Fortuna

Sic Placit Deus

Amor vincit omnia: et nos eadem us amore.
Joseph A. Eve
Augusta, Georgia
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Joseph A. Eve, M.D.
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A course of Anatomical Lectures

By

Prof. Geo. W. Newton, M.D.

Augusta

1844.
Errata.
The word Camena may be found in the following page incorrectly written, under the idea that it belonged to the There declension.
The word Lateral may be found spells with two t's if not corrected.
Other errors may be found, as soon continued; some words or words may be omitted owing to the great haste with which these pages have been written. We hope however no error of importance will be detected. They would have been corrected if time had been given.
Division of Anatomy. Rule leader.

Q. Men is Anatomy divided?
A. Descriptive or Special & general.
Q. What is meant by Special Anatomy?
A. The exterior form of the organs, their magnitude, position, connections with adjacent parts, their texture or organization.
Q. What by general anatomy?
A. All the elementary tissues of which tissue are composed.
Q. What is the regional division of the skeleton? Mule Drivers.
A. Head, Trunk, Superior & inferior extremities. Mule or Mule Drivers.
Q. What kinds of matter are found in the constitution of bone?
A. Animal & Earth.
Q. Can you define a bone of its animal matter, and still retain its form and vice versa?
A. Yes, sir.
Q. How many stages are there in the direct element of test, & what are they?
A. Bire: Muscular, Cartilaginous, & Osseous.
Q. What begins to ossify first?
A. Chondro, then the inferior extremities.
Q. What fine structured cartilage bone.
Bones of the Structure, Cranium
A. Compact, & Cellular.

Q. Into what way the Compact is left 
avaried?
A. Into Samaenas, and their into Fibrell. See
Q. Are boney trosulated of Mederotd, more 
& Symphatid?
A. They Are.
Q. What is that membrane called which 
surrounds the Bones?
A. Periosteum.

Head, or Face, & Cranium—

Q. How is the Head divided?
A. Into Cranium, & Face.
Q. How many bones in the Cranium?
A. Eight.
Q. Name them?
A. Occipital, Sphenoidal, Ethmoid, 
Frontal, 2 Parital, 2 Frontoral.
Q. Name the symmetrical inner of the 
Cranium.
A. Occipital, Sphenoidal, Ethmoid, 
Frontal.
Occipital bone.

Q. What is the figure of the occipital bone?
A. Quadrilateral, resembling a Trapezium; surmounted by a foramen, &c. concave internally.

Q. What large hole is there in the lower portion of this bone?
A. Foramen magnum occipitale.

Q. What is that part of the bone called which is in front of this hole?
A. The Valsa.

Q. What is the bursal or submaxillary process?
A. The Palpex.

Q. What lips in the excavation on the superior surface of this process?
A. Medulla Oblongata.

Q. What bone joins this process anteriorly?
A. Sphenoid bone.

Q. With what do the canals of this process articulate?
A. The first vertebra.

Q. What shaft through the Foramen magnum?
A. The spinal marrow, vertebral artery &c.

And the spinal accessary nerves.

Q. Where is the occipital protuberance?
A. On the external surface half way between the foramen and the upper angle of the bone.

Q. What extends from each side of this?
Occipital bone.

1. The superior transverse ridge.
2. What is observed about one inch below? The inferior semicircular ridge.
3. What is observed just behind each condyle?
4. A foramen.
5. What foramen in each foramen? The posterior condylar foramen.
6. What foramen passed the condyle having its trigone in front?
7. The anterior condylar foramen.
8. By what is each limb composing the cross, on the internal surface, marked? A groove or fossa for a sinus.
9. There are four cavities formed by these ridges. What do they contain? A. The two posterior, the relief of cerebrum. The inferior, the relief of cerebellum.
10. With what bone does the occipital articulates? A. Above with the cranial bones, laterally with the temporal bone, in front with the ethmoid bone.
Frontal Bone.

Q. What part of the roof of the cranium is formed by the frontal bone?
A. The whole anterior, a portion of the lateral, inferior, and inferior.
Q. How is the front surface terminated on either side below?
A. By the orbital ridge.
Q. What are the internal and external termination of the ridge called?
A. Angular process.
Q. What is there just above each of the orbital process?
A. The diploë, or nasal fontanelle.
Q. What is there on each side of the front of this bone?
A. The frontal fontanelle or boss.
Q. What part of this bone is thickest?
A. Orbital process.
Q. What is received into the opening between the orbital process?
A. Ethmoid bone.
Q. Where is the depression for containing the lacrimal gland?
A. At the anterior anterior part of the orbital process.
Q. What is that foramen or notch called?
Frontal & Sphenoid bone

in the orbital ridge.

A. Supra-orbital foramina.

2. Where are the frontal sinuses?

A. Dorsal to the nasal predorsum.

Q. Through what bone do they communicate with the nasal cavity?

A. Ethmoid bone.

2. Which root bone of the Cranium is this united?

A. Verrbal, Ethmoid & Sphenoid

B. Sphenoid Bone

2. So what had the Sphenoid bone been

considered?

A. A bat.

2. Where is it situated? Transversely in the middle of the base of the Cranium.

Q. What are the processes arising from the upper anterior part of the bone called?

A. The process of Vaginal & little wings

2. With what bone does their anterior end articulate?

A. The Frontal bone.

2. By what foramen is the base of each wing penetrated?

A. The foramen Orbitale.

2. What is that ridge of bone between the
Sphenoid

Foramen Opticus Called

1. The Proceed Observer

2. What is the depression behind the ridge?
   A. Verte Surface.

2. What process is in the middle of the inferior face of the body of this bone.
   A. Iliac process.

2. What does it articulate?
   A. The Row.

2. What process project downwards from the lower part of the great wings?
   A. Sphenoid. External & Internal

2. By what are they separated?
   A. The Sphenoid Fracture.

2. What process of this bone situated between the petrous & sphenoid portion of the Temporal bone.
   A. Sinuses present.

2. What projects downwards from the Spine?
   A. The Spinal process.

2. What foramen between the left & greater wings?
   A. Foramen Lacerum Inferior

2. What Foramen just below this?
   A. Foramen Abyssorum

2. What behind the Cast?
Sphenoid Parietal bones

A. Frontal Sphenoid

1. What bones does the sphenoid articulate with?
   A. Frontal, Ethmoid, Malar, Parietal

2. With what laterally?
   A. Temporal
   B. Occipital

3. How many points of articulation for this bone?
   A. Eight


Parietal Bones

2. What part of the cranial wall do the parietal bone form?
   A. Superior & lateral

3. How divided for description?
   A. Two surfaces, 4 margins & angles

2. What need about the limits of external surface?
   A. Parietal protuberance
   B. What part is it that should not be trephined
   A. The anterior superior angle

2. With what does it articulate?
   A. Its fellow, Frontal, Sphenoid, Temporal & Occipital.
Ethmoid bone. Apr-27

2. Where is the Ethmoid bone situated?
A. Between the orbital processes of the frontal.
B. What is that vertical process on the superior face of the ethmoid plate called?
A. Crista Galli
B. How is the bone divided?
A. A middle portion & 2 lateral masses.
B. What foramina between the front of the Crista Galli & the Os Frontis?
A. Foramen Cocceum
B. On each side of the Crista Galli there is a depression what occupies there?
A. The jugular foramen
B. What is the vertical plate below the ethmoid called?
A. Palatal (Plate), Sphenoid.
B. What is the portion of this bone called which contributes to the formation of the orbit?
A. Os Frontis
B. A part of what cavity does the internal surface of the ethmoid plate form?
A. A part of the sphenoid.
B. What is in the middle of this surface?
A. The superior meatus of the nose.
B. What forms the upper boundary of this meatus? The upper Turbinated bone.
Temporal bones

1. What is the inferior?
A. The middle temporal bone.
2. Is the inferior temporal bone a part of the middle?
A. It is not.

Temporal Bones

3. What part of the surface of the cranium is formed by the temporal bone?
A. A part of the lateral and inferior.
4. How is it divided?
A. The circular anterior portion is called the squama; behind is the mastoid; between these is the zygomatic.

5. What occupies that space at the anterior inferior part of the external surface of the squamous portion?
A. The middle artery of the zygoma.
6. What cavity is in the external surface at the anterior inferior part of this portion?
A. The Glomoid Cavity.
7. With what does it articulate?
A. The lower jaw.
8. By what is the glomoid cavity on its outer margin formed?
A. The zygomatic process.
9. Delineate what bone is the upper angle of
Temporal.

The mastoid processes received:

A. The Parotid & Occipital.
B. What large process on this bone?
C. The Mastoid.

D. What is that groove called at the inner side of the base of this process?
E. Digestive

F. What occupies the groove on the external surface of this portion?

G. Lateral Sinus of the Brain.

H. What foramen at the centre of the anterior surface?
A. The Sphenoidal Paracysis.
B. What nerve passed through it?
C. The Vidian.

D. What large foramen in the posterior surface of the posterior portion?
A. Medial Auditory Sinus
B. What foramen at the base of the petrous. Know the Mastoid & Styloid processes.
A. The Medial Auditory Sinus.
B. What foramen between the squamous and mastoid portion.
A. Glenoid

D. What process just within the styloid process? The Sphenoidal.
What foramen immediately before the lower end of this fossa?
A. Carotid
B. Vena cave.

How many foramina do you see?
A. 14.

What bone forms the lower boundary of the same
A. Superior Maxillary bone.

How is divided?
A. Into a body and 2 branches or Rami.
B. By what is the upper edge formed?
A. The alveolar process & Crowned.

What is there at the lower part of the tympanum?
A. The anterior mental Tubercle.
B. What foramen is there on the external line just bounding the alveolus?
A. Anterior mental or Maxillary foramen.
B. What does it communicate with?
A. A large Canal in this bone.
B. There is the posterior mental Tubercle.
A. (At the lower internal part of the eurypterygoid)
B. What two processes terminate the ramus of this bone?
A. Condylar & Pivotoid.
Superior Maxillary

1. What is the superior jaw called?
   A. Orbital process

2. Where is the infra orbital foramen?
   A. Just below the middle of the lower margin of the orbit

3. What is that portion called which articulated with the malar bone?
   A. The malar process

4. What process arises from the upper and lower side on this bone?
   A. Nasal

5. By what is the under surface marked?
   A. Alveolar process

6. What process is within the circle of the alveolar process?
   A. Palate process

7. What does its superior surface form?
   A. Floor of the nostril

8. What foramen just behind the first alveolar process opening into the nostril?
   A. The foramen incisivum

9. What large cavity on the inner face of this bone?
   A. Anterior Hyomionamus
Valate bones.

2. How is the palate bone divided for description?
A. Into a horizontal or palate, a vertical or nasal, and articular plates.

2. What is the palate on the same line & continuous with?
A. The palate of the inferior mandible.

2. What part of the nostril does the nasal plate form?
A. The nostril external.

2. What processes arise from the posterior inferior of the nasal plate?
A. Dringoids.

2. What is the articular plate form a large part of the orbit?
A. Not in Nasal Bones.

2. What is the figure of the nasal bone?
A. Oblong.

2. What is formed by them?
A. A strong bridge or arch.

2. Which what do the articulate above?
A. Nasal Bones.

2. What small bones are placed between the nasal spools of the maxillas & ol flammers?
A. The unguiform bones.
Malar bone.

2. What part of the face is formed by the malar bone?
A. The middle external.

2. How many faces or surfaces consider in this bone?
A. One that contributes to the orbit, one in front which is convex, one concave behind, two superior, two inferior, merging.

2. With what does the posterior superior margin articulate?
A. The Zygomatic Title of the Temporal bone.

2. To what muscle does the posterior inferior margin give rise?
A. Masseter.

2. What are the angles of this bone called?
A. Superior orbitar triangular process, inferior orbitar triangular, the Zygomatic & Maxillary process.

Subjoined WO ONLY.

2. Where is the inferior maxillary extended to?
A. Superior to the lateral process of the zyg.

2. How is the internal face?
A. Convex.

2. What does the fascia in the superior part of the corner receive?
A. The apposed process of Ethmoid bone.
Spinal Column

2. What are the bones composing the Spinal Column called?
A. Vertebrae

2. How many true vertebrae?
A. Thirty Four.

2. How are they divided?
A. 7 Cervical. 12 Dorsal. 5 Lumbar.

2. What is the figure of S. Column?
A. Triangular.

2. Is it filled by the spinal marrow?
A. Not completely.

2. A vertebra is divided into portions for disposition. What are they?
A. A body. An annular portion.

2. What is the first vertebra called?
A. The Atlant.

2. What is the particular about it?
A. It has no bony or spinous process. The transverse process is long. The spinal cavity large. It produces two surfaces to articulate with the condyles of the occiput. Has a surface on the anterior ridge to articulate with the odontoid process of the dens vertebra.

2. By what is the second known?
A. Preceded anteriorly.

2. What is it confined to?
Sp. Column 4. Thorax

A. Transverse Ligament.
B. What resistance have 11" & 12" Dorsal?
C. They have a complete articular surface for the corresponding ribs.
D. How many points of articulation for each rib?

A. Three. 1 for the body, 1 for each annular part.
B. How would you frame a Lumbar vertebra?
C. They larger than the others, the epiphyses at the margins of the facets are larger and more elevated. The transverse processes stand out at right angle & the spinous horizontal. See page 193.

Thorax

A. How is the Thorax formed?
B. By the Dorsal vertebrae behind, the Sternum in front. & by the ribs & their Cartilages.
C. What is the figure of the Thorax?
D. Conoidal.

2. How are the ribs divided?
A. Into true and false.

2. How many true ribs are there?
A. 7.
B. How many false?
A. 5.

2. How do they run commencing at their
Ribs.

1. What is the anterior extremity?
   A. Posterior.
   B. Anterior.

2. Which rib is nearest horizontal?
   A. First.
   B. Second.

3. How is each rib divided for description?
   A. An external and internal surface, an upper and lower margin, and a vertebral and external extremity.
   B. How are the surfaces?
   A. External concave, internal concave.
   B. How are the margins?
   A. Rippled rough, lower of sharp.
   B. What is settled on a rib not far from its vertebral extremity?
   A. A consideration, sometimes called the junction angle of the rib.

4. Where is the intercostal space or groove?
   A. Just within and above the lower margin.
   B. How would distinguish the first rib?
   A. If it is ever circular, its head has lateral articular surface. It is flat above and below. It has an internal and external, it has no intercostal groove.

5. What are the two last ribs called?
   A. Floating.
   B. Is the sternum parallel to the ribs?
   A. It is not.
Sternum

2. Which surface is smooth?
   A. Anterior.

2. By how many joints is it composed?
   A. 3.

2. What is the notch on the superior extremity called?
   A. Cornual notch, or Anacheta.

2. What is the inferior portion of the bone called?
   A. Eustiliform or Hypostylid Cartilage.

2. Is the small extremity of this bone always pointed?
   A. Sometimes it is bifurcated.

2. What articulated with the marquise of this bone?
   A. The Cartilage of the rib.

2. What bone at the superior extremity?
   A. Clavicle.

2. What is the length of the sternum?
   A. From 5½ to 7½ inches.

2. Is it shorter in the male or female?
   A. In the female.

2. Of texture of bone is the sternum principally?
   A. Spongy.
Of Innominateum

1. How many primary points of osification are there in the femur? A. 5. (iliac crest, ischium, pubis, acetabulum, and ischial tuberosity.)

2. Which is the largest bone of the innominateum? A. The Ilium.

3. How many separate ends on this bone? A. 4. (iliac crest, ischial tuberosity, pubis, and acetabulum.)

4. Is its division certain? A. Yes. (Division into ilium, ischium, and pubis.)

5. What is the internal face called? A. Convex or ventral.

6. Which is the smallest bone of the innominateum? A. Pubis.

7. How is it divided? A. At horizontal portion the body a posterior portion.

8. How is the triangular concavity on the external surface of the horizontal portion bounded? A. On one side lined with cartilage, and the other by ridges which terminate in the anterior lip for part of the acetabulum.
Os Innominate

1. What is that part of the pubis called when it joins its fellow?

C. Symphysis of the pubis.

B. What part of the inominate bone is formed by the ischiuim?

A. The posterior inferior.

D. What part joins the pubis?

A. Rami.

D. How is the sacro-iliac joint formed?

A. The posterior part by the sacrum and the anterior by the ischiuim.

A. How much of the acetabulum does form?


D. What large foramen is in the front part of the inominate bone?

A. Iliac foramen. or foramen ovale.

D. Describe the sacrum and state its use.

A. The sacrum and acetabulum shape bone between the inominate bone of which it is the coccius.
Clavicle & Scapula

2. How is the upper extremity divided?
A. Shoulder, Arm, Fore-arm, Hand.
B. What shape is it? By the Clavicle
A. In the Cylindrical, flattened externally and internally, its is triangular.
B. What curvature does the vertebral foramen present?
A. Curves anteriorly. (Curve posteriorly)
B. What curvature on humeral third?
A. Curves posteriorly. Curves anteriorly
B. What difference is this bow in the male and female?
A. Longer, smaller and larger in the female
B. Is there any difference in the right & left of the same length?
A. Right larger and more curved.
B. On what does it rest at the distance of 1/3 its length from the sternum?
A. First Rib 19

Scapula

1. What is its figure?
A. Triangular
2. What is the posterior face or surface called?
A. Posterior
C. What is the Anterior?
A. Costa or Deltoid
Scapula & Humerus.

1. What is that ridge on the thorax called?
   A. The spinous process.
2. What cavity above the spinous process?
   A. Supra-spinata fossa.
3. What below?
   A. Intra-spinata fossa.
4. In what does the spinous process terminate?
   A. The Acromion process.
5. What cavity does it overlie?
   A. Almoid cavity.
6. What are the margins of the Scapula?
   A. The superior, the external, the posterior, what is intima?
7. What angle has it?
   A. The superior, the inferior, the exterior, or interior?
8. What portion arise from the cervix of the Almoid cavity?
   A. The Conoid process.

Humerus.

1. What is general shape of the 1st Humeri?
   A. Cylindrical.
2. How much of sphen does the head of the 1st Humeri represent?
   A. The third.
3. What does the bicipital groove separate in
Humerus & Ulna

This bow?

Q. The greater & less Cubitus.

Q. What level does its union at its lower extremity.

A. Radius & Ulna.

Q. What cavity above the ulnar articulation anterior.

A. The little sigmoid.

Q. Where is the greater sigmoid cavity?

A. In a corresponding place behind.

Q. What does it receive when the arm is extended.

A. Olecranon process of the Ulna.

Q. On what side of the forearm is the Ulna?

A. on the side with little finger.

Q. Which is largest extremity of the Ulna?

A. Superior.

Q. What process a little below and in front of the olecranon?

A. Coronoid.

Q. What cavity separated them?

A. The greater sigmoid.

Q. Where in the Ulnar sigmoid cavity?

A. On the radial surface of the coronoid process.

Q. What process on the inferior extremity of the bone on the side of the little finger?

A. The styloid process.

Q. Which is the longest the Ulna & Radius?

A. Ulna.
Radius & Carpus.

Q. Which is the largest extremity of the Radius?
A. The Carpal.

Q. Where is its head?
A. The superior extremity.

Q. What is the protruberance immediately below the neck called?
A. Sincipital or Tubercle of the Radius

Q. With what of the Carpus does the Radius articulate?
A. As Tunard &t Scaphoided

Carpus.

Q. How many bones in the Carpus?

Q. How are these bones arranged?
A. In 2 rows.

Q. What bones are in the first?
A. Lunaris, Scaphoid, Tunard, Triangular, Pedi form.

Q. What is it that can be readily felt at the ulnar extremity of the wrist?
A. Pedi form bone.

Q. Which is the largest bone of the Carpus?
A. Os Lunatum.

Q. Is the surface articulating with the ulna and Radius convex or concave?
A. Inward curve.
Carpus & Os Femoris

A. Os Femoris.

Q. By what bone of the Carpus is the oblong con

bined principally formed?

A. Capituloides Carneus and slightly by the Os ci:

Q. How would you know the metacarpal bone of the

thumb?

A. It is shortest & thickest of any.

Q. Now many phalanges has each finger?

A. Three

Q. The Inferior Extremity.

Q. What bones complete the Inferior Extremity?

A. Os Femoris, Patella, Tibia & Fibula.
Fibia and Tibula.

2. Which is the internal bone of the Leg? A, Tibia.

3. What part of it is smallest? A, one third from the inferior extremity.

4. Where is the epicondyle process of the tibia? A, Between the 2 cartilages which articulate with the condyles of the 2 femur.


7. For what is that concavity on the lower part of the tibia? A, For articulation with the tibula.

8. How many surfaces ridge in the length of the tibia? A, 3 of each.

9. Which is the longest, the Fibia or Tibula? A, Tibia.

10. Tibula.

11. What is the inferior portion of this bone called? A, External Malleolus.

12. How many surfaces and ridges on it? A, 3 of each.
Patella & Foot

1. Where is the Patella situated?
A. At the fore part of the knee joint.
B. What is observed on the anterior surface?
A. A ridge from the superior to the inferior margin.
B. Which surface is convex?
A. The external

Foot

1. How is the foot divided?
A. Into Tarseus. Natica Tarsal. & Tert or Phalanges.
B. What bone compose the Tarseus?
A. Os Calcis, Astragalus, Navicular, Cuboides.
C. Os Cubiforme Sinus.
D. Which is the largest
A. Os Calcis.

