



FIG. 562.

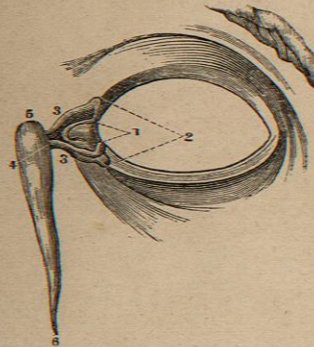


FIG. 563.

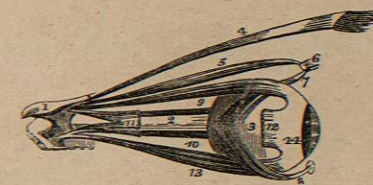


FIG. 564.

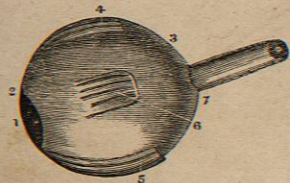
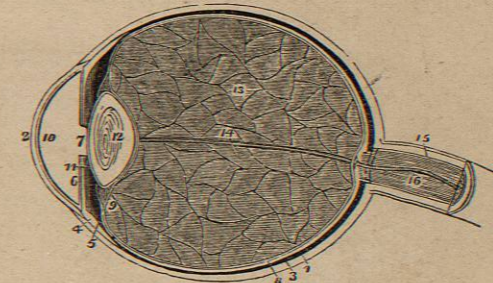


FIG. 565.



THE EYE.

FIG. 562.

A VIEW OF THE SHAPE AND POSITION OF THE LACHRYMAL CANALS.

1. The Puncta Lachrymalia or openings of the Lachrymal Canals in the Lids.
2. The Cul de Sac at the Orbital end of the Canal.
3. The course of each Canal to the Saccus Lachrymalis.
- 4.5. The Saccus Lachrymalis.
6. The Lower part of the Ductus ad Nasum.

FIG. 564.

A SIDE VIEW OF THE EYE-BALL—ENTIRE.

1. The Middle of the Cornea.
2. Its union with the Sclerotic Coat.
3. The Sclerotica.
- 4.5.6. The Tendons of the Recti Muscles, losing themselves in the Sclerotic Coat.
7. Point where the Optic Nerve penetrates the Coats of the Eye-Ball.
8. The Optic Nerve.

FIG. 563.

A VIEW OF THE MUSCLES OF THE EYE-BALL, TAKEN FROM THE OUTER SIDE OF THE RIGHT ORBIT.

1. A small Fragment of the Sphenoid Bone around the entrance of the Optic Nerve into the Orbit.
2. The Optic Nerve.
3. The Globe of the Eye.
4. The Levator Palpebræ Muscle.
5. The Superior Oblique Muscle.
6. Its Cartilaginous Pulley.
7. Its Reflected Tendon.
8. The Inferior Oblique Muscle; a piece of its Bony Origin is broken off.
9. The Superior Rectus Muscle.
10. The Internal Rectus almost concealed by the Optic Nerve.
11. Part of the External Rectus showing its two Heads.
12. The Extremity of the External Rectus at its Insertion; the intermediate portion of the Muscle having been removed.
13. The Inferior Rectus Muscle.
14. The Sclerotic Coat.

