

FIG. 541.

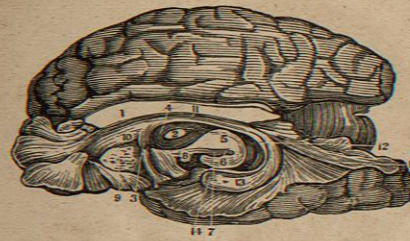


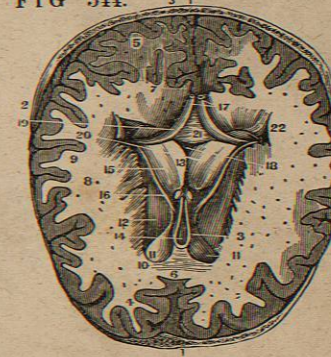
FIG. 542.



FIG. 543.



FIG. 544.



THE VENTRICLES OF THE BRAIN

FIG. 541.

A VIEW OF THE CONNEXIONS OF THE DIFFERENT PARTS OF THE BRAIN BY MEANS OF THE COMMISSURES—AS GIVEN BY A VERTICAL SECTION.

1. The Great Transverse Commissure or Corpus Callosum divided on its Middle Line.
2. The Commissura Mollis.
3. The Anterior Commissure.
4. The Thalamus.
5. Section of the Crus Cerebri.
6. The Cineritious Matter in the Crus.
7. The commencing Fibres of the Inferior Longitudinal Commissure or Fornix.
8. Corpus Mammillare.
9. The remains of the Corpus Striatum—the rest of it has been scraped away.
10. The Septum Lucidum.
11. Body of the Fornix or Centre of the Commissure.
12. Tænia Hippocampi or Descending Fibres of the Inferior Longitudinal Commissure.
13. Fibres covering the Hippocampus Major.
14. Fibres covering the Pes Hippocampi.
15. Fibres covering the Hippocampus Minor.

It will be thus seen that the different portions of the Convolved Surface of the Brain are connected together by this Inferior Longitudinal Commissure, called the Fornix.

FIG. 542.

A VIEW OF THE LATERAL VENTRICLES OF THE BRAIN.

The Hemisphere has been divided Vertically so as to lay open the Lateral Ventricle in its greatest extent. Another Section in its greatest extent. Another Section passing from the Fissure of Sylvius has opened the Lateral Ventricle on the External

Limit of the Corpus Striatum and all the convexity of the Hemisphere has there been cut away, so as to open the Ventricle outwardly.

1. 1.  $\gamma$  Is the whole Cavity of the
2. 2.  $\delta$  Ventricle.
3. 3. Convolutions on the under side or Base of the Brain.
4. 4. Points to the opening of the Fissure of Sylvius.
5. 5. The External Circumference of the Hemisphere.
6. 6. The Fissure separating the Posterior from the Middle Lobes of the Cerebrum.
7. 7. The bottom of this Fissure towards the Ventricle.
8. 8. The bottom of the Fissure of Sylvius.
9. 9. The Plexus Choroides.
10. 10. The Large Extremity of the Cornu Ammonis.

FIG. 543.

A VIEW OF THE SUPERIOR PART OF THE LATERAL VENTRICLES, CORPORA STRIATA, SEPTUM LUCIDUM, FORNIX, &c., AS GIVEN BY A TRANSVERSE SECTION OF THE CEREBRUM.

1. Section of the Os Frontis.
2. Section of the Os Occipitis.
3. Section of the Ossa Parietalia.
4. 5. Anterior and Posterior Extremities of the Middle Fissure of the Cerebrum.
6. Anterior Extremity of the Corpus Callosum.
7. Its Posterior Extremity joining the Fornix.
8. 8. Points to where the Corpus Callosum joins the Lateral Medullary Matter of the Cerebrum.
9. Its Place of junction Anteriorly.
10. Posterior point of union.
11. Middle portion of the Corpora Striata (Lateral Ventricle).
12. Tænia Striata.
13. The Septum Lucidum.

14. The Fifth Ventricle.
15. The Fornix.
16. Its Posterior Crura.
17. The Plexus Choroides.
18. The Ergot or Hippocampus Minor.
19. Posterior Crura of the Lateral Ventricle.

FIG. 544.

A TRANSVERSE SECTION OF THE BRAIN ON A LEVEL WITH THE LATERAL VENTRICLES, IN ORDER TO SHOW THE FIFTH VENTRICLE AND THAT PORTION OF THE FORNIX KNOWN AS THE LYRA.

