The B N A arranged as an outline of regional and systematic anatomy / by Victor E. Emmel.

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THE B N A ARRANGED AS AN OUTLINE OF REGIONAL AND SYSTEMATIC ANATOMY

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PREFACE

The Basle Anatomical Nomenclature (the B N A) has been preeminently successful in the simplification of anatomical terminology. From a total of 50,000 anatomical terms about 45,000 have been eliminated as unnecessary synonyms. As a consequence, anatomical terminology as represented by the B N A now consists of a list of some 5000 simple, unambiguous terms for the macroscopic structures of the human body.

This list of terms, intended for common use in the medical schools, is arranged on the basis of systematic anatomy. Doubtless such an arrangement was best adapted to the purpose of bringing about a revision of terminology. On the other hand, it appears obvious that, from the standpoint of practical anatomy, a regional arrangement of these terms in conjunction with their systematic tabulation would greatly extend the usefulness of the B N A. In dissecting laboratories and surgical clinics, the structures represented by the B N A terms are encountered in the various regions of the body not as anatomical systems, but as segments of these systems grouped together in certain definite regional relationships. In attempting to correlate systematic text and cadaver, the one proves almost as difficult to dissect as the other.

It appears important, therefore, that the present systematic B N A should be expanded to include a correlated regional arrangement of anatomical terms; an arrangement based upon the sequence in which the structures indicated by these terms may be exposed and demonstrated to the naked eye in actual dissection, thus securing a direct association of the term with the visualization of the structure to which it refers. The present work represents such an attempt and is the outgrowth of several years of laboratory experience in which a regional arrangement of B N A terms in mimeograph form has been given a thorough trial and its usefulness clearly demonstrated.

The work is presented in two parts dealing with the B N A terms as arranged, first, on the basis of regional anatomy, and, second, on the basis of systematic anatomy, with numeral indices facilitating cross-references from the one to the other. The regional arrangement is given precedence since it is in their regional relations that anatomical structures are first encountered in practical study. The work also includes a complete series of figures for the surface anatomy and the surface projection of the skeleton for the various regions of the body.

Part I constitutes a regional resumé of anatomical structures. A tabulation for any given region necessarily involves only those structures or segments of structures which are embraced within the confines of that region. Structures such as the larger nerves or vessels extending through two or more regions would be re-listed for each region in which they occur. In general the terms have been arranged with a view to greatest utility for student and clinical reference in practical work. In presenting the subject of human anatomy it is frequently difficult to steer a course between the Scylla of too great detail and the Charybdis of a paucity of subject matter, but in any event the present tabulation may serve as a basis from which deviation may be made in either direction as the requirements of the special case may dictate. In a few instances, in the interest of the student but subject to possible criticism on pedagogical grounds, the terms for structures such as some of the smaller rami of blood vessels or nerve plexuses which may be relatively of secondary importance or especially difficult to demonstrate, are indicated by affixed double asterisks. With the exception of such osteological elements as are encountered in surface anatomy, terms relative to skeletal structures have been largely omitted in Part I. In this connection, the figures showing the surface projection of the skeleton should prove of value for purposes of general reference and orientation.

Concise statements are given for the more important or more difficult incisions and dissections involved in the demonstration of the structures as listed for each region. The order in which these regions and their component structures are dealt with is based primarily upon the sequence of dissection developed in Cunningham's *Manual of Practical Anatomy*, which may be regarded as representing a method of procedure prevalent in the majority of American and English anatomical laboratories. The sequence of primary subdivisions such as superior extremity, thorax, abdomen, etc., is obviously a more flexible matter readily adjusted to any given method of study. From the standpoint of systematic anatomy, it may not be a matter of such great importance what order may be followed in dissection so long as the structures in question are really exposed and observed. From the standpoint of regional anatomy, however, the subject presents quite a different aspect. In the latter case, the structures should be exposed in the sequence most favorable for the observation of those structural relationships which are of greatest practical significance. Toward this end, therefore, the methods of dissection in general should represent the culmination of the best available anatomical and surgical experience; and this finds perhaps its best expression at the present time in the work of the British and more especially of the

Edinburgh school of anatomists. Barkers' *Laboratory Manual of Human Anatomy*, 1904, which in method is in close agreement with that of the Edinburgh school, has also been a source of valuable suggestions, especially in the case of the brain and sense organs.