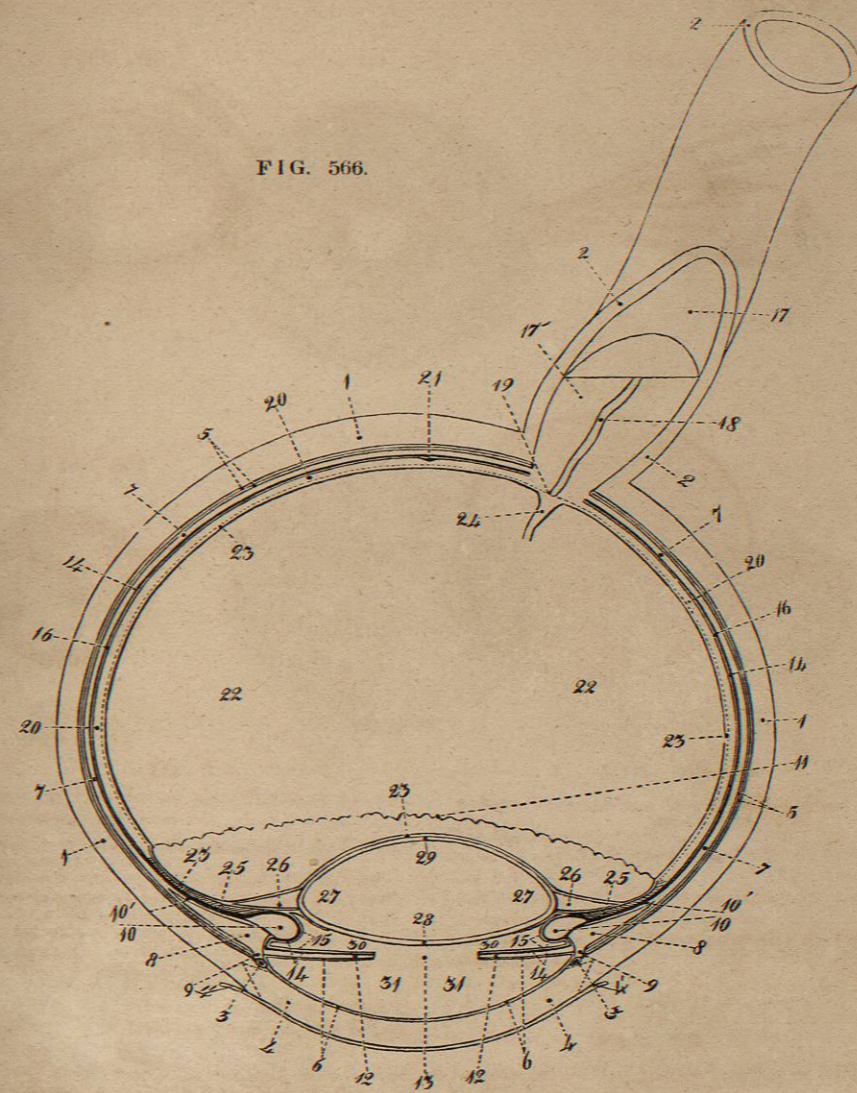
A View of the Tensor Tarsi, or Muscle of Horner, has been already given—see Figure 172.

FIG. 565.

A LONGITUDINAL SECTION OF THE GLOBE OF THE EYE.

1. The Sclerotic Coat.
2. The Cornea.
3. The Choroid Coat.
4. The Ciliary Ligament.
5. The Ciliary Processes.
6. The Iris.
7. The Pupil.
8. The Retina.
9. The Canal of Petit, which encircles the Lens.
10. The Anterior Chamber of the Eye, containing the Aqueous Humour.
11. The Posterior Chamber.
12. The Lens enclosed in its proper Capsule.
13. The Vitreous Humour enclosed in the Hyaloid Membrane.
14. A Tabular Sheath of the Hyaloid Membrane.
15. The Neurilema of the Optic Nerve.
16. The Arteria Centralis Retina.

FIG. 566.



THE EYE-BALL.

FIG. 566.
A HORIZONTAL SECTION OF THE
EYE-BALL.

1. Sclerotic Coat.
2. Sheath of the Optic Nerve, or Canal of Fontana.
3. Circular Venous Sinus of the Iris.
4. Proper Substance of the Cornea.
5. Arachnoidea Oculi.
6. Membrane of the Anterior Chamber of the Aqueous Humour. Of the Two Dotted Lines one points to the supposed Membrane of Descemet, the other to the supposed continuation of that Membrane over the Anterior Surface of the Iris.
7. Choroid Coat.
8. Annulus Albidus.
9. Ciliary Ligament.