2. Which rest in size & where situated?
A. Astragalus placed on the os calcis between it & the bone of the Leg.
B. There is the Navicular.
A. At the internal side of the Tarseus, between the astragalus & Cubiformes.
B. How many Meta Tarsal bone?
A. 5

3. How would you distinguish the first?
A. It is larger & shorter.
B. How many phalanges to each toe?
A. 3 except the big toe - it has 2.
Muscular System

Abdominal muscles & integuments

1. What forms the external surface of the abdomen?
2. Why is the skin so loose?
3. What is the layer next and composed of? Fascia subfascialis abdominis, composed of condensed cellular tissue with some adipose matter
4. What name is given to the portion situated along the spine?
5. Ligamentum suspensorium
6. How many pairs of muscles are in the external anterior & lateral fibres of the abdomen?
   a. 5
7. Which is the most external?
   a. External oblique.
8. Give the origin & insertion of External Oblique
   a. It runs by 18 tendinous & muscular digitations from the 5 inferior ribs at a little distance from their cartilage, the first head covered by the pectoralis major, the 5 upper digitate with the serratus major anterior, the 3 lower with the latissimus dorsi, the fibres fall downwards & terminate in a broad thin tendon covering the lower part of the abdomen, inserted into the whole length of the linea alba, the anterior half of the outline of the ilium, the epigastric apophysis of the pubis...
External & Internal Oblique

2. How is the Linea Alba formed?
   A. By the Seams of the three broad muscles of the abdomen

3. What are those lines called on either side of the Linea Alba two or three inches from it?
   A. Linear Semilunaris

2. What is that part of the Tendon which joins the Pubis called?
   A. Poupart's Ligament

2. What hole is this Ligament?
   A. The internal abdominal ring

2. What passes out of it?
   A. The spermatic cord of the male, & the round ligaments of the womb of the female.

2. Give the insertion of the Tendon forming its superficial layer.
   A. Into the Pubis of the same and opposite side.

2. What is that Tendon called?
   A. Internal Oblique

2. Give the insertion of the external Oblique?
   A. Into the Spine & Cresta of the Pubis

2. Which part is called Hmm Isbald's Ligament?
   A. That part inserted in the Cresta of the Pubis.

Obliquus Internus

2. What muscle is next to the last?
   A. Obliquus Internus
Rectus v. Cremaster

1. Give its origo and insertion?

A. It rises by the fascia lumberum from the spinous process of the three inferior lumbar vertebrae, from all three of the sacrum, from the crista of the ilium, and upper part of the iliac spine. The fibres run upward & inwardly, insert into the cartilage of the 6th & 7th ribs. The cartilages of the 6th & 7th ribs. +

B. Also the epigastric & rectus sheaths of the transversus.

A. It arises from the fascia lumbarum. 1. Rectus, 2. Psoas & 3. Quadratus lumborum, the spine of the ilium, external half of the iliacus ligament, the inferior surface of the cartilage of the 6th, 7th, 8th ribs. The fibres run transversely, inserted into the sub-costal cartilage, & crura auris alba.

2. Give the origo & insertion of the Obliques.

A. It rises from the ilium & upper margins of the body of the Pubis. The fibres first ascend then insert into the cartilage transversum & the cartilages of the 6th, 7th, 8th ribs.

3. Where is the Cremaster muscle found?

A. The testicle is descending through the abdomen beneath that edge of the transversalis & internal oblique, which extends from the iliacus ligament to the crista & spine of the Pubis. & takes a
Fascia \* Pyramidalis

Fascial sheet of three fibres which underlie it and constitute the Pyramidalis muscle.

1. What is the length of the inguinal or abdominal canal?
   A: 1/2 inch.

2. Where is the Fascia Transversalis abdominalis?
   A: Between the Transversus muscle & Pectineum

3. What perforation in it?
   A: The internal abdominal ring.

4. What is that structure between the Fascia Transversalis & Pectineum?
   A: Fascia Propria

5. What forms the innermost stratum of the abdominal Paries?
   A: Pectineum, which is a dense membrane

6. What Coverings has an Obliquus externus?

7. Where is the Pyramidalis muscle?
   A: On the lower part of the Rectus

8. Give its origin & insertion?
   A: Reaches from the symphysis & lower part of the spine of the pubis in front of the Rectus. Inserts into the Linea Alba
Pectoralis major & minor. Proprieties.

1. Give the origin & insertion of the Pectoralis major?
   A. It arises from the anterior face of the sternum, from the cartilages, including the second & third, from the sternal end of the 6th rib, & from a part of the clavicle externally. Inserted into the margin, anterior, of the deltoideal groove of the shoulder.

2. What motion does this muscle give the arm?
   A. It is an abductor, rotator, depressor, and elevates of the arm.

3. What are its extraordinary motion or actions?
   A. It may act from the 6th rib upon and elevate the ribs & sternum in respiration.

4. What small muscle lies under this?
   A. Pectoralis minor.

   Give its origin and insertion?
   A. It arises from the cartilage of the 3rd, 4th, and 5th ribs, inserted into coracoid process of the scapula.

5. What is its action?
   A. Draws the shoulder downward & inward, it may assist in respiration.

6. Where is its Proprieties?
   A. Immediately under the skin covering the back part of the neck & thorax.
Latissimus Dorsi and Serratus Post. Inf.

1. Give its origin and insertion.
   - It arises from the 6th rib, 7th rib, and spinous processes of the 6th and 7th thoracic vertebrae.
   - It inserts into the linea alba, below the arcuate line of the ilium.

2. What is its action?
   - It draws the humerus downward and backward.

3. Give the origin and insertion of the Serratus Post. Superior.
   - It rises from the 2nd to 7th ribs.
   - It inserts into the iliac crest and into the serratus anterior muscle.

4. What muscle is an antagonist?
   - The serratus posterior inferior.

5. What is the Rhomboid muscles divided?
   - The Rhomboid major or inferior portion of the Rhomboid muscle is divided.
Thromboides, Sematus post. Sds, Scapula.
Give the origins and insertions of each.

1. Minor from from 3 aponeuroses proceed from the neck. the major from the 7 of the neck and of the face, they are inserted into together into the base of the Scapula. It draws the Scapula up and back.

2. Give the origins of the Sematus Post. Superior.

3. It runs from the 3 int. Spinosus, posterior, of the neck, and of the 2 laps of the back, inserted into the 3, 4, 5 and 6 ribs. It draws the ribs up and assists in inspiration.

4. Where is the Sematus Scapula?

A. Anterior to the T2 foramen, with its lower end just above the Thromboides.

B. Give its origins and insertions.

A. It rises by 4 tendons from 4 laps, transverse, posterior to the neck. inserted into the base of the Scapula.

5. Where is the Splenius Muscle?

A. Beneath the Sematus.

B. Give its origins and insertions.

A. It rises from the 3 int. Spinosus, process of the vertebrae, the sup. spinal, vititio, inserted into the mastictory process and adjoining part of the Co.
Sacro- Lumbaris Longissimus Dorsi.

1. Does it attach to 2 prolongations where are they inserted?
   A. Into the first and 2 dorsal bones.

2. What is that part called?
   A. The Splancnus Collis.

3. What is its action?
   A. Draws the head back.

2. Where is the Sacro-Lumbaris Longissimus Dorsii?
   A. Between the spinous processes of the vertebral
      and angular of the ribs.

Q. Which is nearest the spine?
   A. Longissimus Dorsi.

Q. Are their origins and insertions?
   A. They have a common origin from the external
      margin and spine of the laminae, spinous and
      transverse processes of the last dorsal vertebra
      and spine of the ilium. Longissimus dorsi is
      inserted into the transverse processes of
      all the dorsal vertebrae except the first one
      into the under edge of all the ribs but the 2 lower.
      The Sacro-Lumbaris is inserted into all the ribs at
      their angles.

Q. What are these slips called coming from
   the Sacro-Lumbaris & attached to 2 lower
   ribs?
   A. Musculi accessorii & Sacro-Lumbaris.
Muscles on the Neck.

2. What is the action of these muscles?
A. To keep the spine erect and to draw the ribs.

D. Give the origin and insertion of Cervicis de levatores?
A. It arises from the upper margins of 4 to 5 spinal vertebrae, inserted into the transverse processes of the 4, 5, and 6 cervical vertebrae.

D. There are the Transversalis cervicis?
A. On the inner side of the last.

D. Where is the Trachea transversus?
A. On the inner side of the Transversalis cervicis.

D. Give its origin and insertion?
A. It arises from 5 to 7 transverse processes of the cervical and 4 last of the dorsal vertebrae, inserted into the manubrium sterni.

D. Give the origin and insertion of the Cephalics?
A. It rises from 7 last dorsal, 4 last cervical vertebra by their transverse processes. Inserted into the occiput between the scapulam and nape.

D. Give the origin and insertion of the Semispinalis cervicis?
A. It arises from the transverse processes of the 6 inferior dorsal vertebrae.
Simiae Nervi Dorsi, Multifidis Spinae; &c.

of the Dorsal Vertebrae. Inserted into the Spinous Processes of the Middle Cervical Vertebra.

1. Give the origin & insertion of the deep spinalis Dorsi.

2. It arises from the transverse processes of the 7th Cervical Vertebra. Inserted into the Spinous Processes of the 2nd Cervical & 5th to 7th dorsal vertebrae.

3. Give the origin & Insertion of Multifidus Spinae.

4. Rises from the spinous processes of the sacrum, the spine of the ilium, the transverse & oblique processes of all the vertebrae except the 3 superior. Inserted into the Spinous Processes of all except 9 Superior.

5. Give origin & insertion of Levatores Costarum.

6. Rises from the last cervical and eleven superior dorsal vertebrae, and inserted into each rib below.

7. What is its action?

8. Upright elevates the ribs.

9. When are the inter spinalis?

10. Between the Spinous Processes of Contiguous vertebrae.

Q. Where are the intertransversales?
A. Between the transverse processes of contiguous vertebrae.

Q. What is their action?
A. To draw together the transverse processes and bend the spinal column.

Vert. Posterior Capsitis Major.

Q. Give its origin & insertion?
A. It arises from the spinous process of the atlas and inserts into the semicircular ridge of the occiput at the inner end.

Q. Give the origin & insertion of the Vertus Capsitis Posticud Minor?
A. It rises from the tubercle of the atlas and into the inferior semicircular ridge of the occiput.

Oblique Capsitis inferior.

Q. Give its origin & insertion?
A. Rises from the side of the spinous process of the axis and isht into the transverse process of the atlas.
Muscles of the Chest.

3. Give the origin & insertion of Subclavian?

4. Rises from the cartilage of the 1st rib. Inserted into the inferior part of the clavicle from the Sternum to the Coracoid ligament.

5. What does it separate from the clavicle?

6. The axillary muscles & brachial placed on each side.

7. Give the origin & inch of serratus Magn and Minor.

8. If raised from the 9 inferior ribs, the five lower ligations are connected with the Obliganged Esth."不惜 in the base and angle of the scapula into the costal muscles.

9. How are they divided?

A. External & Internal.

10. Give the origin & inch of the External?

11. Rises from the inferior edge of the ribs, rising at the Sternum and the 2nd rib against the ribs, that into the superior margin of the ribs below.

12. Give the origin & inch of the Internal?

13. Rises from the inferior margin of each rib commencing at the Sternum and ending at the angle of the ribs, in the inferior edge of the ribs below.

14. Give the origin & inch of the External?

15. Rises from the under surface of the Transverse process and inferior edge of each rib; just into the ribs below.
Triangularis Posteri. Pectoralis Major. Scapula Spinus Larte.

1. Give its origin and insertion:
   A. Rises from the margins of the Eulorinse Cartilage and Membrane of the 4th 5th 6th 7th 8th 9th ribs.
   Muscles of the Shoulder.

2. How many are there?
   A. Six.

3. Give the origin and insertion of the deltoid:
   A. Rises from the spine of the Scapulae, the circumference of the arm above the external third of the Scapulae, into a triangular rough space or line on the outer side of the 1st Rumen near its middle third.

4. What is its action?
   A. Raises the Humerus. By its anterior fibres bring it forward. The posterior carries it backward.

   Supra Spinatus Scapulae.

5. Give its origin and insertion:
   A. Rises from the Concave surface of the spine of the Scapulae and from the superior border of its base into a great tendon of the Humeral.

   Inra Spinatus Scapulae.

6. Give its origin and insertion:
   A. Rises from the two internal thirds of the Intra Spinatis Posteri: Just into a great tendon of the Humeral.
1. Give the origin and insertion of the Teres Minor.
A. Rises from the inferior angle of the Scapula, and the inferior border of that bone, just above the lower back part of the labrum of the Humerus.

2. Give the origin & insert of the Teres Major.
A. Rises from the inferior border of the Supra Scapular Ponsa & lower third of the base of the Scapula—just into inner side of trochlear groove

3. Give the origin & insert of the Subscapularis.
A. Rises from the base superior & inferior Postae of Cristal. Surface of the Scapula; just into the capsule of the joint & small labrum of the Humerus.

Muscles of the Arm.
Give the origin and insert of the Biceps Brachii.
A. Rises by its long head from the inferior part of the glenoid cavity, by its short head from Coraco-Process of Scapula. Insert into the interole at the upper end of the Radix by a common tendon.

What is its action?
A. Bends the forearm when the arm and arm when the shoulder.

Give the origin and insert of the Coraco-Brachialis.
A. Rises the Coracoïd process of the Scapula.
Brachialis Luxated Trender Hart Lab. Pronator R. Incx. 1.)

rough ridge and middle inner part of the humerus.

1. Give the origin & Just of the Brachialis

2. Rides by a bifurcated fleshy origin from the middle front face of the head of the humerus

Just into the coracoid process of the ulna.

3. Give the origin of the Trender Flexor Cubite.

4. Rides by 3 Radial long one from the inferior edge of the Scapula. Short one the ridge on the outer back part of the Humerus. The third from the inner side of the Humerus Just into the olecranon process.

5. Ridge leading from it, on the Radial side.

6. Give the origin of the Pronator Radii Finx?

7. Rides from the internal condyle of the humerus & coracoid process of the ulna. Crash into the external back of the radius.

8. Give the origin and insertion of the Flexor Carpi Radialis.

9. Rides from the internal condyle of the humerus, only part of the mid. and interosseous ligament. Crash into the base of the metacarpal bone of poro teste.

2. What in its action?

A. Treads the Hand

B. Give the origin and insertion of the Palmaris Longus.
Flavor Muscles of Arm

1. Arises from the internal condyle of the humerus, or inter-muscular ligament, and into the anterior portion of the triangular ligament of the wrist.

2. Give the origin of the flexor carpi ulnaris?

3. Arises from the internal condyle of the ulna, the olecranon, and ridge of the ulna. Insert into the pisiform.

4. Arise from the interosseous membrane, and insert into the various flexor tendons of the fingers.
Ronulths, Supinator of Flexor Ulnar.

3. Give the origin & head of Pronator Quadratus.

4. Pass from the uninjured surface of the ulna. Insert into the corresponding surface of the Radius.

Dive its action?

a. Rotates the Rad. inward.

b. Give the origin and insertion of Extensor Radialis Longus.

c. Pass from the ridge on the humerus, leading to the External Condyle. Inserted into the styloid process.

d. Give the origin & insertion of Extensor Carpi Radialis Longus.

A. Pass from the ridge leading to the Ext. Condyle of the humerus, inserted into the base of the meta carpal bone of the first finger.

b. Give the origin & insertion of the Extensor Carpi Radialis Posteror.

A. Pass from the ext. condyle of the humerus, & upper part of the ulna. Insert into the meta carpal bone of the middle finger.

3. Give the origin & insertion of the Extensor Digitorum Communis.

A. Pass from the Ext. Condyle of the humerus, & inter osseus ligament. Insert into the second phalanx of distal tendons into third.

Give the origin of knust of the Flexor Carpi Ulnaris.

1. Pass from the Ext. Condyle of the humerus & Intertendol Polar ligament. Insert to the base of the In car bone of the little finger.
Muscles of the Forearm.

3. Give the origin and insertion of the Extensor Extrinsicus Pollicis Minus.

1. arises from the back part of the ulna, below its middle, and inserts into the back part of the extensor communis into the back part of the thenar eminence.

2. What is its action?

3. It extends the little finger.

2. Give the origin and insertion of the Extensor Extrinsicus Pollicis Major.

1. arises from the posterior part of the ulna below its middle, just into the first phalanx of the thumb.

3. Give the origin and insertion of the Extensor Extrinsicus Pollicis Major.

1. arises from the posterior part of the ulna, above its middle, the interosseous ligament.
Muscles of the Hand.

1. Give the origin & insertion of the Anconeus?
   A. Puts from the external Condyle of the Humerus, into the ridge of the external part of the ulna — it extends the forearm.

2. Give the origin & insertion of the Palmaris Longus?
   A. Puts from the anterior part of the annular ligament of the wrist & inner side of the Palmar aponeurosis. Nests into the oblique fat of the inner margins of the hand.

How many Lumbrlcalis Muscles are there?
A. Four Small Muscles.

3. Give the origin and insertion of the abductor minimi digitii manus?
   A. Puts from the postulature of the os juxta. Forme & contiguous part of the annular ligament. Nests into the first phalanx of the little finger.

4. Give the origin & insertion of Flieson Bivit Minimi Digitii manus.
Muscles of the Hand

A. Rises from the aniliform bone & annular ligament. Installs into the first phalanx of the little finger.

Q. Give the origin & Just of the abductor pollicis longus.
A. Rises from the projecting ends of the trapezius. It lies oblique and annular ligament.Installs into the outside of the base of the phalanx (first) of the thumb.

Q. Give the origin & Insertion of the Opponen.
A. Rises from the trapezius and annular ligament. Installs into the radial edge of the carpal bone of the thumb.

Q. Give the origin & Just of the Flexor Brevi Pollicis Manus.
A. It is divided by the Semies of the Flexor pollicis longus, into 3 heads: First rises from the trapezius, Flexor praepeles, and
Muscles of the Hand

1. Muscle of the thumb.
   Insertion into the outer side of the base of the thumb, and into the inner side of the first metacarpal bone.

2. Abductor Pollicis.
   Origin from the ulnar edge of the base of the middle finger, and insertion into the back side of the first metacarpal bone.

3. Abductor Indicis.
   Origin from the trapezium and trapezoid bones, and insertion into the inner edge of the second metacarpal bone of the thumb.

How many interosseous muscles?
A. Seven: One on the palm.
I give the origins & insertion of the Platysma.

1. I find the condensed cellular membrane just below a nearly whole length of the Clavicle, just into the integuments of the lower face.

2. What is seen near its middle and in the direction of its fibres?

A. External Jugular vein.

B. Give the origins & Insertion of the Sternocleidomastoidmuscle.

A. Rised by two heads, by one from the upper end of the Sternum, by the other from the posterior end of the Clavicle, just into the mastoide process at Serracircular Ridge.

2. What is there very important on the lower edge of this muscle?

A. Primitive Carotid Artery & Truncus Caroticus nerve.

C. Give the origins & Insertion of the Omohyoid muscle.

A. Rised from the superior margin of the Scapula, just into Omohyoid.
Sternocleidus: Hygrothyroid Digast.

Of what does this muscle consist?

At two bellies connected by a tendon which lies under the Sternum Clavicle Mastoides.

Give the origin & insertion of Sternocleidus.

It rises from the approximated surface of the Cartilage of the first rib & Sternum. Inserted into the base of the hyoid bone.

Give the origin & insertion of the Thyroideid

It rises from the internal surface of the Cartilage of the first rib & Sternum. Inserted into the Thyroid Cartilage.

Give the origin & insertion of the Hyraco Thyroideid

It rises from the Thyroid Cartilage. Inserted into the base & Corne of the Os Hyoides.

Give the origin & insertion of the Thyroideid

It rises from a little fossa posterior to the base mastoid process of the Temporal bone. Connected into a tendon which passes through the Hylohyoides and is fixed to the base of the Os Hyoides.

Give the origin & insertion of the Thyroideid.

It rises from the inferior surface of the inferior
Cricoid Stylo-Hyoid - Stylo-Esophageal Pharyngeal
Manilla. The fibres converge and are inserted into the base and corner of the Hyoid bone

Give the origin and insertion of the Stylo-Hyoid

A.的缘起 the posterior tubercles of the lower jaw and is inserted into the base of part of the cornu of the Os Hyoidea.

Give the origin and insertion of the Stylo-

Hyoid bone:

A. Pass from the Hyoid process of the 1st

Throat bone, it perforated by the digastric

inserted at the junction of the base of corner of the Os Hyoidea.

Give the origin and insertion of Stylo- glossus

A. Pass from the Hyoid process of the Temporal bone and is inserted into the side of the root of the tongue forming a part of its structure.

Give the origin and insertion of the Stylo-Thyroid

A. Pass from the Hyoid process of the 2nd

Throat bone, Sut into the Thyroid Cartilage at the posterior part and into the Pharynx.
Give the origin & insertion of the Scaleneus Anticus.

A task from the Transverse Processes of the 4, 5, 6 Cervical vertebrae, inserted into upper surface of the first rib at its Middle. What large vein in front of this muscle?

The Subclavian vein.

What large blood vessel passes between this muscle and the Scaleneus Posticus.

A Subclavian Artery.

Give the origin & insertion of the Scaleneus Posticus.

A task from the Transverse Processes of the Cervical vertebrae. Just into inferior margins of the first & second ribs by 2 Apices.

Give the origin & insertion of Clavus Colli.

A task from the body of the 3rd Superior
Rect. Capr. Sat. - Ursus Nagring. - Anterior to
dorsal vertebrae. It from the transverse for-
cess of the 1st, 2nd, 3rd, and 4th cervical vertebrae
insert into the spinous process of the 0th
occipital.

Show the origin & insertion of the Rectus Capri-
tis Lateralis

A. Rises from the front part of the transverse
process of the Atlas, fast into the ridge lead-
ing from the Caudal of the Occipital to the
Squamosal process.

Give the origin & insertion of the Serratus
Painius Minoris.

A. Rises from the Anterior Superior Spineous
process of the Thoracl, and inserted into the
anterior side of the rib near its stercule.

Give the origin & insertion of the Rectus
Latissimus Dorsi.

