* Intermaxilla, septomaxillary.
- S. O.* Supraoccipital.
- S. Op.* Suboperculum.
- Sq.* Squamosal.
- S. tp.* Supratemporal of Bridge and the author; extrascapula of Sagemehl.
- Sym.* Symplectic.
- T.* Teleotemporal.
- T^l.* Lower teleotemporal.
- T¹¹.* Teeth.
- tg.* Temporal fossa.
- tr.* Foramen for the first branch of trigeminal nerve. *Tr.* For the second and third branches of the same.
- v.* Foramen for exit of vagus.
- V. f.* Ventral fin.
- vg.* Vagus foramen.
- Vo.* Vomer.
- z.* Two small pieces of cartilage posterior part of cranium of *Amia*. (Sagemehl.)
- Yn.* Coracoid of *Amia* (in cartilage).
- z.* One of the ossifications of Meckel's cartilage; the one marked *a* in Plate V, Fig^s. 17 and 18.