Part II constitutes a systematic résumé of anatomical structures and, with the exception of certain minor changes is based upon the systematic arrangement of the B N A terms, including text figures 11 to 13 and plates 14 and 15, as originally published by His, *Archiv für Anatomie und Entwicklungsgeschichte, Supplemental Band*, 1895. This arrangement, as emphasized by Dr. F. T. Lewis (Stohr's *Textbook of Histology*, ed. 6, p. vi), is such as to furnish "an excellent means by which students may review anatomy."

In Part I some of the terms are in Latin while others are anglicized. In a few instances it has been necessary to employ a term not listed in the B N A, as, for example, in the case of the surgical triangles of the neck. Such terms can, however, always be recognized through the absence of cross-reference numerals. In Part II all the B N A terms have been retained in their original Latin form. In Part I, that form of the term has been used which appears most prevalent in the majority of the standard English and American anatomical texts and in the conversational language of the laboratory and clinic. Where this is not clear, the Latin term is given. In the event of differences in different texts regarding the terms which are anglicized, the cross-references to Part II facilitate a ready reference to the equivalent Latin form, as, for example, in the case of stomach and ventriculus, or spleen and lien. In this connection it must be recognized that as yet there is no authoritative list of English equivalents for the B N A and no unanimity of agreement as to the usage of Latin or anglicized forms—a problem toward the solution of which an authoritative decision by proper representatives from English-speaking countries would render an important contribution in the interests of medical science.*

A thorough understanding and an adequate command of anatomical terms constitute an important objective in anatomical study. The same is equally true of dexterity in dissection, independence of observation, and the verification of textbook statements. In the last analysis, however, perhaps the matter of greatest importance is the student's own efforts toward the interpretation and organization of the facts and observations thus acquired. Instructors, cadavers, textbooks, atlases, and laboratory manuals are only means to an end. If the student is lacking in this ability or fails to develop it, all these accessories will be of little avail. A mere memory of anatomical

* Relative to this subject may be noted E. B. Jamieson's work on *The Basle Anatomical Nomenclature* (London, W. Green and Son, 1916).

terms, and all the minutiae of structure, do not in themselves constitute a working knowledge. It is only as these data become organized in such a way that when confronted with the living body we can visualize the form, position, relations, and functions of its various structures as component parts of a living, working machine and at the same time have a ready command of the terms by which these structures are designated, that we can regard ourselves as having made any great degree of progress toward a mastery of human anatomy. Toward the realization of this end the present work is necessarily only one of many factors. It has been undertaken with a keen appreciation of the almost discouraging character of some of the perplexing problems it involves and with the realization that at best it must represent a beginning which only the cumulative data acquired with more extended experience and criticism can bring to perfection. Its immediate purpose will, however, be attained if it proves to be of real utility in the establishment of a basis for a more direct correlation of anatomical terminology and structure in the practical study of the cadaver and in the presentation of a resumé of regional and systematic anatomy for anatomical and clinical reference which will materially facilitate the attainment of such a working knowledge of the human mechanism.

The decision as to the final form of the present work has been materially facilitated by valuable suggestions from students and laboratory assistants. It is also a pleasure to acknowledge indebtedness to Mr. W. C. Shepard, of the anatomical department of the University of Illinois, where the work was begun, for his careful delineation of the figures illustrating surface anatomy and surface projections of the skeleton.