A. Rises from the Anterior Superior Spineous
process of the Istum, and obliquely downwards
fasten into the inner side of the arm near its:

Give the origin & insertion of the Rectus
Pectoris.

A. Rises immediately in front of the
Vastus Ext. & Crusales. Recti Secund.

Thick. Rises from the ant. Lateral Gubernaculum of the Ilium. * inset into the upper part of the Patella.

* upper part of the acetabulum.

Give the origin and insertion of the vastus extensor.

Rises from the anterior surface of the Trochantor major + linea aspera. Inserted into the external margin of the Patella. + page 216

Give the origin & insertion of the Vastus Intermed.

Rises from the anterior part of the Trochantor minor + linea aspera. Inserted into the upper inner edge of the Patella. page 216.

Give the origin & insertion of the Cruvalis.

Rises from the fore part of the ob. Pinnate almost to its lower extremity. Inserted into the Patella. see 216

Give the origin & insertion of the Recti Secund.

Rises from the brim of the Trochlear & inserted into the upper third of the linea aspera. see 217

Give the origin and insertion of the Addue.

A. From the inner face of the pubis, just into the middle third of the femur. Let 217.

Give the origin and insertion of the adductor Magnus.
A. Rises from the anterior surface and flanks of the pubis, from the internal and external border of the oblique, just into the femur, by a tendon into the external condyle of the femur. Let 218.

Give the origin and insertion of the Gluteus Max. Minor.

Give the origin and insertion of the Rectus Med. A. From the anterior third of the spine of the ilium, but deeper. Seat of the Gluteal apertures of the ilium, the notch below it, the dorso...

Give the origins & insertion of Semimembranosus.
1. Rise from the tuberosity of the ischium just into the external surface of the tibia near its lateral edge.
2. Give it use: a. Flex the leg on the thigh.

Give the origins & insertion of the Semitendinosus.
1. Rise from the tuberosity of the ischium just into the back part of the head of the tibia.
2. Give it use: a. Flex the leg on the thigh.

Give the origins & insertion of the Biceps Femoris?
1. Rise by its long head from the tuberosity of the ischium in common with the Sartorius, and by its short head from the line of the femur to the ridge leading to the external condyle, just into the head of the fibula.

Give the origins & insertion of the Pyromenoid?
1. Rise from within the trochanter, and face of 2/3 the breadth of the sacrum, passing out at the upper sacro-tuberal notch just into the Trochanter major.

Use: Rotates the limb outward.

Give the origins & insertion of the Adductor Valfurus?
Other tendons. Popliteus. Flexor longus. Dig. ped. In

What tendon is formed by these muscles?

The Serra Achillea

Give the origin & Insertion of the gastrocnemius

It rises from the head of the tibia, 1/3 of its
external angle also from 1/4 inch of its internal
angle & from the oblique ridge on the Posterior
surface of the tibia. Just into posterior surface of
the os calcis.

Give the origin & Insertion of the Plantaris

It rises from the ridge above the external Codyle
of the os tibiae. Just into the internal surface
of the os calcis.

Give the origin & Insertion of the Popliteus

It rises from the depression of the external face of
the external Condyle. Just into the oblique ridge
on the Posterior face of the tibia just below its head.

Give the origin & Insertion of the Flexor Longus digitum

Pedis perforant

It rises from the Posterior surface of the tibia & entering the
flexor tendons within two inches of the ankle. The fatty
fibrous tissue obliquely enters a tendon at the Posterior
cage of the ankle, this tendon must be behind the upper
ankle in a groove of the tibia & is bound in its situation
by a strong ligament, which is extended from the
Muscles of the Foot.

The flexor muscles of the foot arise on the posterior surface of the tibia, and are divided into three groups: the superficial, the intermediate, and the deep. The superficial group consists of the flexor digitorum brevis and the flexor hallucis brevis. The intermediate group consists of the flexor digitorum longus and the flexor hallucis longus. The deep group consists of the tibialis anterior and the peroneus longus. The flexor digitorum longus and the flexor hallucis longus pass through the tendon sheaths of the foot to insert into the phalanges of the toes. The tibialis anterior passes through the tendon sheath of the foot to insert into the phalanx of the great toe.
Muscles of the Foot.

Give the origin & insertion of the flexor tendons, pedis.

1. Sides from under a point of the mallet or little toe. Paralyses bone. It consists of two bellies. The external is inserted in the external sesamoid bone, the internal with the adductor pollicis into the internal sesamoid bone.

Give the origin & insertion of the adductor pollicis pedis.

1. Sides from the calcanecocuboid ligament of the bone of the external tarsal bone. It inserts into the external sesamoid bone.

Give the origin & insertion of the flexor accessorius.

1. Sides from the inside of the mallet or little toe into the flexor longus.

Give the origin & insertion of the lumbrical pedis.

1. Rises from the flexor profundus, inserted into the first joint of each of the toes.

7. On the dorsal. 3 on the sole.
Muscles of the Head
Give the origin and insertion of the Occipito-frontalis.

It arises from the superior circumference of the occiput, continues muscular about an inch and a half, then becomes tendinous which terminates at a little in front of the coronal suture in another fleshy belly which is inserted into the angular process at the root of thecondyle, in the superior margin of the orbicularis, palpbralns, and corrugator supercilii.

Describe the orbicularis palpbralns.

A. It is a circular muscle lying immediately under the skin of the eyelids. Rises from the superior narial process of the superior maxillary bone, internal angular process of the os frontis and contiguous part of the os unguis also, from the palpebral ligament, descends into the Same.

Give the origin and insertion of the corrugator supercilii.

A. Rises from the internal angular process of the os frontis inserted into the lower margin of the os frontis & upper margin of orbicularis palpbralns.
Muscles of the Face

Along the origin & insertion of the Compressor mystic
A Ridge found the root of the ala made by a pointed
beginning it shades into a spur & on the neutral +
point the fleshes of the opposite sides.

Give the origin & insertion of Levator Labii Superioris
Alaque Nasi.

A Ridge from the nasal or orbital fissure of the super-
erior maxilla. Just into the side of the ala nose &
upper lip.

Give the origin & insertion of the Depressor Labii
Superioris Alaque Nasis.

A Ridge from the inferior part of the upper-
maxilla. Just into the side of the ala nose &
contiguous part of the upper lip.

Give the origin & insertion of Elevator Anguli or
A Ridge from the inferior surface of the inferior-
maxilla. Inserted into the corner of the mouth.

Give the origin & insertion of the Zygmaticus
Major.

A Ridge from Zygoea, ruderal bone. Inserted into
the corner of the mouth.

Give the Origin & Insertion of the Zygmaticus
Minor.

A Ridge from the anterior depression of the lacrimal
bone, inserted into the upper lip.
Middle of the Face

Give the origin and insertion of the orbicularis oris?

A band from fibers of muscle which join at the angle of the mouth forming a circle inserted into the bone.

Give the origin and insertion of the buccinator?

A ridge from the coronoid process of the inferior maxilla and the roots of the alveola processus of the inferior & superior maxilla inserted into the corner of the mouth.

Give the origin & insertion of the masseter?

A ridge from the malar process of the upper maxillary bone, from the inferior edge of the malar bone. Zig zagonic process of the temporal bone. The internal part is inserted into the coronoid process of the lower jaw, the external with the angle of the lower jaw.

Give the origin & insertion of the temporal muscle?

A ridge from the zygomatic process of the sphenoid bone at the side of the or fossa of the parietal bone inserted into the coronoid process of the lower jaw.

Give the origin & insertion of the external pterygoid muscle?
Plenoid Mucle

A. Read from the plenoid process of the lateral bone (external) Uneros process of the

value and tubercle of the upper maxilla. Insert

into the neck of the inferior maxilla.

Give the origin and insertion of the plenoid neck

Internal

A. Read from the internal plenoid process of

Ethmoid bone Inserted into the internal face

of the angle of the lower jaw.

Diaphragm.

2. Where is the diaphragm situated?

A. Between the thoracic and

abdominal cavities.

2. Give the origin and insertion?

A. It arises from the ensiform

cartilage from the internal

of the cartilage of the seventh

vertebra, and of succeeding false
Circulatory System

Hearts

1. Where is the heart situated?
2. In the thorax, between the sternum & spine being bounded on its sides and greater part anteriorly by the lungs & below by the diaphragm.
3. What bulk of a muscle is it with regard to its structure?

A. Hollow muscular organs.
B. Where is its base & apex?

A. Its apex is at the intercostal space between the 5th & 6th ribs on a line with their junction with their cartilage. Its base is towards the mediastinum & obliquely backward towards the right side.
B. By what is the heart enveloped?
A. By a double membrane called the pericardium.

3. Into what cavities is the heart divided?
A. Two auricles & two ventricles.
B. Which is the most anterior, the right auricle or ventricle or the left?
A. The Right.
B. What is the right auricle or ventricle further termed called?
A. The Right. Pulmonary. Anterior, or Ventral Heart.
B. What is the Left Called?
A. Ventricular. Left. Posterior, or Contra-Heart.
Heart

1. What is the figure of the right auricle?
A. An oval Conoidal Cavity
B. In what part does it join the descending Vena Cava?
A. At its posterior superior angle
B. Where is the ascending Vena Cava?
A. At its posterior inferior angle
B. What other blood vessel empties into this cavity at what part?
A. The coronary vein at the lower part just in front of the ascending Vena Cava.
B. What is the structure of the orifices of the large veins?
A. Slightly forward on ascending the other descending forming an obtuse angle.
B. What is the structure of this part of the auricle?
A. It is a continuation of that of the vein.
B. What is that prominence called about midway between the junction of the I Vena Cava.
A. Pulmonary Trunk
B. What is that part of the auricle situated in front of the Vena Cava called?
A. The Foramen ovale.
B. What is that depression on the auricular aspect?
A. Valsa Acria.
Heart

1. By what is it surrounded?
2. A ridge called the annulus
3. What is that just below the left Jutus Oblica
5. What is the valve at the opening of the coronary
6. Valve called?
7. Valvula Thelis
8. How are the walls of the limbs formed?
9. Of muscular fibers collected into small fascicles called muscular fascicles. Between these
   are interspersed, into the internal and external
   membrane come in contact and disintegrate
10. What is the hole called between the right auriculo-
    ventricles?
11. A column or a cord about an inch in diameter
12. What is the figure of the right ventricle?
14. By what is the internal surface covered?
15. The Columnar Carneus.
16. How many are usually connected with the vena
d 17. From 8 to 10.
18. What are those parts inserted into the hollow
    edge of the valve called?
20. What valves between the auricle and ventricle
    of the superior cavity.
Heart

What is the origin of the Pulmonary artery?
A. Above the Auricular auricular opening
B. What are the valves at the origin of the pulmonary? Called?

A. Tricuspid or Iguana valves
B. What is there in the ventricle of each valve-
A. Small cartilage round body called pericellular auriculate
B. What are those pouches between the outer surface of each valve? Called?
A. Sinus of Valsalva

What is the figure of the left auricle?
A. It is about 1/4 an inch more than the right
B. What oriﬁed all in it?
A. The oriﬁed of the 4 pulmonary vein and the auriculo ventricular opening

What is the shape of the left ventricle?
A. Conical
B. Is the internal surface arranged on the same principle as the right?
A. Yes, but the interior more strength
B. What valve between its of the left auricle?
A. The pulmo or basctlid
B. What at the oriﬁed of the Aorta?
A. Sino Taurine 150-173-221
Arteries.

Have they the Corpuscular Arantii as the valves of the Pulmonary Artery?

1. They have not. 
2. Corrug.
3. They are the divided of Vallalba there.

1. They are.

What direction do the superficial fibres on the external surface run?

1. Sinually.

How many strata of muscular fibres compose the Left Ventricle?

1. Six.

Have the Arteries a proper name in respect to their functions?

1. No.

How is the arterial system divided?

1. Pulmonary & Aorta.

To what has the arterial system been compared?

1. To a tree, and also to a Cord.

How many coats have an artery?

1. Three. External, Middle & Internal.

Of what is the External formed?

1. Condensed Cellular tissue.

Of what are the middle coats?

1. Of circular fibres, but not muscular.
Art. 1. Coronary arteries.
2. What is the inner coat?
A. A very delicate serous membrane.
3. Of what is it an extension?
A. Of the endocardium.

**Q&A**

From what part of the left ventricle does the aorta arise?
A. Superior posterior portion.
3. What is the first portion called?
A. Ascending aorta.
2. What next?
A. Horizontal or arch of the aorta.
3. What next?
A. Descending.
4. What distance is the arch of the aorta from the superior part of the sternum?
A. About one inch.
3. To which side of the spine does the aorta lie close in its descent?
A. To the left.
4. Is the aorta:
2. What does the horizontal portion cross?
A. Left bronchial.
3. What are its first branches?
A. The two coronary arteries and are distributed to the endothelium of the heart which they nourish.
Acting Innominata. (7)

1. What branches grow off by the aorta at its arch?
2. Arteria innominata. Left subclavian, left for the left side.
3. Are these arteries always regular in their origin?
4. They frequently deviate from the above answers.
5. Are the usual length, position, and terms of Arteria innominata?
6. Length of 1.612 inches, come obliquely forward and to the right. 1. Terminates in the right subclavian of Arteria innominata.
7. How and where does the Arteria innominata terminate?

8. It terminates at the space between the Thyroid cartilage and styloid cartilage in the interhal of the external carotid arteres.
9. What coverings place it at the cover parts?
10. Skin, superficial fascia, platysma, myoid. Some muscles mastoids, sternohyoid and thyroid.
11. What cover it when it lies by the side of the larynx?

13. Skin, fascia, platysma, myoid.
14. What large vein anterior and external to it.
15. Intestinal cirrus.
16. By what muscle is it crossed on a line with the lower end of the Thyroid cartilage.
17. Sternohyoid.
16. **Carotid Artery**

Q. At what point does the *common carotid* become superficial?
A. At the depression of the cricothyroid, between the *clavicle* and *mastoid*.

Q. What muscles are enclosed in the same sheath with this artery?
A. *Pneumogastric* and *descended laryngeal*.

Q. What nerve is situated behind it?
A. The *sympathetic*.

Q. What is the direction of the artery?
A. Upwards between the two muscles dividing the sheath into two triangles.

Q. What is the *external carotid*?
A. From the *common carotid* to the neck of the *liver*.

Q. In what does it terminate?
A. The *external and internal maxillary*.

Q. Is this artery superficial at first?
A. It is only covered only by the *Platysma* musculature, and by subsequent

Q. By what nerve is it enclosed just above the superficial clavus?
A. Hypoglossal.

Q. Through what gland does it pass?
A. The *parotid*.
Thyroid. Lingual. Facial.

2. What is the first branch of the external carotid?

A. Superior Thyroid.
B. What is its direction?
C. At first inward and forward on the side of the larynx, then descends to the thyroid gland.
D. What is given off by the 1. Thyroid?
E. Carotidus distributus to the lining membrane of the larynx.
F. From what part of the external carotid does the lingual arise?
G. About one inch from its origin.
H. What is its first branch?
I. A. Posterior Lingual.
J. What is its continuation called?
K. Stapedius Mandibula.
L. From what does the facial arise?
M. Ext. Carotid contains above the lingual.
N. By what muscles is its root covered?
O. The Stylohyoid & Digastric.
P. By what nerve traverses externally.
Q. Hypoglossal.
R. What gland lies just below it?
S. The submandibular gland.
T. When does it get under the inferior maxillae?
U. At the anterior margin of the masticatory muscle.
Submental, Coronary, Pharyngeal, &c.

1. From what part does the submental artery arise?
2. From a point with the base of the lower jaw.
3. What is the next branch of the facial artery and where distributed?
   A. Inferior Labial, distributed on the middle of the chin.
   B. What runs off near the corner of the mouth from the facial?
   A. The Coronary, Inferior
   B. Which is the next branch?
   A. Superior Coronary
4. Where does the facial artery terminate?
   A. At the internal canthus of the eye.
5. Give the origin, situation, and distribution of the Pharyngeal artery:
   A. Pass from the Ext. Carotid, along the pharynx, at first on the side of the pharynx, between the external & Ext. Carotid, I distributed to the muscles of the pharynx.
6. Which branch gives off?
   A. Posterior Pharyngeal
7. Give the origin, situation, and distribution of the occipital.
   A. It comes from the Ext. Carotid, generally opposite the facial, is spent before the ligaments on the back part of the head.
Auricular Temporal. 10.

Describe the Posterior Auricular Artery.

1. Comes from the external Carotid just below the parotid gland. It first descends by a deep arch across the back of the throat, between the thyroid bone & Ext. Car. distributed to the integument on the side of the head & Ext. ear.

D What branches from it?

1. Algo mastoid.

B Which is the larger terminal artery of the Ext. Scapula?

1. The internal maxillary.

D What artery gives off from the temporal while in the parotid gland?

A Transverse Facial.

2. Of what is the middle Temporal a branch?

A The Temporal. distributed to Temporal muscle.

D How near to the external ear does the temporal artery run?

A about two inches from the anterior part.

D What sets off at this point?

1. The Auricular.

B What does the Temporal divide into?

A Ant. & Post. Temporal.

B In what artery is a tonsilotomy performed usually.

A Anterior Temporal.
Internal maxillary

A. B. Johnson

I. M. McKinley

B. F. Washington

J. Q. Adams

C. G. Fillmore

R. A. Cleveland

O. U. Grant
Subclavian and its relations

A. At the inferior margins of the subclavian muscle.

2. Give the division made of this artery.

B. 3. 1st to the scalenus anterior muscle. 2. the portion between the scaleneus muscle. 3. from the margin of the scaleneus to the subclavian muscle.

2. Have the two subclavian arteries the same relation?

A. They have not in the first portion.

3. Which is the more superficial?

A. The Right.

2. By what nerve mattresses the first portion crissed in front on the right side A. Paravertebral. Filaments from the great sympathetic to phrenic nerve. External jugular vein.

2. What nerve directly behind it?

A. The recurrent. 1st cervical ganglion.

2. What is it in contact below?

A. The pleura.

2. What is the difference in the deviation of the two subclavian arteries?

A. The left is most vertical.

2. What relation have the muscle which crosses the right to the left subclavian.

A. They roll on the inner side of it.
Subclavian, and branches.

2. What vessel lies close to the subclavian on the left side?
A. The thoracic duct.
B. What vessel situated in front and just below the second leaf of the subclavian artery?
A. Subclavian vein.
B. Which is the largest artery given off from the subclavian?
A. The vertebral.

C. Give its course and distribution.
A. It ascends on the sides of the spine, enters the canal of the transverse processes at the base of the neck; it goes into the carotid sheath and through the carotid sheath. Distributed to the brain.
B. From what part of the subclavian does the infrahyoid arise?
A. At the inner angle of the scalenus muscle near the origin of the vertebral.
B. What is given off from it?
A. Ascending cervical artery.
B. Give the course and distribution of the subclavian artery.
A. Laid across the neck of the first rib, divides into branches which supply the two upper intercostal spaces.
B. Give the course of the internal mammary.
Internal Mammary, Phrenic,  &c.  
A. Descends along the internal margin of Scalenus Anterior, having entered the thorax descends on the posterior face of the Costal Cartilages about 3½ inches from the margin of Sternum. 
B. Upon what is the Phrenic nerve supplied.  
C. Upon the Diaphragm.  
D. What other branches given off by the internal mammary.  
A. At each intercostal space which it crosses it gives off a branch which is sent to the  
  front part of the intercostal muscles and 
  communicates with the corresponding intercostal 
  arteries. Other branches also leave at each inter- 
  costal space which are distributed to the muscle 
  of the front of the thorax.  
B. Where does the internal mammary terminate  
    Generally on a line with the anterior end of the 
    Fifth rib, dividing into two branches, external 
    of external.  
C. Upon what is the posterior or transverse cervical 
    artery distributed?  
D. Trapezius, Serratus Scapulae, Rhomboid & 
    Serratus Maggie muscle.  
D. Of what is the superior Scapulae generally a 
    branch.  
A. The Subclavian.
Oxillary. Acromial

Q What portion of great artery of the Subclavian Extremity is called the oxillary?

A. The portion from the Subclavian branch to the lower margin of the bunion of the Subclavian Artery.

Q Now is this artery divided?

A. Into 3 portions. 1. To the Testicarius minor muscle. 2. To the part under that muscle. 3. To the bunion of Subclavian Artery.

Q What line are situated to the internal extensor to the first part?

A. The axillary nerve.

Q What is then situated external to posterior to the first portion?

A. The axillary pleated of vessel.

Q What vessels passed in front of that vessel?

A. Anterior Chronic nerve.

Q By what is the second `torroid surrounded?

A. By branches of the axillary Valvatic.

Q What nerves lie near the third portion

A. Median, external & internal Cutaaneous, Radial, ulnar nerve.

Q What the Course & distribution of the anterior artery?

A. Soon after its origin it divides into ascending and descending. The former reaches the clavicle it is distributed to the muscles thus...
Axillary & Brachial
the outer tracing between the deltoid and Pectoralis minor is distributed to them —
3. Upon what is the superior Thoracic artery distributed?
A. Pectoralis major & minor muscles?
D. In the course & distribution of the Thoracic artery?
A. It descends the Pectoralis major & Serratus magnus muscles, and are distributed to them.
3. What is the origin & course of the Anterior Circumflex artery?
A. Arise from the axillary, just above the union of clavicular thoracic, it surrounds the front of the neck of the humerus and is distributed to the deltoid & articulation.
3. Which is the larger the anterior or posterior Circumflex?
A. Posterior
3. Give its situation and distribution?
A. Surrounds the posterior face of the neck of the humerus; distributed on the deltoid.
3. When does the Brachial artery terminate?
A. Just below the elbow joint.
3. What is its situation in relation to the humerus?
A. It is first on the inside, then winds round to the outside.
Branches of the Brachial

1. What nerve issues in front of it?
   A. Median nerve.

2. What vessels lie on either side?
   A. Brachial vein.

3. What vein covers it at the lower portion?
   A. Median bachei covered obliquely.

4. What is the first branch of the Brachial?
   A. Profunda major humeri.

5. Give its course and distribution?
   A. Falls down between the first and 3rd head of the biceps, winds laterally round the at humerus.