1. Section of the Os Frontis.
2. Section of the Ossa Parietalia.
3. Section of the Os Occipitis.
4. Anterior Lobes of the Cerebrum.
5. Its Posterior Lobes.
6. Anterior Extremity of the Great Middle Fissure.
7. Its Posterior Extremity.
8. The Centrum Ovale, or Medullary Matter of the Cerebrum.
9. The Cortical or Cineritious Matter.
10. Section of the Anterior portion of the Corpus Callosum.
11. Anterior Extremities of the Lateral Ventricles.
12. Corpora Striata.
13. The Sides of the Septum Lucidum.
14. The Cavity between its sides, or the 5th Ventricle.
15. The Thalami Nervi Optici.
16. The Tænia Striata.
17. Section of the Anterior Crura of the Fornix, which is here turned backwards.
18. Cavity of the 3d Ventricle.
19. Lateral Portion of the Fornix.
20. Its Posterior Crura.
21. The Stria on its under Surface known as the Lyra.
22. Posterior Cornu of the Lateral Ventricle.



FIG. 545.

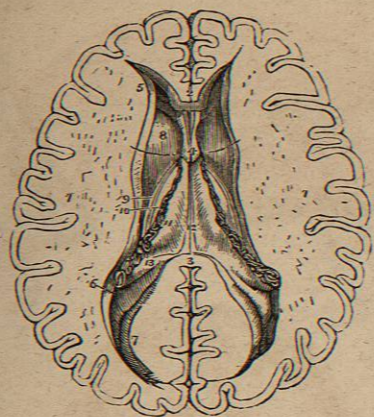
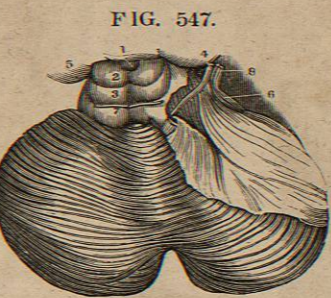
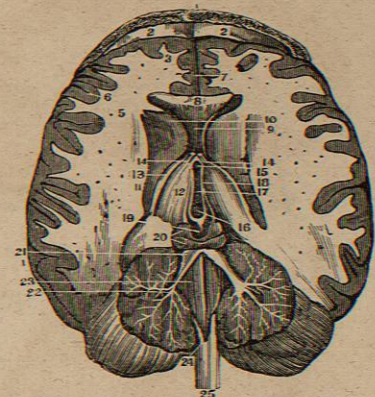


FIG. 545.  
THE LATERAL VENTRICLES OF THE CEREBRUM.

1. 1. The two Hemispheres cut down to a level with the Corpus Callosum, so as to show the Centrum Ovale Majus. The Surface is studded with the small Puncta Vasculosa.
2. A small portion of the Anterior Extremity of the Corpus Callosum.
3. Its Posterior Boundary; the intermediate portion, forming the Roof of the Lateral Ventricles, has been removed so as to completely expose these Cavities.
4. A part of the Septum Lucidum, showing a space between its Layers which is the 5th Ventricle.
5. The Anterior Cornu of one side.
6. The commencement of the Middle Cornu.
7. The Posterior Cornu.
8. The Corpus Striatum of one Ventricle.
9. The Tæmia Striata.
10. A small part of the Thalamus Opticus.
11. The Flexus Choroides.
12. The Fornix.
13. The commencement of the Hippocampus Major in the Middle Cornu. The Rounded Oblong Body in the Posterior Cornu of the Lateral Ventricle, directly behind the Figure 13, is the Hippocampus Minor. A Bristle is seen in the Foramen of Munro.

FIG. 546.



THE CEREBRUM.

FIG. 546.  
A VIEW OF THE VENTRICLES OF THE BRAIN, AS GIVEN BY A TRANSVERSE SECTION OF THE CEREBRUM JUST ABOVE THE TOP OF THE LATERAL VENTRICLES AND A PERPENDICULAR SECTION OF THE CEREBELLUM.

1. Section of the Os Frontis.
2. Its Orbital Plate.
3. Anterior Lobes of the Cerebrum.
4. Its Posterior Lobes.
5. The Medullary or White Matter of the Cerebrum.
6. The Cineritious or Grey Matter.
7. Anterior portion of the Middle Fissure of the Cerebrum.
8. Section of the Anterior portion of the Corpus Callosum.
9. The curved portion of the Anterior part of the Corpus Callosum placed between the Corpora Striata.
10. Anterior portion of the Corpora Striata.
11. Their Posterior Extremity.
12. The Thalami Nervi Optici.
13. The Tæmia Striata.
14. Section of the Anterior Crura of the Fornix.
15. Anterior Extremity of the 3d Ventricle.
16. Its Posterior Extremity.
17. The Commissura Mollis.
18. The Peduncles of the Pineal Gland.
19. The Pineal Gland.