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PART I

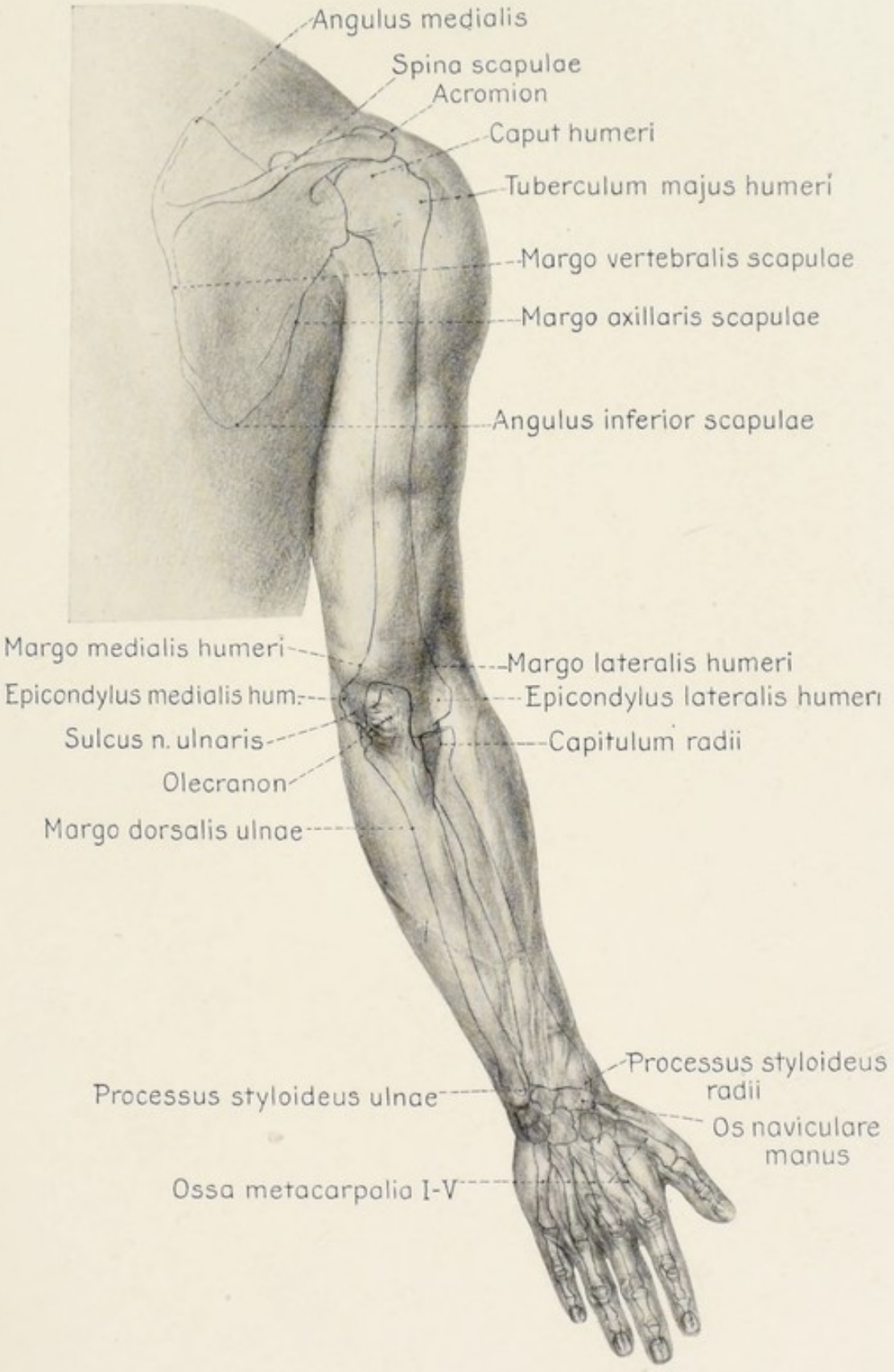
REGIONAL ANATOMY

SUPERIOR EXTREMITY

PLATE I*

Posterior aspect of the superior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.

* In plates I–IX only such structures are labeled as can be identified by inspection and palpation.


Angulus medialis
Spina scapulae
Acromion
Caput humeri
Tuberculum majus humeri
Margo vertebralis scapulae
Margo axillaris scapulae
Angulus inferior scapulae
Margo medialis humeri
Margo lateralis humeri
Epicondylus medialis hum.
Epicondylus lateralis humeri
Sulcus n. ulnaris
Capitulum radii
Olecranon
Margo dorsalis ulnae
Processus styloideus radii
Processus styloideus ulnae
Os naviculare manus
Ossa metacarpalia I-V

PART I. REGIONAL ANATOMY[1]

SUPERIOR EXTREMITY

I. Structures of the Back; with Reference Primarily to Structures in Relation to the Superior Extremity.

1. SURFACE ANATOMY. (Pls. 1, 4.)

Structures which may be identified by inspection and palpation.