6. In company with the radial nerve, draws to the internal condyle. Distributed to the Prickles.

7. Give the origin and distribution of the Confluentus minor humeri?
   A. Rise from the Brachial at or Brachial below the last. Distributed principally in the internal face of the Tricep.

8. Which is the next branch?
   A. The Median artery.

9. Of what is the Dorsal thoracic artery a branch?
   A. With what does it anastomose?
   A. It comes from the lower part of the Brachial, anastomosed with the ulnar, common artery.

10. In what does the Brachial terminate?
    A. Radial and ulnar.
Radial branches. Ulnar.

1. Give the course of the Radial?

a. In the upper part of the arm it is between Supinator Radii Longus and Pronator Teres, it passes between the latter prince in front of the radius, passed between the Extensor and Flexor Carpi ulnaris below the styloid process it passed between the Carpi and Extensor muscles of the thumb, if now gets to the palm of the hand, between the uncarpal bone of the thumb and

2. What is the first branch?

a. Recurves Radialis

3. Where does the Superficialis arise?

a. Near the inferior margin pronator quadratus.

4. Mention the origin and distribution of Carpus'Carpot.

a. From the Radial at the Carpus. It gives off the posterior interosseous arteries of the hand.

5. In what 3 arteries does the Radial terminate?

a. Radialis, Palmaris, Ulnaris

6. Give the course of the Ulnar?

a. After its rise it gets under several muscles of the internal condyle, it runs nearly parallel with the ulnar being at first deep seated beneath superficialis at the wrist, it passes over the annular
Ulmar & Branche.

Ligament and then proceeds to the Palma of the Hand.

1. What is the first branch of the ulnar?

2. Recurs the ulnar.

3. Of what is the ulnar seen a branch.

4. Piesd from the ulnar.

5. Give the course & distribution of the Anterior Interosseous.

A. It moves in contact with the interosseous ligament to the ulnar margins of the Pronator Quadratus under which it perforates the interosseous ligament, distributed on the back of the Carpus & Hand.

6. Give the distribution of the Posterior Interosseous.

A. It gives off a recurrent branch which communicates bodily recurrent ulnaris & Radialis distributed in the muscles on the back of the Fore-arm.

7. Give the distribution of the Carpal branch.

A. Back of the wrist, middle carpal & fingers.

8. How is the ulnar terminated?

A. Delivers the ulnaris, palmaris & flexor tendons; it forms a curve called the curve of ulnaris.
Tracheal. Oesophageal, Intercostal.

2. What is the first branch given off by the descending thoracic artery?

A. Tracheal Artery

2. What is the usual number of them?

4. Very occasionally there are four.

2. Give the course and distribution?

A. Why follow the course of the trachea into the lungs and are distributed with them.

2. Name the origin, number, and distribution of the oesophageal arteries?

A. Two or six small arteries come successively from the descending thoracic artery and are distributed to the oesophagus.

2. What is the number of the intercostal arteries?

A. From 8 to 10.

2. What branch given off from this about the head of the rib?

4. Named Intercostals

2. Give the course and distribution of the intercostal arteries?

A. Those on the right side after emerging the spine join the rib near its middle, as do those on the left side, and go along the groove on the inferior margin of the rib between the internal and external intercostal muscles for 2/3 the length of the rib. It is joined after the intercostal muscles and contiguous parts.answering in front with internal mammary
A*’s,<z//^ 

A. Superior Vena Cava, usually lies in number

B. Give the origin and termination of Celiac?

A. Arises from the aorta between the pillars of the
duodenum, it is about one inch long, it divides
into the gastric, splenic and hepatic

2. Give the course and distribution of the Celiac?

A. It extends forwards and to the left, joins the
Stomach at the Cardiac orifice, attaches some branches
to the Hepachna, runs along the lesser curvature
tends branches to the anterior and posterior surfaces

B. Give the course of the Hepatic?

A. It extends to the right side, it reaches the Liver
through the capsule of Glisson

C. What large branch given off from it near the
Pylorus?

D. Electric Epiploic Artery

E. Give the course and distribution of Right gastric
or Electric Gastric Epiploic?

A. Descends between the Aortae and Pancreas reach
the greater curvature of the Stomach, to the right
half of which with the great curvature it is united.

B. Give the distribution of Hepatic?

A. At the Transverse fissure of the Liver it
divides into a right and left branch, the former
runs to the Cystic or the bile duct, it is then
Left Visceral Plica Iervia. Descendent.

Point on the right lobe. + the left on the left side.

Q. Are the Curves of the Plicentric?

1. If one to the left along the inferior margin of the Plica, performing several elegant loops before it arrives at the Plicentric.

2. Give the original distribution of the Left Plicentric. Commence from the left extremity of the Plicentric, it attaches itself to the left extremity of the Stomach and goes along the left of the greater curvature. As it branches to the anterior abdominal surface it enlarges magnificently. It also branches with the right Plicentric.

3. What other branches given off from the Plicentric. Quite before entering the Plicentric five or six branches are given off, which go to the greater end of the abdomen. I am called Plica Rectoria.

4. What artery comes from the aorta next to the Celiac.

A. Superior Mesenteric.

5. Give the course of its principal branch?

A. If placed behind the Pancreas, then in front of the audoumous, make the incumbent between the Pancreas of which its principal tributary forms a Convent to the left.

Before leaving branches from the Convent, I from 15 to 25.
Colic + Capsular

9. After what manner do they distribute?
10. They descend to the left towards the small intestine forming some rows longitudinally of circular arches the branch from which becoming more numerous at distance to the margin of the small intestine and cease by dividing off a great number of parallel branches.

11. That it arises from the cavity of the superior mesentery.


13. What is the Colic distributed?

14. A short part of the mesentery commencing on the left with the root of the small intestine arteries on the right with Colica Dextra.

15. To what is the Colica Dextra distributed?

16. To the ascending Colic.

17. To what is the Colica Media distributed?

18. Transverse Colic. Commencing on the left with Colica Superior of the inferior mesentery artery.

19. Also the origin + distribution of the Capsular Arteries.

20. They arise from the aorta just below the superior mesentery. Structured from the Envelope arteries distributed to Capsula Peritonei.

1. Give the origin & distribution of the Emulgent or Renal arteries.?
2. They rise from the aorta just below the Saphene and enter the kidney.
3. For what is the Spermatic artery formed after?

1. Its great length.
2. Upon what is it distributed?
3. The testicle of the male, the ovaria & genitalia of the female.

2. Name the origin of Isp. Mesenteric.

1. About 1 inch above the division of the aorta.
2. Give its course & termination.
3. It inclines towards to the left, and gets between the cæcum of brown color, it then divides into 3 branches; called the left Colic, Colic Arteries.

2. Upon what is the middle Colic distributed?
3. The descending & upper portion of the recti flexure of the colon; anastomosing with the inferior & inferior forming arteries.

3. Upon what is the inferior distributed?

1. Sigmoid flexure of the colon & rectum.
2. Upon what is the inferior hemorrhoidal?
CUMBA: SACRAL MIDDLE

1. Give the origin & number of the CUMBA articular.
A usually five on either side, arise from posterior extended part of the aorta opposite the middle of the CUMBA vertebrae.
B. Into what do these divide at the base of the transverse processes.
A. One branch is the anterior or lumbar, a posterior or dorsal branch.
1. Upon what is the art distributed?
A. Broad area else of the abdomen.
2. Upon what is the posterior art.
A. It attaches through the intervertebral foramina to the lower part of the medulla spinalis & Cauda Equina; the remaining portion goes to the back, is upon or near else near the spine.
2. Give the origin & distribution of the lateral sacral branches.
A. It arises very near the bifurcation of the aorta, descends in front of the fifth lumbar vertebra to Sacrum, to the Coccyx. It sends off to a pair of branches for back pair of dorsal foramina which terminates to the Cauda Equina.
2. Men ure the bifurcation of the aorta takes place?
A. Locate the space between the 4th & 5th lumbar vertebrae.
What is formed by its bifurcation?

A. Half of the Iliacus muscle

How far do they extend?

A. Near Sacrum

Is it in front of what vein do they lie?

A. Prostate gland

What arises formed by its bifurcation?

A. External and Internal iliac

By what nerves do the internal iliac bursa lie behind?

A. Sacralplexus of nerves

Which is commonly the first branch from the internal iliac or the posterior trunk when a bifurcation has taken place?

A. See Common Artery

What is the number original distribution of the external iliac arterious?

A. Their number is generally equal to the number of branches of the abdominal arteries which they generally come from one or two roots from the internal iliac; they are about 12 in the Equidae.

What is the usual origin of the dilatator?

A. From the internal iliac, but sometimes from the pudendal or external iliac

Is there danger in wounding this artery in operating for anal fistula?

A. The wound in that an anomalous origin of the incision be made upwards or upwards.

2. Through what does the plate out from the pelvis.

A. Lower part of the internal obturator.

Is what is the middle hemorrhoidal distributed?

A. The reteum, vesicle, seminal, prostate gland in the male, to the vagina in the female.

If from what do the vesical arteries usually come.

A. From what was the umbilical artery of the foetus, it is distributed to the bladder.

2. Give the origin and distribution of the vertebrae.

A. arise from the internal iliac, it gives one branch to the vagina, ascend between the falciform and ramus of the broad ligament of the uterus when it is expanded.

D. Is the vein tortuous when the uterus is rising, during?

A. Yes.

What are the terminating branches of the internal iliac?

A. Obturator + Sacroiliac.

2. How does the obturator get form the Pelvic.

A. Passes through the upper part of the sciatic notch.
Ischiatic Pudic. Perineal. Urethra Bulbas above the pyriform muscle.

Do what manner does the Ischiatic arise from the Pelvis.

A. Semicircle between the external & obturator muscles & goes out the lower front of the notch.

What is what move in the Pelvis.

A. Sciatic nerve.

What artery gives off from it while in the Pelvis.

A. Internal Pudic artery.

B. What is the inferior hemorrhoidal a branch to what distributed.


B. What is the Terinal a branch and to what distributed.

A. Of Pudic. Insert upon the muscles and detritures of the perineum & posterior part of the Rectum. in the female to the lower portion of the Vagina & External Cabia.

B. Upon what is the bulbourethral bulbous artery tributary.

A. First part of the urethra. Conjoin Sphincter of the Rectum.

A. Superficial Lateral & Curvatures Arteries.

A. What other arteries pass on the penis.

A. Superficial Arteries.
Ext. Visc. Ophiogastria: Circumflex Line

What is the extent of the Ext. Visc. Artery?

1. From the inferrior surface of the Ophiogastria to the Poupart's Ligament?
2. What is its relation with the vesical ligament? (It is at first anterior to the vein, but as it approaches Poupart's Ligament it becomes External.)
3. About what point does it pass under Poupart Ligament?

What branches from the Ext. Visc.?

1. Ophiogastria & Circumflex Visc.
2. With the course and distribution of Ophiogastria.
3. It Paired at first horizontal, inward then upwards behind the Splanchnic Cord at the juncture margin of the external abdominal ring, it reaches the rectus muscle \\
   to ascend on this muscle and is then anterior.
4. What is the extent of the Femoral Artery?

A. From Crural Arch to the point where it perforates the adductor magnus about 1/2 the length of this or Femoral above the head.
5. Its superficial at first.
6. It is no muscles covered.
7. "Hence what muscle does it lie at the upper portion?"
Superficial Abdominal Post. Tom.

1. Where does it become deep seated?
2. At the apex of the angle formed by the Extensor and Adductor Longus.
3. What is the direction of the artery with respect to the Femoral vein 3 or 4 inches below the popliteal ligament.
4. It is anterior to the vein.
5. What is the first branch from the Femoral on what distribution?
7. What is the usual number of the external iliacs?
8. Usually 2 or 3. Distributed upon the integuments of the hypogastric region. Of the Male. Celiac, External iliacs, of the Female. The sympathetic glands also receive 4 blood from this artery.
9. What large artery arises from the Femoral, 1 or 2 below the Crural Arch?
11. Give its course and distribution?
12. Lies below the Rectus Femoris t. Cruralis giving branches to them. It divides into an ascending and descending branch. The former...
Branches of Peroneral. Pofitetal is given upon the gluteal muscles and the capsule of the joint. Ascending with the gluteal oblique, it descends in front principally upon the vastus externus and grunalis.

Q. In the course and distributions of the external circumflex?
A. Passed between the posticus and Pons magnus, it runs under the neck of the os osiris, thus divided into Branches. The upper is distributed to the capsule, the lower to the femoral ligament. Obturator externus, adductor magnus, the lower upon the adductor magnus, gracilis and hamstrings muscles.

Q. What is the usual number of Peroneral muscles?
A. 4. Upon the posterior muscles of the hip.

Q. What is the anterior moving acro-branch?
A. The Femoral.

Q. What is the continuation of the Femoral, called after passing through the adductor magnus?
A. Pelifetal.

Q. Where does the Pelifetal terminate?
A. At the opening in the adductor ligament of the leg about just below the head of the Tibias.

What is its situation at the knee joint?

It is placed between the Condyles of the Femur, between the internal and external meniscus, surrounded by a mass of adipose tissue.

What is its relations to the popliteal vessels?

It is anterior to the vein, vein is anterior to the nerve.

How many articular arteries is what called the inferior internal and external, inferior internal and external, middle articular artery?

Upon what distribution?

One joint, and contiguous structures.

Of what is the gastrocnemius artery branch?

Popliteal.

How does the popliteal terminate?

In the pop. taut. Tibial.

What is the extent of the art. Tibial?

St. the back of the talar bone of great toe.

Give the relative situations of this artery.

It runs upon the front of the interosseous bone and is bounded on the tibial side by the tibial arteries, on the other side posteriorly by the extensor longus digitorum tendons, lower down by the popliteal tendons, just above the ankle joint, it runs on the front of the tibialis, the anterior tibialis nerve adorns to its whole way.
Branches of the Saphenous

1. What is the first branch of the ant. Saph.?
   a. Recurrent Saphial.

2. Give the origin and distribution of the internal saphenous artery.

3. From what tibial vessels do the internal saphenous and adjacent posterior articular vessels arise? What is the exact saphenous arterial origin and distribution?

A. St. Nat.

4. What other branches from the anterior Saph. are in the talus. meta. talus. and some of the great toe.

5. How does the ant. Saph. communicate?

6. At the posterior end of the first meta. tarsal it takes down to the side of the joint and joins the external saphenous artery.

7. What is the extent of the first Saph.?

8. From the popliteal to the externality of the calcaneus.

9. Give its relations:

a. On the dorsi. fascia of the flexor longus digitorum in the upper 3/5 of the gastroc. muscle. the superior third it is on the saphenous muscle. the inferior third it is on the margin of tendo Achilles. it passes. between the tendons of the flexor longus gastroc. plantar. Posterior tibial nerve in its external anage.
Plantar tc tc.

1. What is the first branch of Post Tibial?
   A. Personal.
2. Is it superficial or deep seated?
   A. Very stuff, being covered behind by Flavo- (Hiuse Polliitio. Volume t Pastaerenism.
   V. From where distributed?
   A. Muscles on the back of the leg, inferior external part of foot; muscles to ulnae of external anterior.

1. What are the terminating branches of the Posterior Tibial?
   A. Internal & External Plantar Arteries.
2. What is the internal posterior plexus of distributed?
   A. Muscles of the great toe & lower, middle, dig. femoral periad.

1. What are the principal branches of the external plantar?
2. The branches which supply the muscles that arise from the interspace of CS Calcius- External digital artery of the little toe. A digital artery of the foot and the peroneal artery.
Sir, A. Eve M. L.

Augusta 1828

Notes on Anatomy
Hamilton, R. Pierce
Columbus

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Vascular System

1. What are those veins called which accompany the arteries?
   a. Venae, or satellite.
2. Which is the greatest, the area of the venous or arterial? M.D. or properly speaking.
   a. The venous. Mr. Brown, Sr. says the
3. What number of veins usually attend an artery? S.W. Brock, M.D.
4. Generally, but not in the present state of the ab
   drome usually there is but one.
5. What parts have the veins?
   a. An external cellular & internal connect. Cat.
6. Why is it that portions of weakness occur both
   superficial to deep seated seams?
   b. Is there the circulation of the parts in entire
   c. What is then existing at various places in
   the denser coat of the vein?
   d. Subinticular or valves
   e. Are the most abundant in the superficial?
   a. They are.
7. What promotes the circulation of blood
   through the vein?
   a. The contraction of the heart, their own elastic
   b. Suction of the arteries, Contraction
   c. Pressure of the valves.
Superior Vena Cava. Innominata

1. What venous trunk empty into the right Auricle?

A. Ascending & Descending Cava & Coronal vein.

B. From what portion of the lymphatic does the Superior Cava return the blood?

C. The portion above the diaphragm.

D. By what vein is it formed?

E. Vena innominata, or Brachiocephalic.

3. Describe its situation:

A. It extends from between the Cartilage of the first rib on the right side and arch of the Aorta to the Protector Inferior, first part of the right Auricle inclining to the left and forward, in its course the Superior trunk is in contact with the Pleura and on the left with the artery innominata, the Aorta in its left anterior face lower down.

B. What is the length of this vein?

A. From 2 1/2 to 3 inches.

C. What veins empty into it?

B. Only the vena subclavia and Internal Jugular.

D. What is the difference in these veins on the right & left side?
Vains of the Neck.

1. That on the left side is larger. descends more obliquely. Crosses behind the superior end of the Sternum in front of the large vessels issuing from the arch of the Aorta.

2. What is the vein on the left side sometimes called?
   a. The Transverse vein
   b. In what does the inferior Thyroid vein end.

3. Left Subclavian, Cephalic or Transverse
   a. What other veins end in the vein commoninate.
   b. Internal Jugular, or Subclavian, Intercostal, Internal Mammary.

4. What is the extent of the internal jugular cav.

A. From the base of the cranium to the internal margin of first rib near the insertion of the pectoral muscles.

B. By what is the internal jugular formed.
   a. By the division of the Subclavian.

2. Through what area does the blood space which forms the internal jugular.
   a. Bronchi Lumen.

2. That in the relation of the subclavian vein with the Sterno Clavido and the Muscles.
   a. Beneath it runs. Parallel with anterior margin.
Mouth of the Head, Face &c.

1. By what muscle is the upper jaw drawn toward the neck?
2. The One Thyroid.
3. Does the internal and external angular angulate?
4. They are by one or two large branches.
5. What view looks into the internal angular?
   A. Occipital, Vastus, Facial, Pharyngeal.
   B. Superior Pharyngeal?
6. What names are given to portions of the face being?
   A. On the forehead: Frontal, at the inner canthus of
     the eye it called Internal angular.
   B. What is the situation of the various veins?
     A. In the under surface of the tongue
   C. Where does the submental vein go?
     A. From the Sublingual, Submandibular glands
     B. From what is the inferior Palatine?
     A. The soft Palate of Condy, E.
   F. In the origin of the lingual
     A. From a cluster of veins at the root of the tongue
     B. of Pharyngeal?
     C. From a Pile of the Pharynx.
   D. of Superior Pharyngeal?
   E. Pharyngeal gland.
   F. Occipital.
   G. From the back of the head
2. Where does the external Jugular vein empty?
A. Into the subclavian just behind the clavicle at the internal margin of the sternoclavicular joint.
Q. Do the external Jugular veins anastomose with each other?
A. They do by one or two branches.
Q. What is the External Jugular a continuation of?
A. Of the Pars Dorsalis.
Q. Where does its union occur? Does it descend?
A. Wallop's groove. Sternum mastoid.
Q. Which vein empty into the External Jugular?
A. The Interjugal Cervical.
2. By what is the Temporal formed?
A. Middle Temporal, Superficial Temporal.
Q. Through what gland does the Ext. Jugular vein pass?
A. Parotid.
2. By what vein is it joined near the neck of the lower jaw?
A. Submental or submandibular.
Q. By what other vein is joined to the Parotid gland?
A. Auricular Posterior.
Walls of the Upper Extremity.

1. On which surface of the hand are the ulnar veins most numerous?

A. On the dorsal surface.

2. How many areas of the hand have been named?

A. Three: Palmar, Dorsal, and Talonavicular.

3. On which margin of the arm is the cephalic situated?

A. Anterior, Radial.

D. Describe its situation on the arm.

A. Ascends along the internal margin of the biceps, then between the posterior border of the brachial, and a little below the elbow.

D. What view does it then present?

B. Anterior view.

D. Describe the basilic which joins the palmar.

A. Usually consists of two trunks; one runs on the front of the ulnar side of the forearm, discharges in the median basilic, the other in the basilic vein along the posterior side of the ulnar to the bend of the arm; then forms the internal condyle to it, and becomes the biceps.

D. Where does the anastomosis arise?

A. From the bend of the hand which is found on the front of the arm and divides.

D. What veins are formed by the division of median?

C. Median cephalic, t. median basilic.
Wings of the lower extremity.

1. What is the extent of the sartorius muscle?
2. From the origin between L.l & Saphenous vein to the posterior inferior part of the right muscle.
3. On which side of it is the dorsal?
4. On the Left?
5. When does its auricular vein arise?
6. External side dorsal to foot & ext. ankle.
7. Describe its course?
8. Covered behind the external ankle it is a curve along the tendo Achillis & posterior surface gastrocnemius muscle.
9. Into what vein does it empty?
11. Where does the great saphenous vein its origin?
12. From the external saphenous foot and leg of the foot.
13. Describe its course?
14. Curve along the external face of the leg over the external condyle & the external face of thigh corresponding nearly with the external margin sartorius muscle.
15. How terminates?