20. The Tubercula Quadrigemina.
21. The Valve of Vieussens divided and turned on each side.
22. Section of the Cerebellum and Arbor Vite.
23. The 4th Ventricle.—The dark middle Fissure which leads from the Fourth to the Third Ventricle under the Valve of Vieussens is the Aqueduct of Sylvius.
24. Lower portion of the Calamus Scriptorius.
25. Extremity of the Medulla Spinalis.

FIG. 547.  
A VIEW OF A SECTION OF THE BRAIN, SHOWING THE MOTOR ORIGIN OF THE FIFTH PAIR OF NERVES AND THE ORIGIN OF THE FOURTH PAIR, WITH THE POSITION OF THEIR COMMISURE.

1. The Pineal Gland lying on the Tubercula Quadrigemina, just above the Nates.
2. The Superior of the Tubercula Quadrigemina, or the Nates.
3. The Inferior or Testes.
4. The Motor Root of the 5th Pair of Nerves.
5. The Thalamus Nervi Optici.
6. The Sensory Root of the 5th Pair.
7. The 4th Pair of Nerves.
8. The 5th Pair of Nerves.

FIG. 549.



FIG. 551.

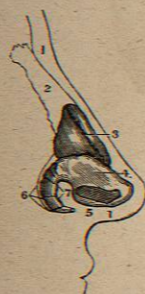


FIG. 548.

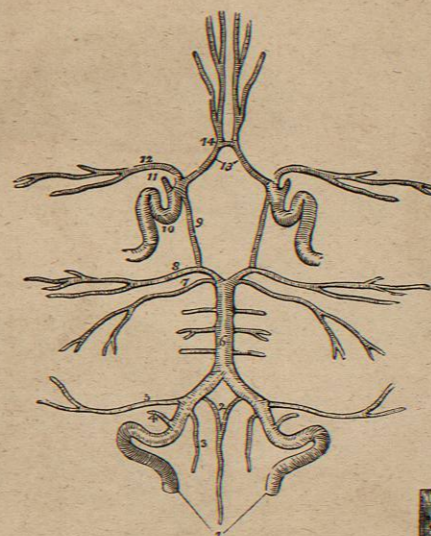


FIG. 552.



FIG. 550.

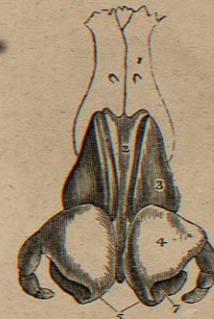
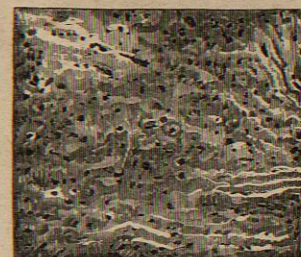


FIG. 553.



THE ORGAN OF SMELLING.

- FIG. 548.  
A VIEW OF THE CIRCLE OF WIL-  
LIS.
1. The Vertebral Arteries.
  2. The two Anterior Spinal Branches.
  3. One of the Posterior Spinal Arteries.
  4. The Posterior Meningeal Artery.
  5. The Inferior Cerebelli Artery.
  6. The Basilar Artery.
  7. The Superior Cerebelli Artery.
  8. The Posterior Cerebelli.
  9. The Posterior Communicans.
  10. The Internal Carotid.
  11. The Ophthalmic Artery.
  12. The Middle Cerebral Artery.
  13. The Anterior Cerebr.
  14. The Anterior Communicans.

- FIG. 549.  
A SIDE VIEW OF THE NOSE DE-  
PRIVED OF ITS EPIDERMIS IN  
ORDER TO SHOW THE SEBACE-  
OUS FOLLICLES OF THE SKIN.
1. Lower part of the Forehead.
  2. Root of the Nose.
  3. Its Point.

4. Opening of the Right Nostril.
5. The Lips.
6. Ala of the Nose.
7. The Side of the Nose and its Follicles.
8. The same on its Front.