- 10, 10'. Ciliary Body, consisting of (10') a Pars non-Fimbriata, and (10) a Pars Fimbriata formed by the Ciliary Process.
11. Ora Serrata of the Ciliary Body.
12. Iris.
13. Pupil.
14. Membrane of the Pigment.
15. Delicate Membrane lining the Posterior Chamber of the Aqueous Humour.
16. Membrane of Jacob.
17. The Optic Nerve surrounded by its Neurilema.
- 17'. The Fibres of the Optic Nerve consisting of Fasciculi of Primitive Tubules.
18. Central Artery of the Retina.
19. Papilla Conica of the Optic Nerve.
20. Retina. The situation of its Vas-
- cular Layer is indicated by a Dotted Line.
21. Central Transparent Point of the Retina.
22. Vitreous Humour.
23. The Hyaloid Membrane.
24. Canalis Hyaloidens.
25. Zonula Ciliaris. In the Plate, none of its fimbriated part is seen, being concealed by the Ciliary Processes.
26. Canal of Petit.
27. Crystalline Lens.
28. Anterior Wall of the Capsule of the Lens.
29. Posterior Wall of the Capsule of the Lens.
30. Posterior Chamber of the Aqueous Humour.
31. Anterior Chamber of the Aqueous Humour.



FIG. 569.



FIG. 567.

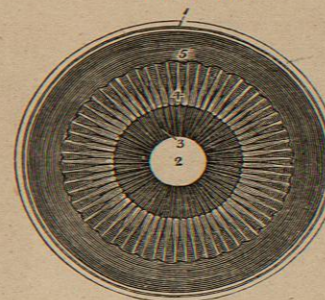


FIG. 570.

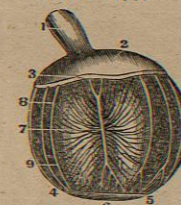


FIG. 568.



FIG. 571.

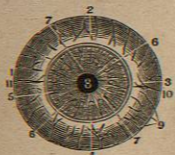
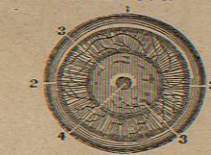


FIG. 572.



THE EYE-BALL.

FIG. 567.

THE ANTERIOR SEGMENT OF A TRANSVERSE SECTION OF THE GLOBE OF THE EYE, SEEN FROM WITHIN.

1. The divided Edge of the Three Coats—the Sclerotic, Choroid and Retina.
2. The Pupil.
3. The Iris; the surface presented to view in this Section being the Uvea.
4. The Ciliary Processes.
5. The Anterior Border of the Retina.

FIG. 568.

THE POSTERIOR SEGMENT OF A TRANSVERSE SECTION OF THE GLOBE OF THE EYE, SEEN FROM WITHIN.

1. The divided Edge of the Three Coats—the Membrane covering the whole Internal Surface is the Retina.
2. The Entrance of the Optic Nerve with the Arteria Centralis Retinae piercing its centre.
- 3.3. The Ramifications of the Arteria Centralis.
4. The Foramen of Scemmering; the Shade from the sides of the Section obscures the Limbus Luteus which surrounds it.

5. A Fold of the Retina, which generally obscures the Foramen of Scemmering after the Eye has been opened.

FIG. 569.

A VIEW OF THE CHOROID COAT WITH ITS VESSELS INJECTED.

1. The Optic Nerve.
2. Posterior portion of the Sclerotica, cut off circularly.
- 3.4. The Ciliary Ligament.
5. The Iris.
6. Ciliary Nerves.
7. Long and Short Arteries of the Choroid Coat.
8. Long Internal Ciliary Arteries of the Choroid Coat.
- 9.10. Vasa Vorticosa.

FIG. 570.

A VIEW OF THE VEINS OF THE CHOROID COAT, AS DISTENDED BY BLOOD.

1. The Optic Nerve.
- 2.3. Section of the Sclerotic Coat.
- 4.5. The Circumference of the Iris.
6. The Pupil.
7. The Veins of the Choroid Coat.
- 8.9. The Ciliary Nerves.

FIG. 571.

AN ANTERIOR VIEW OF THE IRIS AS ATTACHED TO THE CHOROID COAT.

1. The Choroid Coat.
- 2.3. The Ciliary Ligament.
4. The Great Circumference of the Iris.
5. The Anterior Face of the Iris.
6. Its Lesser Circumference.
7. Shows the Striated or Ray-like appearance of the Iris.
8. The Pupil.
9. The Ciliary Nerves dividing as they penetrate the Ciliary Ligament.
- 10.11. The Ciliary Blood-Vessels.