A. In the external vein 1 or 2 inches below the foot ligament.
B. That vein received by the external iliac.
C. Escastric & circumflex iliac.
Abdominal & Pelvic veins.

2. What veins are formed by the origin of the Inferior Ileal vein.

A, Hemorrhoidal, Rectal, Sacral, Pudendal, Vaginal, Uterine.

II. What other veins contribute to its formation after the origin mentioned.

A, Splenic, Ileocolic & Ileo-Caecal.

3. What veins receive by the Vena Cava Inferior?

A, Middle sacral, Ileocolic, Ileopancreatic, Duodenum, Cephalic, Hepatic and Thoracic veins.

D. What is that splanx called formed along the Ileopancreatic veins?

A. Coeliac Pampiniforms.

D. From what arteries does the vena Porter and, draw its supply of blood.

A, The Superior or Inferior mesenteric of the Celiac, with the exception of the Hepatic branch.

Are there anastomotic areas formed in the branches of the Superior or Inferior mesenteric veins as in the arteries.

A, There are.

D. How does the Vena Postremae divide on reaching the transverse pleurae of the liver?

A. Put two branches which are at right angles with the trunk, but in a line with one another, constituting the diuretic Potasium.

I. Into what do the terminating branches fuse Potasium empty?

B. Epithelial kinds.

1. Where is the vein empty situated?

A. In the shoulder region, on the right anterior margin of the dorsal vertebrae.

2. How does it commence?

A. It commences in the abdomen by accompanying with the ascending aorta or celiac, which is said:

B. What veins receive by it?

A. The inferior intercostal veins of the right side, about the 5th portion of the back. The Heumiaa, goes into it, the Esophagal or Bronchial, its anastomose at each intercostal foramen with the veins in the interior of the vertebral canal.

2. By what is the Heumiaa goes formed?

A. At Commences by anastomosing with the left lumbar, or left inferior lumbar, it receives four or six lower intercostal veins of the left side.

2. From on the valves first discovered in the second section.
Vertebro-Flins

What is the number and extent of the vertebral wings?

1. They are two in number and extend from the foramen magnum to the inferior end of the sacrum.

2. Are they like branches of the brain cortex in the human body?

   A. They are not, they are in front of it.

   B. Are they anatomically with each other?

   A. They are at the middle of each vertebral column. What arise do they anatomically externally?

   A. Vertebro-wings in the transverse processes of the vertebral column extraordinary musculatures at their upper end with the Intermedius Largus.
Absorbent System

1. Into what two classes may the absorbent system be divided?
2. Visceral and Sympathetic.
3. Is there any anatomical difference between the visceral and sympathetic?
   a. No anatomical difference.
4. In what respects do these resemble the veins?
   a. They are superficial and deep seated, their origin is similar, they have valves, formed by two coats.
5. In what respect do they differ from the veins?
   a. They pass through glands, convey a different fluid, do not diminish in number, if increase in size in their tortuous like the veins.
6. What is the external coat?
   a. Some say muscular, others cellular.
7. What is the inner?
   a.tensor, the same as veins and arteries.
8. When is the origin of the Sympathetic first discovered in the human subject?
   a. 1650. By Wans Fuddock
9. As to the origin of the Sympathetic branch above.
   a. It is not
Symptoms.

In what tissue are they supposed always to ex.

1. The Cellular

Do the sympatricus universally pass through a gland, before the enter the thoracic duct?

A. Generally. Some exceptions in the lower extremity.

Q. How do they enter the glands?

A. Before they penetrate they radicate into several branches.

Q. How do they emerge from the glands?

A. By several branches which afterwards unite.

Q. What are the vessels entering the glands called?

A. Yara intercosta.

Q. Are the glands supplied with veins arteries of nerves?

A. They are.

Q. Are they more fully developed in early or after life?

A. In early life.

Q. Do all the sympatricus contain the same kind of fluid?

A. They do not. Those from the skin contain a fluid like bile; from the mamma, like milk.

Q. Do they any change produced in the fluid while in the gland?

A. There is.
Phrenology

1. Is it more probable the fluid undergoes an elaboration or that a part of its constituents are separated from it?
2. The latter is more probable.
3. What then becomes of the part separated?
4. Taken up by the nerves radiating to the Cerebral vessels (Thoracic duct excepted) imparts into the veins.
5. Those that are in the Cerebrum may reside in the minute trunks of the organs but they can be seen escaping towards the veins.

1. Into what ducts do all the abdominal vessels terminate?

A. Left Thoracic duct: Branches cephalic duct (right).
2. Where does the Left Thoracic duct commenced?
A. In front of the body of 2.03 "Dunbar vertebrae.
3. What is the dilatation in it, even after its origin called?
A. Reservoir of Pacquart or intercostal veined cavity.
4. What is its relation to the Aorta or entering the Thorax?
A. It is to the right of & behind the aorta.
5. To what height does it rise?
A. As high as the upper margin of "Corvus" or liver.
6. Over what artery does it fade in turning down?
Abscent Glands.

A. Left Subclavian.
1. Where does it terminate?
A At the junction of the Subclavian and sub-vascular vein.
B. From what part of the system do the arteries that enter the left Thoracic duct come?
A. Left side of head, neck, superior extremity, Thorax of the pectoral abscess, and inferior extremities.
B. Where does the right Branchal Appendage descend empty.
A. Junction of the right Subclavian and Subclavian.
B. From what is derived.
A. From Sympathetic of the right side of Head, Neck, upper extremity & Thorax.

I. Are there any masticatory glands below the neck?
A. seldom more than one or two.
B. Where are they situated?
A. In the course of Ant. Sympathetic artery on upper part of Leg.
B. How many glands called Popliteal, where sit
A. Far around the Popliteal vessels to far part of the Shank & Knee.
B. How are the inguinal glands divided?
A. Those external to the Fascia lata called superficial.
Those internal, deep seat of.
Absorbents of the Leg.

1. What is the number of superficial glands?
   A. From 10 to 20.

2. What is the number of deep glands?
   A. 3 or 4.

3. Are the absorbents more numerous on the internal surface of the leg?
   A. They are.

4. Where do the superficial absorbents on the inner side of the leg have their origin?
   A. On the dorsum of the foot.

5. Where do the external or posterior arise?
   A. On the sole of the foot.

6. What is the situation of their last vessels on the thigh?
   A. They are on the front surface of the thigh.

7. How are the deep seated absorbents of the leg arranged?
   A. They are near the artery, being generally two each, 2 to 3 or those attending the saphena brevis coming from the outside of the foot.

8. What is the number and situation of these vessels in the thigh?
   A. Usually 4 to 5 attending the femoral artery.

9. What other absorbents pass through the subcutaneous glands beside those mentioned?
   A. The superficial of the back and the superficial of the femoral (of the femoral cavity of the glutaeus), also of the lower part of the abdomen, from the buttock.
Glands and Accessories of Pelvic Abscesses

3. What glands in the Pelvis?
   A. 6 External iliac, 7 more internal iliac glands along the arteries of the iliac vessels
   B. Here in the Abscences of the Pelvis arranged:
   C. Along the arteries of the parts having the same name.

D. When are the Abscences, Retractile, Blind.
   E. Sural, Sural, Sural, Sural, Sural, Sural Abscences terminate.

A. In the Abscences of the Pelvis Present?
   A. They are, Superficial 8 Deep Glands

A. In the Sural Abscences?

A. In the Sural Abscences of the Pelvis terminate
   A. In the Internal iliac glands
   B. Here the Abscences of the Bladder terminate

A. Internal iliac glands.

A. What are the Abscences of the Abdomen?
   A. Muscular, Mesenteric, Fascial, Epiploic, Pelvic, and Sural glands.

A. What abscesses are the muscular viscera?
   A. Those of the Small Intestines.

A. Where are the Sural and Astic glands?
   A. On each side of the diverticulum from the aorta to the Pillars of the Aorta.
Absorbs and Glands, Miran

Q Have they extensive communications with other glands?
A They have, and may be considered as extensions of what of the conjunction of glands in the abdomen.

Q Where are the absobents of the stomach?
A The superficial are immediately beneath the peritoneal coats, the profound between the muscular coats.

Q Are there other absobents of the small intestines beside those which convey chyme?
A They are immediately under the peritoneal coats do not convey chyme.

Q Are the absobents of the liver numerous?
A They are.

Q How are the absobents glands of the liver?
A They are a few near the surface of the ribs, a few along the Aorta, of Earthliqne in the postem brachialis, on the along the internal mammary artery 10 to 20 situated about the bifurcation of the Vaeheia called broncheal.

Q Are there both superficial and deep absobents in the lungs?
A Yes, Sir.

Q How are the deep absobents arranged?
A They are near the course of the Pulmonary vessels bronchiæ, lie they arising at the bronchial glands.
Mr. Hay's of the Thorax 

1. Have the heart any absorbant vessels? 
A. It has.

2. Where do they terminate? 
A. In the Left Thoracic Atria.

3. How do the absorbents of the Esophageal termini 
A. They pass through the Bronchial glands to
have a common termination with those of
the Lung.

4. Where do the Esophagie terminate? 
A. In the External Sino Volumes.

5. Where do the intercostal absorbents terminate? 
A. After passing through the small glands at the base
of the ribs, they in front of the vertebral they
terminate in the Left Thoracic Atria.

6. Where do the internum mammary absorbents termi
minate? 
A. Those on the Right in the Right Thoracic Atria
those on the left, in the Left. I. I. I.

7. Through what glands do the superficial absorbents
of the female mammary pass? 
A. Visceral Glands.

8. Are there any absorbent in the cavity of the
Cranium? 
A. None.

9. Name the principal ones of the Stomach and

Aet.
Abs. Glands of the Upper Extremity

A. On the face are a few below the Zygomae. For 2
about the Parotid gland. For 3 under the symphysis
of the Jaw, or 10 around the sub-maxillary gland
down 9 along the Sterno mastoid muscle. For
9 along inferior margin of the Clavicle.
I know what you have seen in the meninges of the
brain.
A. They have.

Where are the glands of the Superior Extremity
A. They are 2 in front along the course of the
deep arch of the Forearm, 3 or 4 in front
of the elbow, 4 or 7 along the anterior of the ve
nels of the arm 6 to 10 in the axilla
A. Are the superficial of the upper Extremity
very similar numbered?
A. They are.

How are the Stomaces arranged?
A. They attend the Stomach passing up to the ex
illary gland.
A. Are the superficial Sympathetic of contiguous
parts, as from the neck to the point which con
juncts to the axillary gland. It is unnecessary to
think of the upper Extremity.
A. They are not.
Ear

2. Where is the organ of hearing situated?
A. In the Petrous portion of the Temporal bone

2. Into what two portions is the ear divided?
A. The external, tympanum & labyrinth
B. Into what two is the external divided?
B. The auricle & meatus auditorius externus

2. Into what two is the auricle divided?
A. Pinna & lobule

2. Where is the concha situated?
A. It is that deep depression near middle of the auricle

2. Where is the Tragus?
A. An elevation of the pinna found in front of the concha

2. What is that bend on the circumference of the pinna called?
A. Helix

2. Where is the Anti-helix?
A. That slightly curved arch formed near the middle of the pinna forming the upper posterior boundary of the concha

2. What is the depression between the bifurcation of the head of the helix?
A. Antihelix

2. Where is the lobus situated?
A. That soft pendulous portion situated at the inferior posterior part of pinna
Musculi Oftaebmo, 5.

1. By what is the external car united to the side of the head?
2. By thin ligaments are anterior, posterior & inferior.
3. How are the muscles of the ear divided?
   A. Extrinsic & Intrinsics.

4. What are the dimensions of the contents inside the ear?
   A. About 1 inch in length, three lines in diameter, though somewhat smaller in the middle than at its extremities.

5. By what is it formed?
   A. The external half by the cartilage of the pina; the internal half by the temporal bone.

6. By what is it bounded inwardly?
   A. Membrana Tympanum.

7. By what is this canal lined?
   A. A continuation of the skin from the cavity.

8. What are those small, reddish bodies called, which are chiefly situated beneath the skin where the cartilaginous deficient in the external half of the canal is occupied by a fleshy structure.
   A. Sacculara Conoida.
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Symphalium.

What is the use of the secretions from these glands?
A To direct insects against exteriors sound and lubricate the cavity.
B Where is the Symphalium?
A Between the epiphysis auditoire and the labrynthum.
B What are the dimensions of the Symphalium?
A Its depth about three lines its entire posterior diameter about six its vertical diameter eight or nine.
B What is the membrana Symphalii?
A The connective membranes septum between the cavities exteriors and Symphalium.
B Is it placed vertical?
A It is placed obliquely with the upper edge inclined outward the under inward.
B In the middle of the side of the Symphalium next the labrynth is an elevation what is it called?
A Promontory of the Symphalium.
B What boundary piece border the superior margins of the Promontory?
A Promontory Circular.
B What at the posterior inferior part?
A Promontory Rotundum.
Car

1. What does it lead to?
A. Cochlea.

2. When is the Eustachian Syphon dilated?
A. A small central column projecting from the posterior part of the tympanum. It is solid and contains a muscle.

3. At what part of the tympanum is the eisio of communication between it and the mastoid cells?
A. At the superior posterior part.

4. Have these mastoid cells any lining membrane?
A. The bone which is a continuation of the lining membrane of the tympanum.

5. The opening of what tube is it situated at the fore part of the tympanum?
A. Eustachian tube.

6. How is it formed?
A. A portion of it by the portion bone, a portion is cartilaginous and a portion membranous.

7. With what does this tube communicate?
A. The Pharynx.

8. What is the length of this tube?
About two inches

By what is it lined

A Membranous membrane

What foramen is these on the outer side of the opptic cartilage?

A Gluboid foramen by which it communicates with the Gluboid cavity

How many and what are these bones called which are in the tympanum?

There are four, the malleus, Incus, Utricular and Stapes

To give the situation of the ends of the chain formed by these bones

One end is fastened to the membrane tympani, the other rests upon the process ovale

This chain of bones is moved by several muscles, what are they called?

A Sacculus Tympani, Tensor and the Stapedius

Of what is the lining membrane?

The Tympanum is continuous with what?

Of the lining membrane of the Pharynx

Of what does the bony Labyrinth consist?

Of three portions, the vestibule, semicircular canals and cochlea
Car

1. There are two fossa in the vestibulum, what are they called?
A. fossa ellipsoidea and fossa semisferica.

2. How many orifices in the vestibulum?
A. Eight
2a. What are they?
A. Three at the posterior part leading into the three circular canals one anteriorly leading into the upper scalae of the cochlea, the second one which opens into the tympanum and the conduit of the vestibule.

2b. What is the number of semicircular canals?
A. Three
2a. What are they called?
A. superior, inferior, and external.

2d. What part of a circle does each form?
A. About one third.

2e. How is it that only five orificies are formed by these three canals?
A. By the union of one extremity of the superior and inferior canals.

2f. What is the diameter of the cavity of one of these canals?
A. About half a line, though enlarged at their orifices.
Ear

It has the internal ear, or the bone
labyrinth any less
A. It lined by a delicate and vascular
membrane.

2o What is contained in this bone and
A. There is a membranous labyrinth
consisting of three semicircular canals
nearly filling up the canals and
having the same shape and general
arrangement.

2o Where do the orifices of these canals
open
A. In a sac at the superior part of
the vestibule.

2o What is that sac called
A. Sacculus ellipticus.

2o Situated in join, the vestibule
no part of the Sacculus ellipticus
is another sac what is it called
A. Sacculus spherici

2o Which is contained in these sacs
and the membranous canals
A. A very fluid transparent liquid
called by some vitreous auditory also in
each sac is a small mass of
whitish calceous particle, used by doctors
according as they are hard or soft.
20 What is that fluid called which is contained in the cochlea, long vestibule, and long semicircular canals?
21 Liqueur, or Synapha, of Ootamnes.
20 What does the cochlea resemble?
21 The shell of a snail.
20 How is it formed?
21 A conical tube wound twice and a half round a column of bone, called Modiolus.
20 What is that plate, called, which divides it into its length into two compartments and the superior & inferior Lemmis Spinalis.
20 What are the inferior two compartments called?
21 The inferior is called Scala tympani, the superior Scala vestibule.
20 How has the septum of the cochlea been divided?
21 Into four portions and called according to their structure.
20 What are the names of these different portions?
A factor and the product of the whole.

What is the supposed product of the whole?

The whole product of the whole.

The whole product of the double whole.
Eye.

By what is the organ of vision formed?
A. By the ball of the eye, Eye lense, Eyelids, Lacrymal apparatus, Muscles, and Tunic of Eye - Junction.

1. What are the Uses of the Eye Brow?
A. They can protect the eye from too much light. & from the perspiration.

2. What are the Uses of the Eyelid?
A. They shut out the light, preserve it from contact with extraneous bodies during sleep. or reduce extraneous particles from the eyeball by their motion.

3. What are they formed?
A. Skin. Muscular fibres, Cartilage, Cellular fibrous tissue.

4. By what is the internal Canthus attached to nasal process of the Superior maxillary bone.
A. Ligamentum Palpebrae Anterior.

5. By what is the Ex. Canthus united by the Ext. Ligament?
A. To the external Margin of the orbit.

6. What muscles enter into the Composition of the Eyelid?
A. Ascending Palpebrarum. Levator Palpebrae Superioris.

7. Where are the Palpebral Cartilages?
A. One at the margin of each eyelid.
Eyes

A. Give the figures of three cartilages or lacrimal
B. Upper is of a semi-lunar form, & much
C. Broad in the middle, the lower not exceeding
D. Three in breadth,
E. Do they reach each other?
F. No, they terminate in the ligaments.
G. What is the internal lining of the eyelid called?
H. Tunica Conjunctiva
I. What is its arrangement?
J. At covers the inner face of the upper eyelid, it is reflected for 2 or 3 lines towards the
K. Extension of the orbit, then traces over the front
L. Of the eyelid, & lines the inner face of the
M. Eyelid
N. Is it very closely connected with the Cornea?
O. It is.
P. What is the membrane is it?
Q. Superficial to be mucous.
R. Where are the glands of Mucous?
S. At the margin of each lid, between its Carti-
T. Lages & Conjunctiva
U. What is the use of the tear for from them?
V. For preventing the overflowing of the tear &
W. Lubricating the eyelid.
CASE.

Q. How many muscles move the eyeball?
A. 3. 4. Rectus - 2 Oblique
Q. From what point do they all arise, except the inferior oblique?
A. Above the bottom of the Orbit.
Q. Give the insertion of the Rectus Aculei super.
A. Into the Sclerotic, two lines from the Cornea.
Q. Give the insertion of the Rectus Aculei inf.
A. Into the Sclerotic, 2 or 3 lines from the Cornea.
Q. Where is the Oblique Aculei inferior seen?
A. Into the Sclerotic on the under jaw near its middle, it draws the eye forward and towards the External Canthus.
Q. How Origin & Insertion of Oblique Inf.?
A. Rise from the Inferior Maxillary, just in to the side face of the Sclerotic.
Q. What is the superficial for the Clint con.
A. Pachyranal gland. deckt f. absorptit.
B. Parch is in the Pachyranal gland.
A. Immediately below and within the Ext. Angular Process of the front.
Q. How many Lacrimal ducts?
A. For 7. Forming a box about i. in. length.
3. When are the Lachrymal Ducts?
A. At the internal Communion.
B. What is the beginning of the duct called?
C. Phrechnus Lachrymale.
D. Life what do ducts open?
E. Lachrymal Sac.

3. What is that bicuspid tubercle at the internal juncture of the Eye lids?
A. Lachrymal Caruncle.
B. What is the Phrenic Semi-Sacrament?
C. Duplication of the Conjunction at the margin of Caruncle.
D. Where is the Lachrymal Sac?
A. At the internal conjunct of the orbit in the depression of or unquis & daph. Marcell's bone?
B. What part of the eyeball does the deltoid coat?

A. About 2 of the exterior investment.
B. Where is the hole of the nerve.
A. At the posterior part a little within the orbit.
B. When is the deficiency in the delentine?
A. On the anterior; which is filled by the cornw.
B. On what is the delentine remarkable?
A. At moist & moist of illustrely.
B. By what is the delentine formed?
E 39

No idea.

1. Does the cornea represent a segment of a sphere, the same as that of the sclerotic?
2. As of a syllepsy.
3. In the junction of the Cornea and Sclerotic.
4. They each have a sloping margin.
5. What is the choroid coat?
   A. Immediately within the sclerotic.
   B. By what is its anterior opening bounded?
   C. The ciliary ligament and vile.
   D. What is the ciliary process?
   A. Behind the iris and within the ciliary ligament and vessel as a great number of nodos or radiated ridges called ciliary processes.
   B. What is that bare part of the iris called that is spread over the choroid?
   C. Pigmentation. Stigma.
   D. Is the choroid cell very dense and insinuating?
   A. It is easily lacerated.
   B. Is it very vascular?
   A. It is.
3. What is the iris?
   A. Circular, oval, placed in the deficiency in the front of the choroid, having in the center a round opening called the pupil.
   B. What is the posterior face of the iris called?
   A. Uvea.
I. What does the color of the eyelid depend on? Does the color of the lid vary in the cause of [illegible]?
II. What is the cause of the color of the eye?

A. Retina

2. Does it adhere to the choroid coat?
A. It does not

3. What parts of the eyelid is composed of the vitreous humour?
A. Retina; choroid process

4. With what is it in contact?
A. The retina for the greater part, the conjunctiva, humour of ciliary body

5. What substance is the vitreous humour?
A. The hyaloid membrane of a thin fluid.

6. What is the arrangement of the internal surface of the retina? A. Thin process from the internal surface a great many formations dividing the whole cavity into cells of various shapes and sizes.