Spinous processes—6:37.
Vertebra prominens—6:38.
Medial angle of the scapula—13:52.
Inferior angle of the scapula—13:50.
Spine of the scapula—13:42.
Acromion—13:45.
Iliac crest—15:18.

For the osteology of the girdle of the superior extremity, see 13:36–65.

2. REGIONS OF THE BACK. (Pl. 12.)

Median region of the back—83:24.
Interscapular region—83:25.
Scapular region—83:26.
Suprascapular region—83:27.
Infrascapular region—83:28.
Lumbar region—83:29.
Region of the hip—83:30.
Sacral region—83:31.
Gluteal region—83:32.
Perineal region—83:33.

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[1] In conformity with the Basle Anatomical Nomenclature (B N A) all brackets relating to anatomical terms are used in the following sense:

Oval brackets ( ) indicate variations (varietates anatomicae).

Angular brackets [ ] contain explanatory additions, among which are included double names and personal names.

One affixed asterisk* is used to indicate ontogenetic expressions (e.g. Membranae deciduae*—43:5, Vena umbilicalis*—55:34, etc.).

Two affixed asterisks** are used to indicate structures which may be either especially difficult to demonstrate by ordinary methods of dissection or which appear to be relatively of secondary importance.

The numerals affixed to each term in the regional anatomy (Part I) cite the page (indicated by numeral at bottom of page) and number of the same term in its systematic position in the outline of systematic anatomy (Part II). In connection with these cross-references, it will be observed that the terms in Part I are anglicized in some instances and given in their Latin form in other instances, whereas in Part II the terms appear exclusively in Latin. In the latter case, the term corresponds with the original B N A; in the former case the term has been used in the form which appears to coincide with the usage common to the majority of standard American and English anatomical texts, but it is to be recognized that as yet there is no authoritative English list based on the B N A and that for the present decisions upon this point are necessarily largely dependent upon the individual preferences of author and student. (See also Preface.)

3. FASCIA, CUTANEOUS NERVES, AND VESSELS.

Skin incisions: (*a*) in the midline from the vertebra prominens to the tip of the coccyx; (*b*) from the tip of the coccyx to the posterior superior iliac spine, thence along the iliac crest to within about 25 cm. of the anterior superior iliac spine; (*c*) from the vertebra prominens to the medial margin of the acromion; (*d*) from the spinous process of the first lumbar vertebra to the lateral margin of the acromion.

Superficial fascia—23:36.

Medial cutaneous rami of posterior rami of thoracic nerves—69:77.

Lateral cutaneous rami of posterior rami of thoracic nerves—69:76.

Posterior rami of lateral cutaneous rami of intercostal nerves—70:4.

Medial rami of posterior rami of lumbar, sacral and coccygeal nerves—70:13, 19.

Lateral rami of posterior rami of lumbar nerves—70:14.

Medial cutaneous rami of posterior rami of intercostal arteries—49:63.

Dorsal rami of lumbar arteries—50:10.

Posterior rami of lateral cutaneous rami of anterior rami of intercostal arteries—49:68.

4. MUSCLES, NERVES, AND VESSELS.

a. Muscles: first layer.

Exposed by removing both superficial and deep layers of fascia.

Trapezius muscle—23:15.

Latissimus dorsi muscle—23:17. (Not including its insertion.)

Trigonum lumbale—25:48.

b. Structures in relation to the superior margin of the scapula.

May be demonstrated by detaching the thoracic part of the trapezius muscle at its origin, separating it from the cervical part of the muscle by a transverse incision at the level of the vertebra prominens, and reflecting the thoracic portion toward its insertion, exposing at the same time the external ramus of the accessory nerve—68:59, and the muscular rami from the third and fourth cervical nerves supplying it.

Inferior belly of the omohyoid muscle—24:59.

Suprascapular nerve—69:31.

Transverse scapular artery—48:60.