FIG. 572.

A FRONT VIEW OF THE RETINA, WITH THE LENS IN ITS CAPSULE.

- 1.1. The Retina.
- 2.2. Its Anterior Limits.
- 3.3. The Lens in its Capsule.
4. The Central Foramen of the Retina, seen through the Transparent Lens and Vitreous Humour.

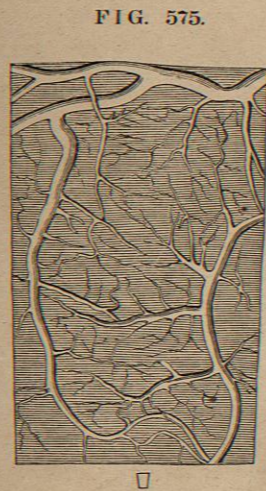


FIG. 575.
A PORTION OF THE RETINA OF AN INFANT, WITH ITS VESSELS INJECTED AND MAGNIFIED 25 DIAMETERS.
An outline of the Natural Size of this piece is seen just below the main Cut.



FIG. 573.
THE EXTERNAL FACE OF THE RETINA, WITH THE LENS ATTACHED TO IT.
1. The Retina.
2. Its Central Foramen.
3. The Optic Nerve deprived of its Sheath.
4. The Ciliary Body.
5. The distance of this Body from the Lens.
6. The Lens in its Capsule.



FIG. 574.
A VIEW OF THE LEFT EYE OF A FETUS OF SIX MONTHS, MAGNIFIED 2 DIAMETERS — SHOWING THE VESSELS IN THE CONJUNCTIVA.
1.2.3.4. The Internal, Superior, External and Inferior parts of the Eye-Ball, with the Blood-Vessels injected.
5. The Transparent Cornea.

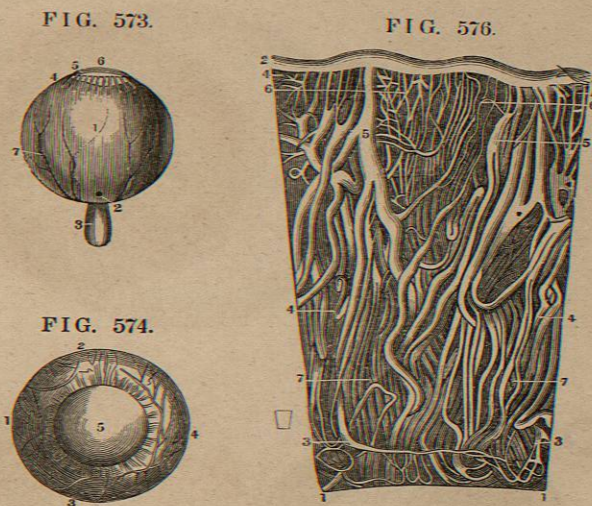


FIG. 576.
A SEGMENT OF THE ANTERIOR FACE OF THE IRIS WITH ITS VESSELS INJECTED — MAGNIFIED 25 DIAMETERS.
1.1. A portion of the Pupillary Circumference of the Iris.
2.2. A part of its Greater Circumference surrounded by a Branch of the Long Ciliary Artery.
3. Part of the Lesser Circle of the Iris.
4.4. Part of its Greater Circle.
5.5. Three Arteries which are larger than the others, and coming from the Greater Circle are lost in the Iris.
6. Smaller Arteries arising from these.
7. Branches of the Larger Arteries, which are lost in the Smaller Circle of the Iris.
An outline of the Natural Size of this piece is seen on the side of the Figure between 3 and 7.



FIG. 577.
A SIDE VIEW OF THE VITREOUS HUMOUR AND LENS OF A FETUS AT 8 MONTHS, SHOWING THE SHAPE AND DIRECTION OF THE CANAL OF PETIT.
1. The Lens.
2. Its Anterior Face.