7. Where is the ciliary sinus or humor?
A. In a depression in the front of the vitreous behind the iris.

B. What is it, shape?
A. A double curved lens.

C. Which convexity is the greater?
A. Posterior
What is meant by the Canal of Petit?

A. When the tunics by aloide a hole near the circumference of the chrysaline lens it separates into two cavities which afterward unite at the circumference. The space between the two cavities is called the Canal of Petit.

B. Has the Chrysaline lens a proper capsule?

C. It has...

D. Is its constitution the same throughout?

A. It varies more solid in the middle...

What do you call the translucent fluid between directly both the capsule?

A. Liquor of Morgagnio

What part does the aqueous humor occupy?

A. Anterior to the chrysaline lens and posterior to the cornea.

B. Say it a capsule?

A. It has not perhaps not complete...

Will the fluid be produced by last by an accident?

A. At once rapidly...

What is meant by the chamber?

A. The division of the eye made by the iris...
The Brain

Mucous Membranes of

February 13th 45

By what membrane are the Brain and Spinal marrow invested?
A. Dura mater, arachnoid, pia mater.
B. What is the appearance of the external surface of the dura mater?
A. It is rough and uneven
B. Does it adhere to the cranial bone?
A. It does early in life or in very old age
B. Does it consist of one or two layers?
A. No, but they are very closely united
B. By what is the Dura mater formed?
A. By a duplication of the internal surface of the Dura mater.

1. Give the names attached
A. It commences about the middle of the body of the sphenoid bone, it rises above the crista galli, spines of middle line frontal bone, the sagittal sinus of temporal bone, assisted at the anterior and posterior
B. What is its breadth?
A. About 1 inch in front, increased to 2 1/2 at the median plane
B. What can you say of its inferior margin?
A. It is verycontain
Membrane of the Brain.

1. By what is the Tentorium formed?
   A. An internal layer of the dura mater.

2. What is the extent of the outer meningeal circumference?
   A. Extends along the horizontal line of the occipital crest, and along superior corner posterior bone to the posterior clinoid process.

3. What is it, that separates the posterior lobe of cerebrum from the cerebellum?

4. What is the opening in the internal margin called?
   A. Foramen Oval.

5. What is the extent of the fifth ventricle?
   A. Extends along the middle line to the posterior margin of the inferior foramen from the under surface of the Tentorium.

6. What is the structure of the Dura mater?
   A. Fibrous.

7. What gives the internal surface its smooth appearance?
   A. The Palatinus from the Tunica Arachnidea.

8. Do any blood vessels ran off into it?
   A. It will supply with arteries and veins.
   B. How are the sinuses formed.
   C. By a separation of the Dura Mater.
2. **Situation of the Superior Longitudinal Sinus.**

A. At the base of the Sphenoid Sinus.

B. It begins at the Foramen Cerebelli, by a small vein which passes from the vertex.

C. What blood vessel does it receive?

D. On each side it receives two or three large veins from the Petrosal Sinus, also veins from the Semilunar & Carotid Sinuses.

D. Where are the lateral Sinuses?

A. On each side at the base of the Tentorium & the inferior Longitudinal Sinus?

B. In the Sphenoid just above the Cuneus edge.

D. Where is the Sphen Quadratic or Rectus?

A. In the tentorium where it joins the Sphen Sinus arising from the Anterior & the Posterior Margin of the Tentorium.

B. What is the general union of the Longitudinal Quadratic & Tentorial Sinuses called?

A. Longular or Tentorial Sinuses.

B. How many Tentorial Sinuses?

A. One on either side.

D. With what other Sinuses are they connected?

1. They arise from the Cavernoas and terminate in the Cerebral.
2. Where are the Cavernoas located?
3. What artery crosses this line?
4. The Internal Carotid at first crosses.
5. Where is the Circular Line?
6. In the Dura mater, surrounding the Pituitary gland.
7. With what veins does it communicate?
8. The Cavernoas.
9. What is the Periva Arachnoidae?
10. A second line, lying on internal surface of the dura mater.
11. What is the structure of the Pia Mater?
12. It is a network of arteries and veins, the Sarceuses are filled by a loose white cellular tissue.
13. Is it closely applied to the brain?
14. Is the dura mater of the spine attached to the bone?
15. Only at first.
16. The arrangement of the meninges of the spinal Column is the same as of the brain.
Substance of the Brain re
I. What is the structure of the Arachnoid Pia
mater of the spinal columns.

A. Fibrous

Q. What are the two kinds of substance composing the central portions of the nervous system called?
A. The gray or cortical, & the white or medullary.
Q. How are these substances placed in the central portions of the nervous system?
A. The surface of the Cerebrum & Cerebellum is formed by the gray or Cerebriform, the interior of the white substance. The surface of the Thalamus, Crus, & Spinal marrow is the white substance, the gray is interior.
Q. What is the intimate structure of these substances?
A. Fibrous
Q. Which proceeds in development, the Brain or Spinal marrow?
A. Spinal Marrow
Q. What is the extent of the Medulla Spinalis?
A. From the seventh cervical to the first or second Lumbar vertebra.
Q. What is the form of the Medulla Spinalis?
A. Generally Cylindrical.
Q. By what is the Spinal marrow kept in its place?
BULKS of the Spine

1. By the nerve passing off from it, I. by a process sent down from the inferior extremity of the Pia mater, to be attached to the dura mater at the lower part, by the Ligamentum Articulatum.

2. What are the Ligamenta Articulatae?

A. Narrow thin bands are placed on either side of the medulla spinalis, commencing at the 1st cervical foramen, descending between the articular roots of the nerves, to near the termination of the medulla spinalis.

3. To what do they adhere by their internal man-gis?

A. Pia Mater.

4. What do you understand by the cervical or brachial bulb?

A. An enlargement of the medulla spinalis along the fifth lower cervical vertebra when the roots of the auxiliary plexus of nerves arise.

5. Where is the cervical bulb?

A. An enlargement of the medulla spinalis, forty inches above its termination, from it the Lumbar part of the dorsal nerves proceed.

6. What do you observe on the front surface of the Medulla Spinalis?
Elements of the spine, &c.
1. A longitudinal fissure which divides the front surface into two symmetrical halves.
2. What is the posterior?
A. A deeper fissure corresponding with the fora called posterior intercordal.
3. What is the anterior commissure?
A. A corrugated commissure of which the hollow of the anterior fissure.
4. What is the arrangement of the fibres of the posterior commissure?
A. They are corrugated but not longitudinally.
5. What is buried on the external surface?
A. A fissure, the situation of which is marked by a line of white substance.
6. What number of nerves attached to the spinal marrow?
A. Is scant.
7. Now are the nerves connected with to the spine.
A. By two roots an anterior to posterior, the dura mater afterwards the root not forming a ganglion the root, then united.
8. What is the situation of medulla oblongata?
A. Extends from foramen magnum, to the middle of the basis of the sphenoidal sinuses.
9. What other sections is it continuous?
A. Medulla oblongata, Pons Varolii, & Corpus Callosum.
A. What is its form?

B. Caudal; conical, about one inch long—

1. At this end; or dist. surface is a fissure the continuation of the 1st spinal fissure, what are these

2. Corpora Pyramidalea

3. By what is the 1st spinal fissure interrupted

4. By a depression of the ridge of the anterior

5. Column of Spinal Marrow

2. Of what are the Corpora Pyramidalea a Con-

1. Take Columnus of the Spine.

2. What are the Corpora Elyares

A. Our bodies in the 1st margin of the Corpora

2. When are the Corpora Postiformia?

A. At the lateral point, margin of the medulla

2. By what are they separated from each other

B. Of the Post. Fissura Medulla Oblongata

3. Of what are they a continuation;

A. Post. Part of the Medulla Oblongata

3. What is the Columnus Parsitortus?

A. On the oblongata between the Corpora Posti-

B. Formia?
Cases: Cerebellum.

Q. Where is the protuberancia anterior or posterior veretum?
A. Near the centre of the base of the encephalon at the base of the medulla oblongata.

Q. How is the under surface formed?
A. Of transverse medullary fibres coming from the corna cerebi.

Q. What is the tissue which passes through this body and continues to re-form the under surface of the corna cerebi?
A. Corpus Pyramidalis.

Q. Where is the vermis?
A. In the posterior fossa of the cranium. Separated from the occipital by the tentorium.

B. What is its shape and size?
A. It is rounded. Crown about below, and ends in the transverse. It is called?
A. Vermis Superior.

Q. What is the tuber inferior veretum?
A. In the inferior part of the cerebellum.

Q. What ridge is this tuber?
A. Inferior vermis.

Q. What is the central portion of the cerebellum formed by the lips of the vermis called?
A. Vermis Inferior.
Corbellum. Arteries of the Brain.

1. Into what number of classes are the sulci of the Corbellum arranged?
   A. 4.

2. What are the portion, separated by each class?
   A. 1 into Sulci, 2 into Colucla, 3 into Fascia, 4 into Corbellum.

3. What is the appearance of the Corbellum when laid open by an incision?
   A. Has the appearance of Arbor Vitae.

4. What is that oblong rounded body in the middle of the trunk of the Arbor Vitae?
   A. The ganglion of the Corbellum, or Corpus Ammonis.

5. Where are testis and uterus?
   A. The roots of the Crus Corbelli.

6. Where is the calvarium?
   A. Between the Crus Corbelli, commencing an incutience of ending at the Testis.

7. What vessels enter deeply the brain with blood vessels of the cerebellum?
   A. Internal Carotid, Vertebral.

8. Through what foramina does the vertebral artery get in the Cranium?
   A. Foramen Magnum.

9. At what point do the vertebral arteries unite?
   A. At the posterior margin of the forae Variiis, for the basilar artery.
Arteries of the Brain

1. What branches given off from the vertebral within the Cranium?
2. An Arch of Post Branch bent down to the Spine and the inferior basilaris artery, distributed to the hinder surface of the cerebellum principally.
3. How far does the basilar artery extend?
5. What arteries given off at the Ant. Extremity?
6. Superior of the Cerebellum, Post of the Cerebrum.
7. What artery does the Post. Artery the Cerebrum receive?
8. Communican of Posterior of the internal Carotid.
9. Through what does the internal Carotid pass to get into the Cranium?
10. Aneroid Canal in the Temporal bone.
11. What branch given off from it unclamped process?
12. The Ophthalmic artery.
13. Which is largest importance of trunk?
15. Of what is the arteria called a branch?
16. Of the Internal Carotid.
17. What is the continuation of the Internal Carotid called after those branches?
18. Arteria Media Carotis.
Cerebrum. Enquire to

1. Along what does it grow and on what space.
2. Along the sides of Sylvius and spread upon the adjacent parts.
3. What is meant by the circle of Wolff?
4. Artificial circles surround the Coenurum of the optic nerves.
5. Into what is the Cerebrum separated by the longitudinal fissure?

A. Premotor cortex (two)
B. What is there at the bottom of this fissure?
C. Corpus Callosum.
D. How is the under surface of each hemisphere divided?
E. Left anterior, Posterior, Middle lobes.
F. By what is the Anterior middle separated?
G. Fissure of Sylvius.
H. In the divisions of the middle ? Posterior cortex divided by a fissure.
I. It is not.
J. Cerebrum is framed by the expansion of what?
K. Corona Cerebi.
L. What is the length and breadth of Corona Cerebi?
M. 3 inches long & each side.
N. What condition between the Coruna?
O. The third ventricle.
Infundibulum. Ventricle.  

1. What is that small, minute, situated near the anterior extremity of the cavity?
2. Its mucous Membrane, or Borfina. 

3. What is that conical piece immediately in front of the last named membrane?
4. Its fundibulum, attached to the Petrosal gland.

5. Where is the Petrosal gland?
6. In the dilla Turicca.

7. Where is the Sagan Preannu?
   A. At part of the cavity Centri at the floor of the third ventricle.

8. Where do the right nerves unite?
   A. In front of the infundibulum.

9. Of two each lateral Ventricle consist?

10. By what are they separated from each other?
    A. Septum Lucidum.

11. What is the extent of the Septum?
    A. From the Corpus Callosum to the Physis.

12. What is the separation between the laminae called?
   A. 5th Ventricle.

13. What forms the roof of the lateral Ventricle?
   A. Corpus Callosum.
Callusum, Fornix, Phalami Oplieis.

2. What is the corpus callosum?

A. A medullary layer uniting the 2 hemispheres it occupies 1/3 of the long diameter of the brain courses above. How ever less.

3. How does the anterior extremity terminate?

a. Bed down embracing Corpora Striata.

3. Write what is said. Extremity continuous

A. The Fornix & Cornu ammonis.

2. What forms the floor of the lateral ventricles?

A. Fornix, Phalani Oplieis, & Corpora. Striata.

b. With what is the Fornix continuous posteriorly?

A. Corpora Callosum.

3. What do the posterior angled of the Fornix form?

A. Cornu ammonis.

5. Where the Phalani Oplieis, on the Portion Gauging?

A. At the superior face of the Corna Center

5. What is they dig?

A. 1/4 inch long. 2/4 wide, and the same thick.

3. At the junction of the Dorsal and Anterior surface is a prominent ridge which is then:

A. Postuncle of the Final Cloud.
Corpora Striata. Coruna of L. Veit.

1. Where are the Corpora Striata?
2. Situated in front of, nearly surrounding the thalamus applied by the devengued by their post extremities.
3. What is the composition of the Corpora Striata?
   A. Surface of the nonervous substance within it consists of alternate layers of circular and medullary matter.
4. What are the Cornua of the lateral ventricles called?
6. What is the elongation line of the internal side of the Post. Cornu?
   Hepper. Cornu, minor.
7. What elevated ridge on the floor of the lateral cornu extending its whole length?
   Cornu Ammonis. Hepper Cornu, major.
8. Where is the median interventricular?
9. It passes through the posternum of the thalamus.
10. Determines the Cornus of the Post. Thalamus.
11. In what does the vessel constituting the choroides terminate?
   A. Two veins. Called Vena Valens.
Ventricles + Cerebral Gland
1. What ventricles thought to view by removing
the Velum Intermediae?
A. 3th

2. What forms the floor?
A. Tetris Cerebellum, Corona Radiata, & Eminent
the mammillae.

3. What at its front part?
A. Ant. Convexa of Fornix.
B. What is front of the Convex, forinx?

4. Ventricles

5. Which opening into the 3. ? Which just below
the Ant. Convexa.

B. The base of the Infundibulum

6. What forms the means of communication with
the Septa Ventricle?
A. The aqueduct of Silvius.

7. Where is the Final Gland.
A. Beneath the front, margins of the fornix on
the left part of the Cerebro Quadrigemina

2. What is generally found in the Final
Gland?
A. An accumulation of Calculous matter

3. From the continuation of expansion of what
part of the mediolello oblongata is this Cerebro
formed?
A. Corpore pyramidale, oblongata.
FACTORY

I. By which is the Cerebellum formed?

a. Through California.

2. What division made of the fibers of Cerebellum?

b. Curving and diverging.

c. How are the Cerebellar tubules of the brain formed?

d. A consequence is formed by fibers of the equal length.

NOTES.

1. How many cranial nerves are generally numbered?

a. Five Times.

b. What is the Fourth Spinal?

c. Thalamus Factory.

d. Describe its origin.

2. It rises by three medullary roots from the post: collectio of the anterior lobes.

b. What is the situation of this nerve?

a. On the under surface of the anterior lobe of the brain near the fissure which separates the hemispheres.

b. It is lodged in a small gap of the Cerebrum.

c. Does nerve converge in their Course?

They gradually.

Through what does it pass out?

The extension of the oculomotor, fascia of the Ectomastic.
Ophthalmic Motor Aculi.

I. Where is it found?

2. Principally on the posterior gland membrane.

3. Give the origin of the optic nerve?

4. arise by a flattened root, one portion coming from the quincuncial externa, the other from the body by a medullary band.

5. What is its course?

6. It winds forwards under the crus cecuti, adhering to it of the later cuneum then inclines towards the gill.

7. At what points do they unite?

8. In the under arch, part of the third ventricle, much anterior to the infundibulum.

9. Is there a partial or total decussation of its fibers?

10. There is a decussation of the internal fleeting only.

11. Through what foramen does it pass?

12. Foramen opticum.

13. What is the formed by it?

14. The pituitary or the organ of vision.

15. What is the third pair?


17. What is the origin?

18. From the internal face of the crus cecuti, just in front of the anterior margins of the habenulae.
Pathetic. Trigeminal.

1. Through what does it pass from the cranium?
2. Rhemoidal formula?
3. What is the first branch out?
   a. The Retinal Superior muscles of the eye
   b. After giving off this what is the distribution of this work?

4. It divides into 3 branches, distributed to the face of the muscles of the eye.
5. What is the fourth pair?
   a. The ophthalmic nerve
   b. Lid to its origin?
6. These by two filaments from the upper root face of the vessel of Fourunc.
7. Through what foramen does it pass out?
8. What is the 5th pair?
   a. Origeninaus or Sturfacial
   b. Lid or arisen?

9. By two roots. One is larger than the other. It comes from Vertebral Rivavia the pressure between it &
   Corpus Nerve formig.
10. Through what does it pass?
    a. Post Vandoio
    b. Into what is this root convoluted at the lower
       part of the Canal of the dura mater which it traverses it into a Intracranal Ganglion. Called the Enog
Branches of the Fifth Pair

1. From what does the other root of the 5th pair arise?
   A. Corpora Restiformia, Medulla Oblongata

2. What are its 3 principal trunks?
   A. Ophthalmicus, Superior Maxillaris, Inferior Maxillaris

3. Through what does the Ophthalmicus pass over?
   A. Orbita

4. Into what does derivate while in the face?
   A. Nasal, Ophthalmicus Frontalis

5. What is the situation of the nasal in the orbit?
   A. It gets to the internal face of the orbit 3 lines forward just below the superior oblique muscle involved in adduction motion

6. It gives off a branch soon after its origination. What is it called?
   A. Ramae Ciliaris

7. Of what ganglion does the Ramae Ciliaris form the posterior root?
   A. Gangl. Cuneatus or Ophthalmicus

8. The nasal nerve gives off a branch at the anterior internal orbital foramen. What is it called?
   A. Internal Nasal or Ethmamodal branch
Branches of Trigeminal Nerve.

2. Which is the largest branch of the facial nerve?
A. Frontal.
B. Occipital.
C. None of the above.

D. It does not divide.

D. It does into Internal & External branches.

D. When what is the Internal Branch spent?
A. It attaches a branch to join the facial nerve, giving filaments to upper eyelid and is spent upon the muscles of the forehead.
B. Does it into the Cheek muscles spent?
A. After dividing off a number filaments it is spent on the Cheek muscles it stands.

D. What is the second branch of the Trigeminal?
A. Superior maxillary.
B. Through what bones its face from the Corium?
A. Roots and Retractrians.
B. After the point it which filaments do it give off?
A. Muscles of the upper maxillary.
D. What is the cause of this nerve?
A. Drains through the Viscera Maxillary, and
Branches of Superior Maxillary
or two divisions.

Q What are the branches formed by the division called?
A One called mental, other, Incisural.

Q After giving off these branches the left Maxillary divides into what two branches?
A Supra Orbitale, Inferior Palatine.

Q Of what is the Posterior Dental branch?
A Supra Orbitale: it gives off likewise the anterior dental while the infra orbital Parotid.

Q What is formed by the Superior Palatine nerve just outside of the Ethmoid Palatine foramen?
A The ganglion of Mikel.

Q What is the Sphenoid Palatine branch of which rise from the ganglion?
A The Sphenoid Membrane.

Q What is the origin of Course of the Vidian Nerve?
A It comes from the inferior part of the ganglion of Mikel, and goes backwards through the Pterygoid foramen to the lenticular membrane about the Cartilage cart.

Q From what divides into what?
A Superior and Inferior Petrosal.

Q Through what foramen does the Superior Petrosal Pass?
A The Vidian.
Angular Maxillary : 6 " Pain.  

What nerve doth it adhere in the aqueduct of Fallopius?  
A. Facial or Rotor Dura.  

By what name is known while traversing the Sinus?  
A. Thordia Sinus.  

What nerve doth it join?  
A. The Cingual of the First.  

The anastomosis of the deep seated branches with some filaments of the 6th and the internal Carotid forms what?  
A. The beginning of the Great Sympathetic.  

Through what does the inferior maxillary emerge from the Cranium?  
A. Foramen M. of the Ethmoid bone.  

Through what notch doth the maxillary nerve pass?  
A. The ethmoid notch.  

A bone what are the two deep seated Temporal nerves distributed?  
A. Temporal muscle.  

Distinguish the branches of the Inferior Maxillary?  
A. Buccal, Pterygo, Superficial Temporal, inferior dental, & Cingual.  

Writ in the origin of the 6th branch of the Nerve?  
A. From the upper extremity of the Corpus Spinalis.
6th, 7th, Pair

What time does it pass?

What pressure does it enter the skull?

What effects?

What exterior of the eye?

What two nerves compose the 7th, pair?

Facial and auditory.

What is the origin of the auditory?

From Calamus Viscerosus, & Cornea osteomusculosa.

Give its course, distribution.

Forewards, outward, beneath the bone centre penetrated into the mastoid auditing internment on which it is affected.

Give the origin of the facial nerve.

From inferior part of Cornea osteomusculosa & the space between it & Calamus viscerotomus.

Through what canal does it pass?

The aqueduct of Fallopius.

Through what foramen does it escape?

Sphenoid.

What branch given off near this foramen?

Posterior auricular.

Through what gland does it pass?

The parotid.

What then is the distribution of the Facial?
A. To the side of the face in Radiating Clusters called the Temporal, Facial, Buccal, Corneal, Submandibular, Submaxillary, and Maxillary.

Give the Gloss. Pharanqueal?
A. From the Corpora Petiformia.