- FIG. 550.  
A VIEW OF THE CARTILAGES OF  
THE NOSE.
1. The Nasal Bones.
  2. The Cartilaginous Septum.
  3. The Lateral Cartilages.
  4. The Alar Cartilages.
  5. The Central portions of the Alar Cartilages which constitute the Columns.
  6. The Appendices of the Alar Cartilage.
  7. The Nostrils.

- FIG. 551.  
A SIDE VIEW OF THE BONES AND  
CARTILAGES OF THE NOSE,  
SEEN ON THE RIGHT SIDE.
- 1.1. An outline of the thickness of the Integuments.
  2. The Nasal Bone.

3. The Lateral Cartilage.
4. The External portion of the Cartilage of the Ala Nasi.
5. The Internal portion of the same Cartilage.
6. The Three small Cartilages which support the Ala Nasi.
7. The Fibrous Tissue that holds them together.

- FIG. 552.  
AN EXTERNAL VIEW OF THE NA-  
SAL CARTILAGES AROUND THE  
NOSTRIL.
1. The Outer Plate of one of the Oval Cartilages.
  2. Its Inner Plate.
  3. The Columnæ Nasi.
  4. The small Cartilages of the Ala Nasi.

- FIG. 553.  
A PORTION OF THE PITUITARY  
MEMBRANE OF THE NASAL  
SEPTUM, MAGNIFIED 9 TIMES,  
AND SHOWING THE NUMBER,  
SIZES AND ARRANGEMENT OF  
THE MUCOUS CRYPTS.

FIG. 554.

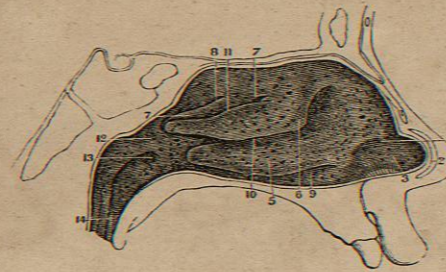


FIG. 555.



FIG. 556.

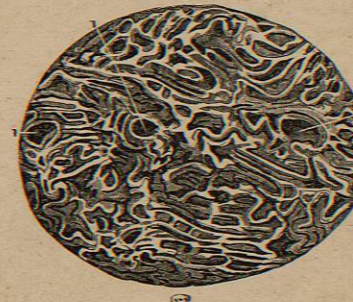
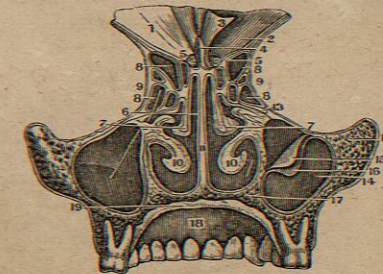


FIG. 557.



THE ORGAN OF SMELLING.

FIG. 554.

A VIEW OF THE EXTERNAL PARIETES OF THE LEFT NOSTRIL, AS GIVEN BY THE REMOVAL OF THE SEPTUM.

1. 2. Sections of the Cartilage of the Nose.
3. The Hollow on the Inner Side of the Ala Nasi, with the Hairs and Mucous Follicles there found.
4. The rounded Prominence where the Skin and Mucous Membrane unite.
5. The Inferior Spongy Bone.
6. The Middle Spongy Bone.
7. The Superior Spongy Bone.
8. An Excavation giving the appearance of a fourth Spongy Bone.
9. The Inferior Meatus of the Nose.
10. The Middle Meatus.
11. The Superior Meatus.
12. An Elongated Projection which separates the Nose from the Pharynx.
13. The opening of the Eustachian Tube.
14. Left half of the Velum Pendulum Palati.

FIG. 555.

THE ARTERIES OF THE LEFT SIDE OF THE NASAL SEPTUM.

1. The Posterior Ethmoidal Artery.
2. The Anterior Ethmoidal Artery.
3. Branches of the Spheno-Palatine Artery.
4. 5. 6. The minute Anastomoses of the Branches of the Spheno-Palatine with the Ethmoidal Artery, showing the Vascularity of this Surface.

FIG. 556.

A PORTION OF THE PITUITARY MEMBRANE WITH ITS ARTERIES AND VEINS INJECTED—MAGNIFIED 15 DIAMETERS.

The natural size of this piece is seen at the bottom of the Cut.

1. 1. 1. The Orifices of Three Mucous Crypts surrounded by Veins and Arteries.

FIG. 557.