Superior transverse scapular ligament—19:43.

c. Muscles: second layer.

Rhomboideus major muscle—23:18.

Rhomboideus minor muscle—23:19.

Levator scapulae muscle—23:20. (Insertion only.)

The descending ramus of the transverse cervical artery—48:69 may be observed in the interval between the rhomboideus minor and the levator scapulae muscles.

d. Nerves and vessels.

The following nerves and artery may be exposed by detaching the levator scapulae muscle at its insertion and the rhomboid muscles at their origins, and reflecting the latter muscles toward their insertions.

Dorsal scapular nerve—69 :27.
Descending ramus of the transverse cervical artery—48 :69.

The following structures may be demonstrated by detaching the latissimus dorsi muscle at its origin and reflecting the muscle toward its insertion.

Thoracodorsal nerve—69 :33. (Termination only.)
Thoracodorsal artery—49 :10. (Termination only.)

II. Anterior Thoracic Region and Axillary Fossa.

1. SURFACE ANATOMY. (Pls. 2, 3.)

Structures which may be identified by inspection and palpation.

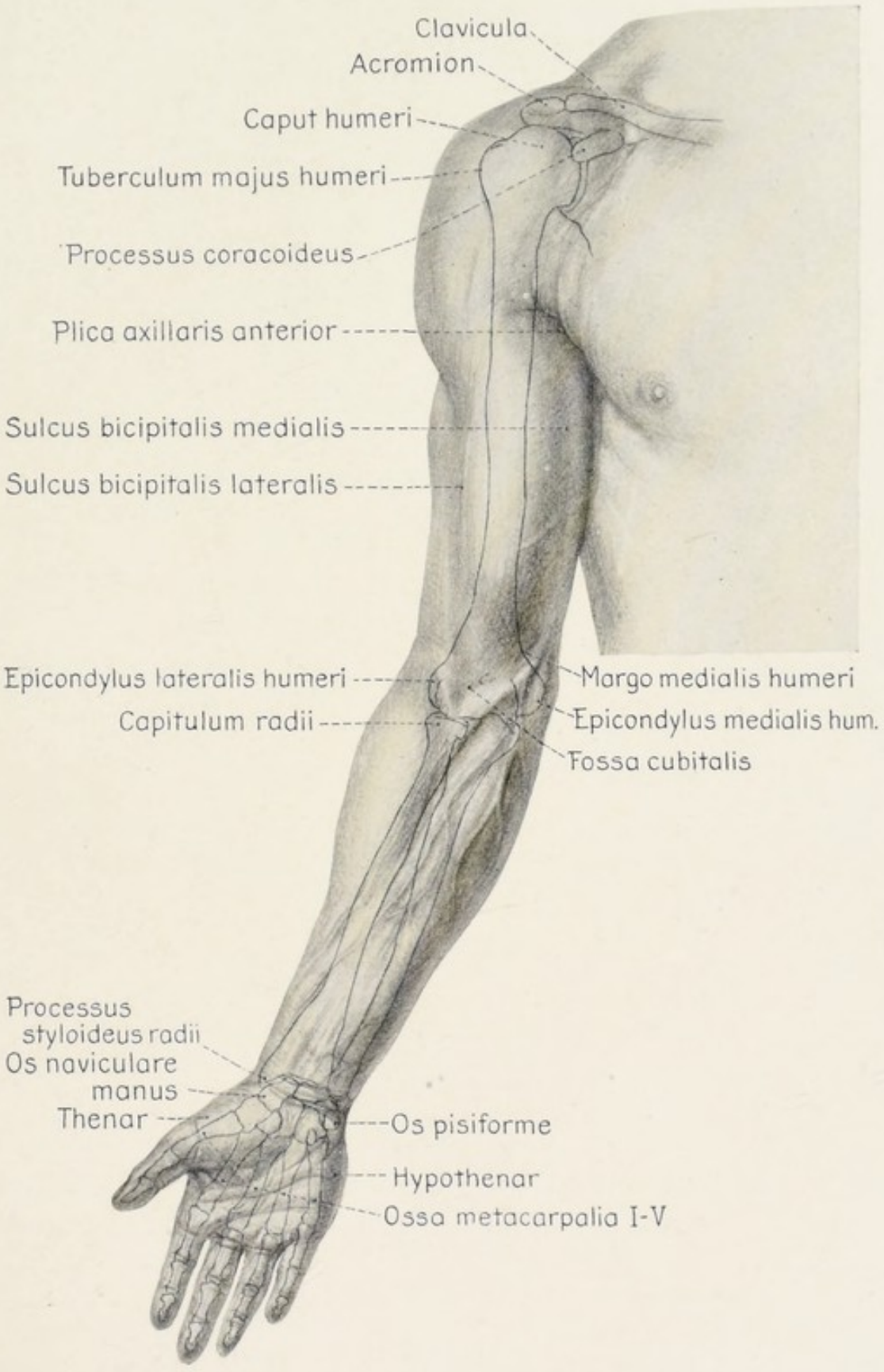
Clavicle—13 :59.
  Sternal extremity—13 :60.
  Acromial extremity—13 :63.
Sternum—7 :46.
  Manubrium—7 :47.
  Jugular notch—7 :54.
  Body of sternum—7 :50.
  Angle of sternum—7 :48.
  Xiphoid process—7 :52.
Ribs I–XII—7 :28.
  Costal cartilages—7 :32.
Coracoid process of the scapula—13 :58.
Mamma—4 :50, 80 :5.
  Papilla mammae—80 :6.
  Corpus mammae—80 :7.
  Areola mammae—80 :14.
Accessory mammae—80 :18.
Axilla—5 :10.
  Anterior axillary fold—5 :11.
  Posterior axillary fold—5 :12.
Humerus—13 :67.