Does it anastomose with the Vagus gastric while in the Cranial?
A. Yes, by a large branch.

B. Through what plexus does it pass?
A. Pharanqueal Lacerum posteriori.

C. A ganglion is formed by it while in the cranium what branches give off from it?
A. A branch is given off which penetrates into the tympanum and divides into branches of the division joins the superior maxillary plexus and the other branches with the sympathetic which is called the anastomoses of Jacobson.

D. Give the course and distribution of this nerve after leaving the cranium?
A. It goes downwards and forwards between the internal carotid artery and the pharynx sphincter, or muscle there between the latter ends the Pharyngeal it
(Accessory) nerve of Willis & Par Vagum follows the direction of the latter to the side of the root of the tongue it is found upon the pharynx and serous mem-
brane of the tongue but forms numerous anastomoses.

Do give the origin of this accessory nerve of Willis?

A It arises from the nucleus spinalis cervicalis commonly as low as the seventh cervical nerve & comes from between the anterior & posterior columns.

Do it passes up into the cranium along the medulla spinalis commonly as low and medulla oblongata. Through what foramen does it leave the cranium?

A Foramen Lacerum posterior.

Do With what nerve does it firstly anast-

A The par vagum.

Do Upon what distributed?

A Principally on the sternum biceps mastoidea and Tragus ear muscles.

Do Give the origin of the Firmenogastic nerve?

A It arises from the corpus restiforme.

Do Through what foramen pass?
Paramogastric. Pharyngeal
1. From the Laurunc. posterior to the internal angular vein.
2. What artery does it pass down the neck?
3. Internal carotid and internal jugular.
4. What artery does it cross on the right and what on the left side?
5. On the right side, it crosses the subclavian and on the left, the arch of the aorta.
6. What then is its course?
7. In getting into the cavity of the thorax it goes downwards and backwards to the posterior face of the bowels in the diaphragm, to the esophagus and sends it to the stomach.
8. The superior Pharyngeal comes from the Paramogastric. Shortly after emerging from the clavicle upon what is it spent?
9. From the esophageal and superior constrictors of the Pharynx.
10. The next branch is the superior Larineal, upon what is it spent?
11. It anastomoses with the superior cervical ganglion pharyngeal and hypoglossal nerve; it is then directed upon the Larynx and Thyroid gland and the Pharynx.
Nerves of Oesophagus &c.

1. What are the chief branches of the

2. Are the obdusculum on the right & right internal

3. Give its distribution?

4. Are the branches to the oesophageal plexus, to

5. Give the distribution of the inferior tracheal nerve

6. The filaments to the tracheal & bronchial, they

7. Do the branches come from the pharyngeal gastric,


9. This is the distribution of the par vagum after

10. Give branches to the oesophagus & plexus is formed at the cardiac orifice of the stomach; the right nerve is then distributed over the posterior surface in the lesser curvature reaching the pylorus some branches join the solar plexus. The left
Descendent Mini. Hypoglossal is distributed on the anterior surface of the stomach. Branches of it also join the solar plexus.

20. Give the origin of the Hypoglossal nerve. It arises from the medulla oblongata. Through what does it escape from the cranium?

A. Anterior border of the paries

20. As it crosses the external carotid artery it detaches a large branch. What is it called?

A. Descendent mini

20. Give the distribution of the Des-

20. Descendent mini?

A. On the Pharyngeal, and Stimulozymid and muscles of the Larynx

20. Upon what is the Hypoglossal nerve distributed?

A. On the muscular structures of the tongue.
Salivary = Parotid. Submaxillary.

1. How many salivary glands, and what called?
A. On either side: Parotid, submaxillary, sublingual.
B. Where is the Parotid?
A. On the side of the head, between the Mastoid process and Ramus of the lower jaw.
B. Of what does it Consist?
A. A number of lobules.
B. She is an appropriate Cysticula?
A. It has not.
B. By what are lobules reflected? Cysticula?
A. Mucous glands.
B. Where from the surface Superficial?
A. In what duct from the Parotid?
A. Of Cysticula.
B. Describe its Course?
A. Passes the outer jaw of the mandible, at the anterior edge it perforates the Adipose matters, and the posterior end of the Bucinator.
B. Where is its oral orifice?
A. Opposite the second upper molar tooth.
B. Where is the submaxillary gland?
A. In a depression on the side of the mouth form ed by the body of the inferior maxillary, Mylo-hyoid, tendon of the digastricus.
B. By what are its lobules held together?
A. By cellular substance.
Sublingual, Grand Pharynx

1. What artery passes through it?
   A. Facial.

2. What is its duct called?
   A. Wharton duct of.

3. When are the sublinguals?
   A. Above the mylo-hyoid along the under surface of the tongue.

4. How long is it than one excretory duct?
   A. Had from 1 to 8.

5. What artery passes through it?
   A. Lingual.

Pharynx

1. Where is the Pharynx situated?
   A. Behind the Cervical vertebrae, and first part of neck muscles.

2. To what does it contain a vein?
   A. Posterior Process of Occipitalis, and front of the fronting portion of Temporal line.

3. To what in front?
   A. Post. margin of upper maxilla. Cornua at Hyoid, side of the hyoid, & Cylind. Cartilages

4. What behind?
   A. Continued into tho. Oesophagus

5. To what behind?
   A. To the muscle on the back of the Cervical vertebrae, by loose Cellular & Fat Tissue.
Esophagus & Lungs.

1. How many coats, &c. ?


3. How is the muscular coat formed, &c. ?

4. By the Nervee, Called Gastrocolic.

5. With what does the Pharynx Communicate ?


6. Where is the Origin of Cysto-chial Tube ?

R. On a line with inferior turbinate bone behind Posterior made Eosphaague.

7. Give the situation of the Esophagus ?

R. In front of the Spleen behind the Trachea Anteriorly with the Pharynx and the Stomach below.

8. As its descent vertical ?

R. It inclines to the Left.

9. What coats compose the Esophagus ?

R. Muscular Cellular & Mucous.

Lungs.

Where is the essential seat of Staphylocaes ?

R. In the Lungs.

2. In the Lungs in direct relation with the capacity of the Throat.
Junge + Pleural

1. They are
2. What is the figure?
   A. An irregular cone. Apex above.
3. Which surface is convex?
   A. External.
4. Which is the thickest part or Post. margin?
   A. Posterior.
5. On what do the Jungs oppose below?
   A. The phrenic nerve.
6. Which of the three lobes of the right Jungs is middle
   A. Middle.
7. What part of the lung is called the root?
   A. The concave surface where the Bronchial vessels enter.
8. Commences at the Strumus and traverses the Pleura to the same point.
9. It lies the lateral portion of the chest in proceeding along the first rib, it forms a sort of bulging bag which opens to the Lung, it passes from the dorsal root to the first, first, second, and third intercostal, then goes along the Pulmonary vessels, and brings shadow into post. part.

The lung covering its post. back; post. part. its shadow round the chest. margin Covering the Ext. rounded surface of the lung, passing over its ant. portion. Covers the Ext. Internal Surface, then along its ant. Surface.
Mediastinum. Larynx.

pulmonary vessels and bronchi add to the Pan Cardium. Covering the Ant. Serosa to the middle line, then passed to the Sternum.

Mediastinum.

1. Into what portions are the mediastinum divided?

2. Superior, Posterior, Inferior.

3. By what is the ant. formed?

4. That portion of the two Pleuræ passing at the Sternum.

5. What is contained in the posterior mediastinum?

6. Descending portion Thoracis Aortæ, the Pharynx, Vena Azygos. And Par Vagum.

7. How is the superior mediastinum bounded?

8. In front by the upper part of the Sternum, laterally by the first Costal cartilage.

9. Other does the aortic anterior supply?

a. Descending Thoracis Aortæ.

b. Larynx.

10. Where is the Larynx?

11. Immediately below the Pharynx, root of the tongue. Bounded behind by the Pharynx, anteriorly by the Priminent Cartilages, Anterior Thyroid.
Cartilages & Ligaments of Cervical

Q. By what is the elevation of the cervical formed?


Q. By what is the prominence in the upper part of the neck formed the thyroid?

A. Prominent Adam's.

Q. Where is the Epiglottis?

A. On the posterior face of the base of the 18 hyoids, being enclosed partially by the sides of the Thyroid cartilages.

Q. On what altitude generally?

A. Vertical. Its elevated margin elevated.

Q. What is the membrane attached to the superior margin of thyroid and inferior margin of hyoid?

A. Thyroid Thyroid Ligament (middle).

Q. To what is the lateral Thyroid hyoid ligament attached?

A. Cornu major Thyroid. Intercalated extremity of the Thyroid bone.

Q. How many thyrocrystoarytenoid ligaments?

A. One each of the Cervical.

Q. Give the attachment of the superior.

A. Extends from the ant. angle arytenoid to inferior part of the anterior angle of the Thyroid.

Q. Of the Superior?

A. Attached to the middle anterior edge of
Vocal Chords: Prachus, and the arytenoid Cartilage + entering of angle of the Hyoid.

2. What are these Segments generally called? Vocal Cords.

3. What is that Space between the Superior and inferior on each side called?

A. Truncus or Ventricles of the Pharynx.

3. What is the principal use of Esophagus Cartes.

a. To prevent Food or other articles from falling into the Pharynx.

3. What part of the Pharynx is essential to the formation of the Voice?

A. The arytenoid Segments and space between.


2. How are the Cartilages arranged? In about 20 distinct rings being incomplete for 5 previously.

2. How is the sternal structure arranged? Ans. It joins the proximate margins of the rings, it may be seen on the rings.

2. How is the muscular arranged? It supplies the stability of the cartilaginous rings.

2. Which Bronchus is the longest upon entering the lungs. Ans. The left. 2 inches, the right 1 inch.


2. What difference is the cartilages of the posterior division of the Bronchus. Ans. Only a small segment of a circle is formed by the cartilage in these.
Abdomen.

1. Give the situation of those lines usually marked by anatomists to divide the abdomen into different regions.

A. Consider a line from the crest of the ileum on one side to the other, drawn on each side paraumbilical extending to the diaphragm. Extend this a fourth line parallel to the first, intersecting the two last when they come upon the false ribs.

2. How many regions formed by these lines.

A. Five.

3. What are these upper called.

A. Middle the Epigastric. Right & Left Hypochondriac.

4. What is central.

A. Umbilical. Right & Left Lumbar.

5. What "3" lower.

A. Hypogastric. Right & Left Iliac.

6. What is the hollow round the umbilicus or navicular called.

A. Percibules Cordis.

7. What organs in the three upper regions.

Viscera of the Abdomen

3. What is the middle division?
   A. Small intestines. Kidneys & Colon.

4. What is the lower division?

2. Of how many kinds are the Viscera of the abdomen in regard to their functions?
   A. 5.

3. What are they?
   A. Excretion and digestion; Reproduction.

5. What kind of a membrane is the Peritoneum?

6. Some membrane

4. Of what is that line formed which may be run on the external surface of the umbilicus, arising from the umbilicus to the Evis.

A. By the umbilical vein that emptied in the Viscera in the adult, the Round Ligament of the Evis.

B. By what is that formed which defends along the median line to the bladder from the umbilicus?

A. By the rectus of the Foment.

B. By what are those formed which interfere with the umbilicus, urine, and are attached to the side of the fundus of the bladder?
A. By the remains of the umbilical arteries of the fetus.

Q. What is that portion of the peritoneum from the Colon to the posterior wall of the abdomen called?
A. Mesocolon.

Q. What is that called which includes the small intestines?
A. Mesentery.

Q. What is that portion of the peritoneum which lies beneath the Diaphragm, or Cæcum of the Colon?
A. Cæcum Magnum, or Cæcum of the Colon.

Q. What is that process which extends to the spleen called?
A. Cæcum Gastrosplenicum.

Q. When is the stomach distended?
A. In the epigastric or part of the left stomach.

Q. What is the substance of the stomach?
A. Mucous membrane.

Q. How is the stomach divided for study?
A. Into four parts.

Q. What are the four parts called?
A. Cardiac, pyloric, fundus, and corpus.
Stomach & Small Intestine

1. How are the Curvatures designated? 2.
2. Small or Upper - Greater or Lower.
3. With what is the Stomach in contact above?
   B. With what of its side extremity?
   A. Spleen.
   B. With what at it, greater Curvature?
   C. Colon + Mesocolon.
3. What lies below the Stomach and Spleen?
   A. Pancreas.
4. By how many layers is the Stomach formed?
5. Which is most resisting?
   A. The Cellular.
6. What is formed by the uncoiled ends at the pyloric? a. Valve.

Small Intestines

1. The small Intestines are divided into Three, 
   What are they called?
   A. Duodenum, Jejunum, Ileum.
2. When do they Commence and when do they end?
   A. Commence at the Pylorus and end in the Ileocecal Region.
Large Intestines

1. How many coats has the small intestine?
A. 4. Serous, muscular, submucous, mucous.
B. What are the mucous folds called?
A. Valvulae conniventes, they give a larger surface from which absorption takes place.
2. Why is the duodenum so called?
A. From its being 12 fingers long.
3. Which duct enters into the duodenum?
A. Bile, Pancreatic duct.
4. How are the large intestines divided?
A. Cecum, Colon, and Rectum.
5. How are the mucosal fibres arranged?
A. Lute and distally fusiform or tubular.
6. What is the length of the Cecum?
A. 1.5 to 2 inches.
7. What process attached to it?
A. Appendiceal vermiformis.
8. What valve at the junction of the Cecum?
A. valve.
10. What is the first portion of the Colon called?
A. Ascending Colon.
11. Where is the transverse colon?
A. That portion of the Colon bounded above by the caecum, below by the stomach, and between.
12. What is the next portion?
A. Descending Colon.
What is that portion in the left head fascia?

2. Segments flexor of the Colon.

3. If the Portion completely covered by the Peritoneum?

2. The lower third is why.

Sphen

3. What part of the abdomen occupied by the Liver?

1. All the Right Hypochondrium, the upper half of the Epigastrium, the right lobe in front of the Left Hypochondrium.

2. Its upper surface convex?

A. It is

3. What is the anterior fissure on the under surface?

A. Umbilical fissure

3. What ligament attached to the inferior surface directly opposite this fissure?

A. Celiac Axis Ligament.

3. What vessels contained in the Transverse Sinus?

A. Vena Hepatica, Hepatic artery & duct.

3. What is that elevation on the under surface of the Right Lobe between the Transverse Sinus and posterior margins of the Liver?

A. Portal Veins, Hepatico.

3. What ligaments attached to the Liver?

A. Fallopian or suspensory. Right & Left lateral & Cordaria.
Gall Bladder & Nuctus.
I. On what part of the liver is the calculus or canal for the ascending vena cava.
A. On the posterior margin near its middle
II. What vessel has the liver?
A. Portal vein, Serous capsule which surrounds the substance of the liver invested the acini
III. By what is the true portal venus formed?
A. By the veins of the vessels of the abdomen.
IV. On what do the acini of the liver consist?
A. Each is an extra gland of itself.
21. How does the hepatic duct arise?
A. A branch made from each acini. It leaves the liver at the transverse peritoneum of entry with the cystic ducts.
22. Where is the gall bladder?
A. One the under surface of the right lobe of the liver
23. With what does the lower surface of the gall bladder come in contact?
A. Transverse colon
24. What is formed by the union of the hepatic and cystic ducts?
A. Ductus Commonus orchoidotrichus
25. Where does the cystic duct end?
A. Into the Ductus Galli
26. By what coats are the bile ducts formed?
Pancreas

A large external fibrous and an internal mucous

Pancreas

to give the situation of the Pancreas. A in the lower back part of the epigastricus it is bounded by the. Spleen on the left, the curvature of the duodenum on the right. Stomach in front, the lesser sac of the dia- phragm behind.

Is by what is its appropriate tunica formed?

A A tunica of condensed cellular mem-
brane which envelopes it and sends down processes into the substance.

Is what is the structure of the Pancreas?

A It consists of lobules of various forms united by cellular tissue.

Is how does the Pancreatic duct take its origin and where does it empty?

A It rises from each of the small granular masses and terminates generally, via the ductus communis, Cholodochus.

Is what is the office of the Pancreas?
Spleen.

A sanguineous juice similar to that of the spleen.

To give the situation of the spleen.

A. In the posterior part of the left hypochondrium, surrounded above by the diaphragm, below by the colon, the right hemi- and pancreas left by the parietes of the abdomen.

B. By what ligaments is it fixed in its place?

A. The left gastro-splenic and the spleno-plexus, the splenic and the spleno-colic.

C. What coat has the spleen?

A. Peritoneal & fibrous capsule.

D. Does the fibrous capsule penetrate the spleen?

A. It passes down and forms cells.

D. To the branches of the splenic artery and veins anastomosed with each other?

A. The arteries do not the veins do.

D. Of what tissue is the spleen?

A. Elastic or venous.

D. Into what does the splenic vein empty? [Note: The sentence is cut off and not fully legible.]
Sidney

2. What constitute the urinary apparatus?

3. When are the Kidneys?
   a. In the post-scapal part of the lumbar region extending from upper margins of the lowest dorsal to the lower margins of the 2d lumbar vertebra.

4. Have the Kidneys any ligaments?
   a. No.

5. What connect the Kidneys?
   a. Only one coat—the fibrous capsule.
   b. Which is the largest extrinsic?
   a. Superior.

6. At what part do the vessels enter and leave the Kidneys?
   a. On the internal margin at the renal pole.

7. Does the Kidney present a homogeneous appearance when cut longitudinally?
   a. They present two kind of subla

8. What is the one near the Periost?
   a. Costal or Interose.

9. What is the internal Paries calyce?
   a. Tubular. Medullary or Conus.

10. Of what is the Costal part composed?
    a. Of intestine very raisening among
Kidneys

granular Corpuscles.

1. At what depth do the tubular portions consist?
   A. Up from 12 to 15 Convoluted Fasciculi called
      Papillae, or Maltiugh.

2. At the bases of these cones present?
   A. In the Cortical, and are enclosed from
      by Processes from it.

3. Where do the tubule uriniferous reside?
   A. In the Cortical portion from each acini

4. What are those membranous tubes called, which
   enclose the Papillas or apex of the Convoluted
   Fasciculi?
   A. Calyx or Infundibulum.

5. What number of these?
   A. From 5 to 15.

6. Where do they terminate?
   A. In thePelvis of the Kidney forming the
      commencement of the ureter.
Mouth

2. Give the boundary of the mouth.
A. Post: by the lips. Post: by the soft palate + Tonsils, above by the Palatine process of the maxillary and palate bones + Soft palate laterally by the cheeks below by the Mylohyoid.

3. What are offices of the tongue?
A. An organ of taste and its communciation to speech.

2. What is the Post: extremity called?
A. Base, attached to the sides.

2. In what of the maxilla is the tongue attached?
A. Post: mental tubercle.

3. What is this situated on the post: & part of the superior surface of the tongue?
A. Small mucous glands with a circular opening.

2. What are the papillae on the taste glands called?
A. Papillae maxima.

2. What are those on the last?
A. Papillae minima.

2. By what is the premum linguae formed
A. A duplication of the lining membrane.

2. What is the structure of the tongue?
A. Muscles.
Tongue: Palate: Half arches.

Q. Which is the thickest the mucous mem-

brane on the superior or inferior surface

of the Tongue?

A. On the Superior

Q. What is the epidermese on the Superior
Surface of the Tongue called?

A. Poriglottis.

Q. How is the Palate of the divided?

A. Into the Hard & Soft.

Q. By what is Hard Palate formed?

A. By the Palatineprocess of the Superior

charity & palatine bones. Covered

above by the pituitary membrane & belo

a febro-mucous membrane.

Q. What is the structure of the Soft Palate?

A. Muscular invested by a mucous membrane.

Q. What is the process in the Centre of the in-

ferior margin?

A. Vultur.

Q. What are the two crescentic doubling of

the lining membrane of the mouth (proces-

sing from each side of the uvula called?)

A. Satinad half arches.

Q. Where do they terminate?

A. The Ant. is the side of the tongue. The Post.

is the lining membrane of the Pharynx.
Soft Palate and Muscles.

1. Which of the half arches is most distinct? A. The anterior.
2. What is that space called between the half arches? A. Fauces.
4. What is the natural appearance of the gland? A. On the external surface are numerous punctations or foramina which may be taken for disease by the inexperienced.
5. What do you understand by the Foramen of the Fauces? A. The space bounded by the anterior half arches.
6. How are the muscles of the soft palate divided? A. Intrinsici et Extrinsicus.
7. How many extrinsic? A. Three only. As you would.
8. Name the Extrinsic.
   A. Constrictor Lateralis Buccalis, Palatohyoglossus, Circumflexus, Levator Palati.
2. How would you distinguish the cervical vertebra from that of the Dorsal?

A. Their spinous processes are bifurcated and their body below are thicker and their inferior surface is concave

2. What difference is there in their transverse processes?

A. Those of the cervical have foramina for the transmission of arteries and veins.

2. What difference is there between the Dorsal and Lumbar vertebrae?

A. On each side of the junction of the Dorsal is a hole or foramina for the passage of the roots of the ribs, and their spinous processes are more angular and long overlapping each other.

2. What difference is there in their bodies?

A. The Dorsal vertebra are not so thick before as the Lumbar.

2. What difference is there in the Lumbar vertebra from the rest?

A. It is larger, its body is thicker before than the dorsal, its spinous process is quadrilateral and the lamina is more horizontal.
Regional characteristics, "into."

1. If I were to present a quizzing yourself of one of the cervical vertebrae to you how would you know that it was such.

a. By it being larger, grooved on its upper surface and bifurcated.

b. How would you distinguish the transverse processes of this region.

a. By being smaller, bifurcated and having a foramen passing through their base.

b. For what purpose is this foramen.

c. For the transmission of the vertebral veins.

d. Canal.