A VERTICAL SECTION OF THE MIDDLE PART OF THE NASAL FOSSE, GIVING A POSTERIOR VIEW OF THE ARRANGEMENT OF THE ETHMOIDAL CELLS, &c.

1. Anterior Fossæ of the Cranium.
2. The same covered by the Dura Mater.
3. The Dura Mater turned up.
4. The Crista Galli of the Ethmoid Bone.
5. Its Cribriform Plate.
6. Its Nasal Lamella.
7. The Middle Spongy Bones.
8. The Ethmoidal Cells.
9. The Os Planum.
10. Inferior Spongy Bone.
11. The Vomer.
12. Superior Maxillary Bone.
13. Its union with the Ethmoid.
14. Anterior Parietes of the Antrum Highmorianum, covered by its Membrane.
15. Its Fibrous Layer.
16. Its Mucous Membrane.
17. Palatine Process of the Superior Maxillary Bone.
18. Roof of the Mouth, covered by the Mucous Membrane.
19. Section of this Membrane. A Bristle is seen in the Orifice of the Antrum Highmorianum.

FIG. 558.

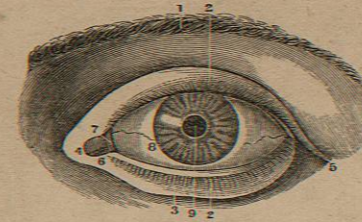


FIG. 560.

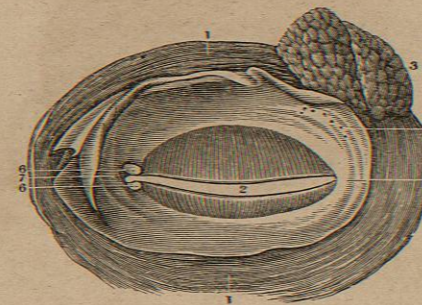
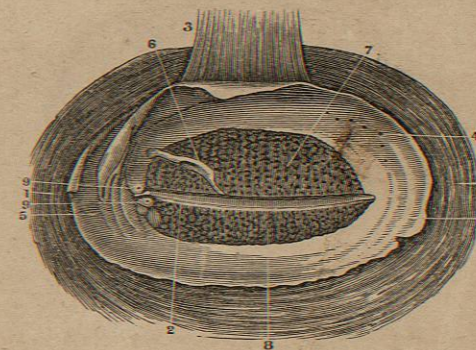


FIG. 559.



FIG. 561.



THE EYE.

FIG. 558.

A FRONT VIEW OF THE LEFT EYE—MODERATELY OPENED.

- 1. The Super Cilia.
- 2. The Cilia of each Eye-Lid.
- 3. The Inferior Palpebra.
- 4. The Internal Canthus.
- 5. The External Canthus.
- 6. The Caruncula Lachrymalis.
- 7. The Plica Semilunaris.
- 8. The Eye-Ball.
- 9. The Pupil.

FIG. 559.

A SIDE VIEW OF THE SAME EYE, SHOWING THAT THE CILIA OF THE UPPER LID ARE CONCAVE UPWARDS, AND THOSE OF THE LOWER LID CONCAVE DOWNWARDS. THE GENERAL CONVEXITY OF THE EYE-BALL IS ALSO SEEN.

FIG. 560.

A POSTERIOR VIEW OF THE EYE-LIDS AND LACHRYMAL GLAND.

- 1.1. The Orbicularis Palpebrarum Muscle.
- 2. The Borders of the Lids.

- 3. The Lachrymal Gland.
- 4. Its Ducts opening in the Upper Lid.
- 5. The Conjunctiva covering the Lids.
- 6. The Puncta Lachrymalia.
- 7. The Lachrymal Caruncle as seen from behind.

FIG. 561.

A POSTERIOR VIEW OF THE EYE-LIDS—AS SEEN UNDER THE MICROSCOPE, SO AS TO SHOW CLEARLY THE GLANDULÆ PALPEBRARUM.

- 1.1. The Orbicularis Palpebrarum Muscle.
- 2. The opening of the Lids, through which are seen the Cilia of the Upper Lid.
- 3. The Levator Palpebræ Superioris Muscle.
- 4. The openings of the Ducts of the Lachrymal Gland.
- 5. The Conjunctiva of the Eye-Lids.
- 6. The Conjunctiva turned back so as to show the Glands which are beneath it.
- 7. The Meibomian Glands of the Upper Eye-Lid, seen through the Conjunctiva.
- 8. The same Glands of the Lower Lid.
- 9. The Puncta Lachrymalia.