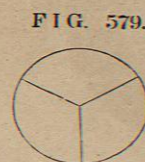


FIG. 578.
A FRONT VIEW OF THE CRYSTALLINE HUMOUR OR LENS, IN THE ADULT.

FIG. 579.
A MAGNIFIED VIEW OF THE LENS OF A FETUS OF 8 MONTHS, SEEN ON ITS ANTERIOR FACE, WITH THE MARKS OF ITS DIVISION INTO THE THREE PIECES THAT FORM IT AT THAT PERIOD.

FIG. 580.
A SIDE VIEW OF THE ADULT LENS.
1. Its Anterior Face.
2. Its Posterior Face.
3.3. Its Circumference.

THE EYE-BALL.



FIG. 581.

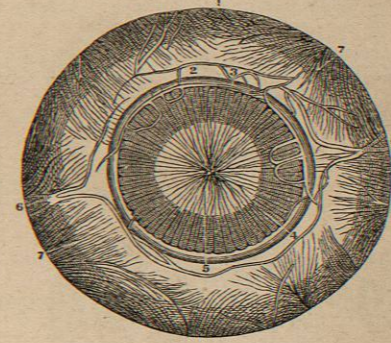


FIG. 582.

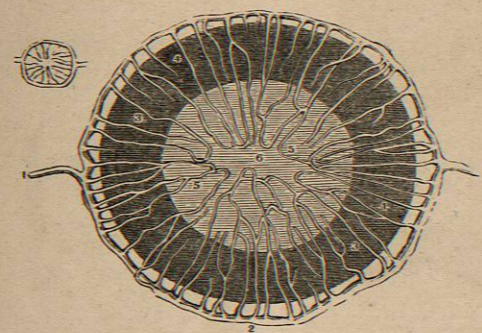
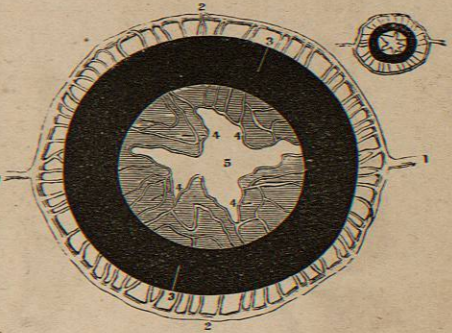


FIG. 583.



THE EYE-BALL.

FIG. 581.

AN ANTERIOR VIEW OF THE CHOROID, IRIS AND MEMBRANA PUPILLARIS OF A FÆTUS OF 7 MONTHS, HIGHLY INJECTED AND MAGNIFIED 4 DIAMETERS.

- 1.2. The Choroid Coat.
- 3. The Ciliary Ligament.
- 4. The Iris.
- 5. The Membrana Pupillaris with its Vessels minutely injected.
- 6.6. The Long Ciliary Arteries.
- 7.7. The Vasa Vorticosa.

- 4. Anterior Face of the Iris.
- 5. Extremities of the same Arteries, forming Arches between the two Layers of the Membrana Pupillaris.
- 6. The Centre of the Membrana Pupillaris, usually free from Vessels, where the Membrane ruptures spontaneously.

The Natural Size of this piece is seen on the side of the Cut.

FIG. 582.

AN ANTERIOR VIEW OF THE IRIS AND MEMBRANA PUPILLARIS OF AN INFANT OF 6½ MONTHS, WITH THEIR VESSELS INJECTED—HIGHLY MAGNIFIED.

- 1.1. The two Long Ciliary Arteries.
- 2. The Circle around the Iris, formed by their Anastomosing Branches.
- 3. Branches which arise from this Circle, and run in Front of the Iris.

FIG. 583.

A POSTERIOR VIEW OF THE SAME, ALSO MUCH MAGNIFIED, AND WITH THE MEMBRANA PUPILLARIS RUPTURED.

- 1.1. Long Ciliary Arteries.
- 2. The Greater Arterial Circle of the Iris.
- 3. The Posterior Face of the Iris covered with Pigmentum Nigrum.
- 4. Flaps formed by the remains of the Pupillary Membrane.
- 5. The Centre of the Pupil.

The Natural Size of the piece is seen on its side.