2. How does this differ from the other vertebrae.

a. It's larger. The transverse diasteme is greater than the anterior postlerion one.

b. What function of nature does this serve.

a. A free motion to the cervical vertebrae without injury to the ophidiella vertebral.

b. How does the foramen differ in the cervical vertebrae differ from that of the other two.

a. It is smaller and of the same diameter.

b. What difference is there in their bodies?
A. They are more curved than the others and have facets at their junction with each other for the ribs.

2. How does the transverse process differ?

A. It is longer and stout and extends forwardly backwards.

2. Do the ribs touch these processes?

A. Yes sir.

2. At what point?

A. At their extremity.

2. Are all of the transverse processes of the same length?

A. No sir.

2. What is the difference?

A. The transverse process has such a short transverse process that the rib does not touch it.

2. What difference is there in the oblique processes?

A. The inferior are flat and present almost backwards, the inferior also, flat of present forward.

2. How do the oblique processes differ?

A. They are triangular, with a broad base and overlap with others like the triangles on the roof of a house.
1. How would you distinguish the first dorsal vertebra from its rest, being the cervical and having a distinct articulation for the head of the first rib?
2. What is the peculiar difference in the lumbar vertebrae from the rest?
   a. Its size, transverse diame longer.
2. How do the spinous processes differ?
   a. Broader, larger, quadrilateral.
2. What difference in their transverse processes?
   a. They are long and flare out at right angles.
2. What difference is there in their articulations from the rest?
   a. The inferior articulates on the inner surface and the inferior on the outer surface.
2. For what use is the foramen between the different vertebrae?
2. For the transverse processes of the cervical, and?
2. How many points of osification are there in the bone?
   a. Five; one for the spinous process, one for each transverse process, one for the superior, and the inferior rings of the body of the bone.
2. Do the sides of the angular arch unite by the epiphysial bolder with the body?

A. The unite together first.

Q. What is the shape of the sacrum?

A. Wedge, both inferiorly & posteriorly.

William Bodie
William Broadhurst
Bill Broadhurst
Black Broad

18 Black Street

Black Thorne

Ward

F[alters]
Clavelle

What is the term clavelle derived from?

A: Resemblance to an ancient prey.

What three circumstances are distinguished this to light from 41-

A: The external epiphysis is always the largest. 2nd: Supracondylar is smooth while inferior surface is rough. 3rd: A convexity of /'stand extremity' and concavity of /external extremity'.

What does it articulate with at external extremity?

A: With a portion of scapula.

What muscles are attached to this bone?

A: The clavicle is attached by deltoid and subclavian and to upper part trapezius, thoro.

What will this bone do? It is the bone of movement.
September

2 to over thyroid

to into border, samples, and

to deep

How is the dome or back divided

the false sternum for and

the infra sternum closed

What muscle on its under

toon

came

The place through the supra

membranous not e

the Supra clavicular groove

2 fibro many muscles attached

the bone

What of attached to these

the supravacula and deltoid

what to their

the longest scalp and the thoracic

sweat if subcoronal

notch in suspension

and down

the omohyoid

2 to at the

this centimeter long he and straight
To what to inferior angle
a Fresn a
To what to a cold press
of General Haldimand.
204. Sphenoid

2. What passes through the optic foramen?
   a. Optic nerve and opthalmic artery.

2. What passes through the sphenoidal fissure?
   a. Third and fourth nerve — first branch of the fifth and sixth pair.

2. What through the foramen ovale?
   a. Third branch of the fifth pair of nerves.

2. What passes through the foramen rotundum?
   a. Second branch of the fifth pair of nerves.

2. What artery passes through the foramen spinale?
   a. Middle artery of the cranial cavity.

2. What muscles are attached to the under surface of the palatopharyngeus inferior, and tensor palati?

2. What tendon passes over the hook-like process of the pterygoide
Sphenoid

1. The tendon of the circumflex, or extensor, muscle of the palate.
2. What foramen at the base of each Petrosal process.
3. The Vidian foramen.
4. Of what nerve is the Vidian nerve a branch.
5. A branch of the second branch of the fifth pair.

On bones of head

1. What may the head be considered?
2. Enlarged or expanded vertebra.
3. Does it possess all the distinctive markings a vertebra.
4. Yes or No.
5. What part correspond with the spinous process a vertebra.
6. The occipital spine or ridge.
7. What the Transverse processes.
8. Mastoid portion temporal bone.
9. What the articular - A = condyles of the occipital = 2 = What with spinal foramen?
10. Foramen magnum.
Superior Maxilla

1. What passes through the infra-orbital foramen?
   a. Superficial maxillary nerve and infra-orbital artery.

2. What helps depress it?
   a. Superficial maxillary nerve and infra-orbital artery.

2. What muscles are attached in the canine fossa?
   a. The compressor nasi, and levator anguli oris.

2. What fossa beneath the nasal spine?
   a. The incisive or myrtiform fossa.

2. What arises from the fossa of the depressor labii superioris alaeque nasi?
   a. The incisive or myrtiform fossa.

2. What groove is on the posterior surface of the nasal process of this bone?
   a. The lacrimal canals and nasal or ductus ad nasum.

2. Does this bone form any part of the wall of the orbit?
   a. Almost the entire floor.

2. For what purpose is the horizontal ridge on posterior surface of the nasal process of this bone?
   a. For articulation with the
middle turbinated bone of ethmoid
Q = What is that small depression
or depression just below the first
horizontal ridge -
Q = It corresponds with middle
beatus of nose
Q = the boundary of ethmoid
process
Q = By what is the orifice of
conthum and ethmocon diminished
by palate bone behind ethmoid
above and inferior turbinad bone
below
Q = Does the maxillary sinus
ever communicate with
frontal sinus
Q = yes sir
Q = By what means
Q = Anterior ethmoidal cells
Q = For what use is that fissure
which lies between orbit and
nasal process
Q = For accommodating mucus
and ethmoid cells
208

Palate Bones

2 Where situated
A = Between inferior maxillary
and sphenoid bone
2 Other. Much of the bottom of nose does this bone form
A = About 1/2
2 = There does the asygos muscle arise
A = From inferior portion internal
extremity of posterior margin of
frontal plate =
2 = What portion of this bone
is received into the bifurcation
of the two plates of pterygoid process.
A = Sphenoid
2 = The tubercle
A = How many groove the tubercle
of this bone present?
2 = Three
2 = For what purposes
A = The internal receiveth the
internal pterygoid process of
sphenoid. The external
receiveth the external process
came bone and midde is
continuous with pterygoid
process of sphenoid bone.
2 = Where is the posterior Palatine
foramen.

= Between external surface
of nasal plate and base of turbini.
Vomer -

2. Where is this bone situated?
   A. Between the nostrils

2. How many margins has this bone?
   A. Four

2. Which is broadest?
   A. The superior

2. What is received in the perron on the superior surface?
   A. The azygous process of the sphenoid bone

2. With what does the inferior margin articulate?
   A. With the spine or ridge of the superior maxillary and palate bones, which exist at this internal border.

Neurally

2. Do anatomists agree as to number of muscles?
   A. Yes

2. What is a lever?
   A. An inflexible rod some part where as a fixed point
How many kinds are there

1. What is the first
   a. Where the power is at one end, the weight at the other and the fulcrum between

2. What is the second
   a. Where the fulcrum is at one end, the power at other and weight in the middle

3. What is the third and last
   a. Where power is in middle
   b. Which is most advantageous as regards the weight to be raised
   a. The second kind

b. Which is most common in human
   a. The 3 kind or where power is middle
   b. What advantage has this kind
   a. 21 combines expert with celerity

Q: Is it important to understand these principles in order to fully comprehend the action of truly
A: Yes sir
2. What portion of linea alba is divided?
A = above the umbilicus
2. Are there any openings in it?
2. Does it occur for what purpose?
A = for urethral and seminal vesicles
2. Do the foramina ever become the cause of hernia?
A = yes, sir
2. Explain how it can be so?
A = about those foramina fat become developed and dilated, and in case of emaciation, the fat becomes absorbed and is liable to hernia on great exertion.
2. By what rule would you ascertain the semilunar line?
A = from midway between the anterior superior spine, process ilium, and umbilicus, draw a slightly curved line upward and as far as ensiform cartilage and downward as low as symphysis pubis.
1. How is the sacral cleft divided in 2.

2. Into pubic and ileal

3. What opens in sacral cleft

4. Softens opening

5. What is the cribiform fossa

6. In the interval between the pelvic floor, close to portion and the anterior surface of the spine.

7. What covering has the femoral hernia

8. Integument, superfice

9. Cricoid, suprapubic.

10. Osseous, articular, peritoneum, septum crural and peritoneum latae

11. How do you bound femoral hernia

12. Anteriorly by symphysis

13. Ligaments.


15. Externally, the femoral

16. Osseous and cartilage internally.

17. Ligamentum

18. What is the difference in the coverings of oblique and direct

19. Substitute the conjoint tendon of inferior oblique and transversalis.
for example...
Tensor Vaginalis Femoris.

1. What are its relations?
   a. By its superficial surface with the fascia lata: 
   b. Posteriorly by the deepened fascia obturatorius medius; rectus
   c. Posteriorly by the vastus externus: internally by the sartorius.

Sartorius.

2. How is it situated with respect to the femoral artery?

Adductor longus: 

4. Exterior at each extremity of it.

Rectus Femoris.

1. How does it fibres run?
   a. Obligely from a central line.
216. Rectus Femoris

2. What are its relations superiorly?
A = Gluteus medius, psoas and iliacus
internum and Sartorius and for \( \frac{1}{4} \) q. lateros frontalis
fascia
2. What are its relations posteriorly?
A = Cuereus, Vastus internus and
externus

Vastus internus

2. What relating superiorly?
A = Rectus, Filius, Semitendinosus
and Gluteus maximus
2. What are its relations posteriorly?
A = Cuereus and Femur

Vastus externus

2. What relating superiorly?
A = Psoas and Iliacus, Rectus
Sartorius, femoral artery, pectineus
adductor longus, magnus et brevis
2. What posteriorly?
A = Cuereus and Femur

Cuereus

2. What relating superiorly?
A = Rectus, Vastus externus et internus
2. What posteriorly?
A = Subcuereus et
What is the use of tensor fasciae latae?
A - Makes iliac crest tense and rotates forward and extend the leg upon thigh.
B - The role of sartorius?
C - Helps to extend thigh and flex hip upon pelvis and adduct.
D - What else of quadriceps.
E - Extend leg upon thigh and support erect posture.

Pectineus:
What are its relations?
A - Anteriorly - tensor fasciae latae, vastus lateralis.
B - Medial to vastus medialis and sartorius.

What else for pectineus?
C - Bends thigh upon pelvis and rotule laterally.

Adductor longus:
What are its relations that it?
C - Posterolateral and adductor brevis mediocris and vastus lateralis with pectineus.
D - What else for it?
And you say you will be Yo Yo.

Pete's Notes

R = Same os pectineus

Adductor longus

2. - Its relations are plain?
A = Externus & pectineus, adductor longus - poster. Adductor magnus
Lateralis, obturator externus, biceps femoris & grácilis, and adductor (hugs)

Adductor magnus

2. - What is its relations?
A = Externus & pectineus, adductor (hugs) longus, poster. Semitendinosus, semimembr.
keeps, sartorius, maximi, and extensor grácilis, and semitendinosus.

Sartorius, muscle of the head.
**Gluteus Magnus**

1. What is the situation of this muscle?
   
   *Beneath the skin and superficial fascia, it covers the semitendinosus, semi-membranosus, and long head of the biceps.*

2. What are the uses of this muscle?
   
   *To draw the thigh backwards and keep the trunk erect.*

   **Gluteus medius**

   *What covers the posterior inferior part of this muscle?*
   
   *The gluteus maximus.*

   2. What is its use?
   
   *Draw the thigh backwards and outwards.*

   2. Give the origin and insertion of the gluteus minimus?

   *From the dorsum of the fenum between the semicircular ridge and the margin of the capsule ligament of the hip joint and inserted into the tendinous supercilium part of the iliobactor major.*

2. Its use?

6. It abducts the thigh and can also
the tenth inwards.
Heart, Sounds of. 221

1. How much of the heart is there free from coverage by the lungs? At all except about an inch and a half in front.

2. What sound is given by percussion over the uncovered part? A dull sound.

At. What sound is given by that covered by the lungs? Hollow sound.

2. How have the sounds of the heart been accounted for? In a variety of ways: some suppose the contraction of muscular fibres causes them; others that they are caused by the friction of the heart with the pericardium; and others that they are caused by the heart striking against the walls of the chest. Others that they are caused by the opening and shutting of the valves.
Sounds of the Heart

Q. What did Dr. Newton say of the sounds being caused by the contraction of the muscular fibres?

A. He said the sounds caused by the contraction of muscular fibres was very different to those of the heart — the contraction of the fibres causing a rumbling sound.

Q. What if it being caused by friction with the pericardium?

A. He said this would produce a blowing sound.

Q. What did he say of these being caused by the heart striking the chest?

A. He thought improbable.

Q. What did he say of Magendie's experiment with the cock?

A. He said Magendie heard too much when he both sounds of the head by applying the
WORDS OF THE HEART

stethoscope in immediate contact with the heart.

2. What did Dr. Newton say of the sounds of the heart being caused by the valves?

A. He said this was most probably correct.

2. Why do you think so?

A. First, because it was proved by the doctrine of exclusion, and also because the valves are more likely to make the sounds of the heart.

2. Which valves give the dull sound?

A. the tricuspid and mitral valves.

2. Which, the sharp sound?

A. semilunar.

2. What is the course of the aorta?

A. It arises from the left ventricle, arises towards the right side for half an inch, then forms a curve to the left and descends along the spinae columnae until
Aorta

It comes to between the fourth & fifth dorsal vertebra, where it divides into the right and left limbs.

2. What arteries arise from the curve of the aorta?

A. The aorta innominata, left primitive carotid and left subclavian.

2. What relations has the arch of the aorta.

A. On the right side the vena cava descendens anteriorly by the lungs, posteriorly by the trachea & esophagus.

2. What arise from the commencement of the aorta.

A. The coronary arteries.

2.
2 How is the ilium divided?
A Into Shaft, Superior, Inferior Ectenia.

2 What is inserted into the depression on the head of the bone just below its center?
A Ligamentum Tunes or Round Ligament of the hip.

2 What is that portion of the bone called on which the head rests?
A The neck.

2 Does it vary in obliquity at various periods of life?
A Yes. Slightly long and oblique in the adult, short and almost horizontal in the aged.

2 What is attached to the anterior facet of the Trochanter Major?
A Gluteus Maximus Muscle.

2 What muscle is attached above this?
A Gastrocnemius.

2 What is the vertical ridge on its posterior side called?
A Linea Quadratica.

2 What muscle is attached to this ridge?
A Quadratus Femoris Muscle.

2 What is the Pit called on the inner side of the Trochanter Major?
A Trochanteric or Digital Fossa.

2 What muscles are inserted into this fossa?
A Pyraminus, Gemellus Superior & Inferior, & Obturator Exter & Internus muscles.

2. What is the line called that passes from one Trochanter to the other on the front of the Bone?

A Anterior Introtrochanteric line.

2 Is there also a Posterior Introtrochanteric?

A Yes, Sir.

2 Into how many branches does the Anm. Apher. Divide at its Superior & how many at its Inferior Extremity?

A 3 at its Superior & 2 at its Inferior.

2 Which condyle is the longest?

A External.

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John A. Ence

G. D. Lawton

A. M. Muller

A. Means

J. A. Newton

[Signature]

constitute the Faculty
of the Medical
College of Georgia
Give the Origin & Inn of Tibialis Ant.

It arises from upper 2/3 of tibia from the interosseous membrane & deep fascia, inserts into intercuneiform bone & base of metatarsal bone of great toe.

1. Give the Origin & Inn of Extensor digitorum longus.

It arises from head of tibia & upper 3/4 of the fibular, interosseous membrane & deep fascia, insert, & tendon into all the phalanges of all the small toes.

2. Nerve & artery the toe & foot.


It lies between the the two last muscles, & arises from lower 2/3 of fibular & interosseous membrane & to insert into the base of last phalanges of the great toe.

4. What lies in the inter-muscular space one find between these muscles at the anterior tibial artery.
The Heart

1. What are the organs of Circulation?
2. The Heart: Arteries, Veins, Capillaries.
3. What is the Heart?
   a. It is a hollow, muscular sac
4. What is that membrane called which encloses the Heart?
5. The Pericardium.
   a. What is the Pericardium of how many layers does it consist?
   b. It is a fibrous serous membrane that consists of two layers— an external fibrous and an internal serous one.
5. What is the position of the Heart in the chest?
   a. It is placed obliquely in the chest, the base being directed upward, backward, toward the right shoulder, the apex forwards to the left, pointing to the space between the 5th and 6th ribs, about two or three inches from the sternum.
6. Give the course of the circulation, commencing at the right auricle?
   a. Drides into the right auricle from the two cavae. Thence it passes into the right ventricle which sends it
Through the Pulmonary artery to the Lung, for the purpose of abrasion—After which it is returned by the four Pulmonary veins to the Left Auricle, thence it enters the Left Ventricle which expels it through the Aorta to the various Parts of the Body.

In what may the Heart be divided for Study?

Ans. Into Two Auricles and Two Ventricles.

Ans. Which Auricle is the largest?

Ans. The Right.

Ans. How is this Auricle divided?

Ans. Into a Canul or Sinus, and appendix auricularia.

Ans. How many openings into this cavity?

Ans. Five.

Ans. What relics of fetal structure in this Auricle?

Ans. Annulus ovalis fossa ovalis, the remnant of the foramen ovale.

Ans. What valves in this Auricle?

Ans. The Atrioventricular Coronary valves.

Ans. What are the muscular septalities?

Ans. They are small muscular columns situated in the Appendix auricularia.

Ans. How many openings in the Right Ventricle? What are they?
1st. The Auricle—Ventricular and
The opening of the Pulmonary Artery.

Ques. How many valves to which are they?

Ans. The Semilunar valves.
Ques. What are those fleshly columns called, seen on the internal Ventricular sur-
face?

Ans. The Columnae Carnea.
Ques. What are the Chorda Tendineae?
Ans. They are the tendons which con-
neck those fleshly columns with the
valves.
Ques. What is the use of these
Chorda Tendineae?
Ans. They serve as muscles to the valves
to effect their occlusion.
Ques. What are the Sinus, Called which
are formed by the Semilunar valves?
Ans. The Sinus of Valsalva.
Ques. What do you understand by the
Corpusculum Atrioventriculi?
Ans. It is a little circle which exists on the
margin of the Semilunar valve at this
centre.
Ques. How many Pulmonary veins open into the Left Auricle?
And. From two from each Lung

And. What is the Structure of the Heart?

And. It consists of muscular fibres disposed in Strata?

Dres. How are these fibres arranged?

And. In an irregular form.

Dres. How do you account for the difference in thickness of the Venticular walls at the Apex & Base of the Heart?

And. It is owing to the fact that these muscular Strata have a common origin from the base of the Heart, but all of them do not extend to the Apex—giving it the appearance of having been bevelled at the edge of the internal surface.

Dres. What was the disease Dr. Newton supposed affection of the Heart very often Conclusive to depend upon?

And. Acute Articular Rheumatism.

Dres. What practical Observation did he make when this subject?

And. That any Physician who treated a case of acute Arterial Rheumatism without paying constant attention to the Heart, was guilty of gross neglect to his Patient.

Dres. How many Sounds are given by the Heart?
And Two.

Mrs. How do you distinguish the two?

Mrs. The first sound is dull, disagreeable is synchronous with the Pulse—the second is clear, more sonorous and is heard in the interval between the pulsations of the artery felt at the wrist.

Mrs. What theories have been proposed in order to account for these sounds?

Mrs.—Some supposed they were caused by the friction of the heart against the Pericardium—some by the friction of the blood against the Ventricular walls—some by the contraction of the muscular fibres of the heart—others, that they were produced by the heart thrashing against the walls of the chest—others again by the contraction of the valves.

Mrs. What objection did Dr. Stolfa urge against the production of these sounds by friction?

Mrs. That friction would produce a flaring sound—entirely different from that of the heart.

Mrs. What objection to the theory of muscular contraction?
And. Tricuspid Contraction Produces a rumbling, reverberating Sound.

Quæst. What did he say of Magendie's Experiments with the Chickens' Heart?

And. That it proved too rough when he applied the Methodology to the Heart; he should have heard but one sound.

Quæst. When a portion of the Thoracic Wall is removed why can you not hear the two Sounds by approximating your ear?

And. Because there are some Sounds which you cannot hear when a portion of air intervened.

Quæst. To what should this be attributed the Sounds of the Heart?

And. To the Contraction of the Valves.

Quæst. What valves produce these respective sounds?

And. The first or dull sound is produced by the Contraction of the Atrio-ventricular Valve, the second by the Contraction of the Sigmoid or Semilunar valves.

Quæst. Will this origin explain the Difference in the Sound—show?

And. Frankly: The Atrio-ventricular valves being broader thicker give the dull sound while the Semilunar valves
King narrower and more compact. Eniska, yehna, clearer, t'more sonorous.

Just. What pathological fact would go to establish the truth of this theory?

Are those sounds unaltered by any disease of the heart, which does not involve the valves?
Private Class of winter of 1655

Barker
Davis
Scott
Clambe
Pentecoast
Quakers
E. Anderson
Thompson
Could not be read
Medical College of Georgia

Dr. Jos A. Eve
Professor of Obstetrics & Diseases of Women & Children

February 10th 1852

Medical College of Geo.
Faculty Chaps. Winter 1852

[multiple signatures]
Medical College
of Georgia

Old Man's acne

Dr. Fuller's Cas

Medical College
of Georgia

Old Man's acne

Dr. Fuller's Cas