

*e'*, and *f'*, over its expansion; *g*, a branch of the vestibulo cut across; *h*, *h'*, the cartilaginous cranium; *i*, tympanic cavity; *k*, pia mater; *k'*, bloodvessels from *k* plunging into the mass of the brain; *l*, dura mater; *m*, vessels of the median sinus; *n*, fibrous membrane of the palate; *n'*, lateral sinus of the fibro-muscular membrane of the mouth; *o*, windpipe; *p*, os hyoides; *q*, muscular bundles; *r*, adductor muscles of the neck; *r'*, muscles of the lower jaw; *s*, bloodvessels cut across; *t*, dense white fibrous corium; *u*, epidermis very much wrinkled.

Fig. 8; compare wood-cut 8, p. 577. Transverse section through the hemispheres, the optic lobe, and the lower jaw, just behind the opening of the windpipe; 5 diam. Corresponds to the line C, in w-c. 3, p. 576; compare also fig. 4. View from before, looking backwards; *a*, left hemisphere, the rudimentary corpus striatum lies at the point where the letter is placed; *a''*, crura cerebri; *b*, *b'*, interior face of the hemispheres; *b* is partly cut away to expose the bloodvessel (*c'*) going to the choroid plexus, (*d*) which enters by the foramen at this point; *c*, bloodvessel which enters at *c'*; *d*, choroid plexus; *e*, third ventricle in the distance; *f*, *f'*, optic lobes; *g*, inferior commissure of *f* and *f'*; *h*, parietal bone of the skull; *h'*, frontal bone; *i*, sphenoid bone; *j*, cavity of the mouth; *k*, fibro-muscular layer of the floor of the mouth; *k'*, roof of the mouth; *l*, windpipe; *m*, middle part of the hyoid bone; *n*, bloodvessels; *o*, muscular bundles; *p*, *p'*, *p''*, three parts of the lower jaw, *p* still cartilaginous, the two others quite gritty with lime; *q*, fibrous corium.

Fig. 9; compare wood-cut 9, p. 577. The same section as fig. 8, looking forward on the opposite side of the cut toward the olfactory lobes; 5 diam.; *b''*, open communication between the hemispheres; *d''*, narrow passage in the olfactory lobe in the distance; *e'*, anterior commissure of the optic lobes. The other letters as in fig. 8.

Fig. 10; compare wood-cut 10, p. 577. Transverse section through the anterior end of the olfactory lobe and a portion of the surrounding tissues, seen from behind; 15 diam. Corresponds to the line B, in w-c. 3, p. 676; compare also fig. 4: *a*, the right olfactory lobe, marked by concentric layers of alternately white and gray substance, the white being much thicker than the gray; *b*, ventricle in the centre of the lobe; *c*, the vascular pia mater; *d*, arachnoid membrane, or network of vessels connecting the pia mater (*c*) to the dura mater (*d'*); *e*, interorbital septum; *f*, frontal bone; *g*, fibrous corium; *h*, layer of pigment under *i*; *i*, the epidermis.

Fig. 11; compare wood-cut 11, p. 557. Transverse section through the nasal cavity, seen from behind; 5 diam. Corresponds to the line A, in w-c. 3, p. 576; compare also

fig. 4: *a*, right Schneiderian membrane; that part which is below the palate bone (*f*) is not seen in the longitudinal section, (fig. 4,) which is made through the middle line of the head; *b*, septum narium; *b'*, the irregular dotted line next to *a* indicates a dense layer of black pigment; *c*, frontal bone; *d*, ethmoid; *d'*, upper edge of the intermaxillary bone, os incisivum; *e*, corium; *f*, vomer; *g*, palate; *h*, inner edge of the horny layer of the mandible, where it meets the mucous membrane (*i*) of the palate (*g*).

#### PLATE XXIV.

[Fig. 7, 7a, 9, 9a, 15, from nature, by A. Sonrel; the others by H. J. Clark.]

Fig. 8 and 14 are from *Nanemys guttata*; the others from *Chelydra serpentina*.

Fig. 1, 1a, 2, 2a, 3, 3a, 4, 5, 7, 7a, 8, 9, 9a, 11, 12, 13, 13a, 14, 15, are all lettered in the same manner: *a*, amnios; *a'*, caudal hood; *e*, edge of the channel of the spinal marrow; *e'*, edge of the open part of the brain; *e''*, brain closed over; *e'''*, constriction between the corpora quadrigemina and the optic lobes; *f*, vertebræ; *f'*, vertebral layer; *f''*, lower edge of *f*; *f'''*, lower edge of *f'*; *f''''*, upper edge of *f*; *h'*, aortic bulb; *h''*, auricle; *h'''*, ventricle; *i*, vena afferens; *i'*, abdominal veins; *i''*, cephalic veins; *j*, cephalic artery; *j'*, dorsal artery; *k*, the whole eye, or the outer layer of the retina; *k'*, the inner infolded layer; *k''*, passage to the brain; *k'''*, crystalline lens; *k''''*, point where the inner wall (*k'''*) folds upon the outer (*k*); *l*, ear; *m*, branchial fissures; *n*, intestino-subsidiary layer; *n'*, stomach; *n''*, œsophagus; *n'''*, anus; *n''''*, allantois; *o*, edge of the abdominal aperture; *p*, musculo-cutaneous layer; *r*, liver; *t*, windpipe; *t'*, lungs; *v*, nostrils; *w*, fore legs; *w'*, hind legs; *x*, mouth; *1*, outer wall of the lungs; *1'*, outer wall of the œsophagus behind the lungs; *1''*, outer wall of the œsophagus before the lungs; *1'''*, outer wall of the windpipe; *2*, mucous membrane of the lungs; *2'*, mucous membrane of the œsophagus behind the lungs; *2''*, mucous membrane of the œsophagus before the lungs; *2'''*, mucous membrane of the windpipe; *3*, opening of the windpipe; *5*, open communication between the windpipe and the œsophagus; *6*, part of the trachea of the right lung; *7*, a bronchiole trending transversely to the broad face of the lung.

Fig. 1. The lungs, and part of the œsophagus, from below, 40 diam., date not ascertained; fig. 1a, interior walls of fig. 1; 250 diam.

Fig. 2. Lungs and stomach, from below, about 5 diam.; laid