2. PECTORAL REGIONS—83 :2. (Pl. 11 and fig. 1.)

Anterior pectoral region—83 :3.
  Sternal region—83 :4.
  Clavicular region—83 :5.
  Infraclavicular region—83 :6.
    Deltoideopectoral triangle—83 :7.
  Mammary region—83 :8.
  Inframammary region—83 :9.
Lateral pectoral region—83 :10.
  Axillary region—83 :11.
    Axillary fossa—83 :12.
  Lateral costal region—83 :13.

PLATE II

Anterior aspect of the superior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.


Clavicula
Acromion
Caput humeri
Tuberculum majus humeri
Processus coracoideus
Plica axillaris anterior
Sulcus bicipitalis medialis
Sulcus bicipitalis lateralis
Epicondylus lateralis humeri
Capitulum radii
Margo medialis humeri
Epicondylus medialis hum.
Fossa cubitalis
Processus styloideus radii
Os naviculare manus
Thenar
Os pisiforme
Hypothenar
Ossa metacarpalia I-V

3. ANTERIOR THORACIC WALL: SUPERFICIAL STRUCTURES.

a. Superficial fascia, cutaneous nerves and blood vessels.

Skin incisions: (*a*) longitudinally from the jugular notch to the xiphoid process; (*b*) from the xiphoid process transversely around to the back; (*c*) from the jugular notch laterally, along the clavicle, to the tip of the acromion; (*d*) from the xiphoid process obliquely upward and laterally along the anterior axillary fold to the arm, encircling the areola mammae and leaving it *in situ*.

Superficial fascia—23 :36.

Platysma muscle—24 :54.

Supraclavicular nerves—69 :17.

Anterior supraclavicular nerves—69 :18.

Middle supraclavicular nerves—69 :19.

Posterior supraclavicular nerves—69 :20.

Anterior cutaneous rami of intercostal nerves—70 :8.

Medial mammary rami—70 :9.

Anterior rami of lateral cutaneous rami of intercostal nerves IV to VI—70 :5.

Posterior rami of lateral cutaneous rami of intercostal nerves IV to VI—70 :4.

Lateral mammary rami of lateral cutaneous rami of intercostal nerves—70 :6.

Perforating rami of internal mammary artery—48 :40–43.

Lateral cutaneous rami of anterior rami of intercostal arteries IV to VI—49 :67.

Tributaries of internal mammary vein.

b. Mamma—80 :5–18.

4. ANTERIOR THORACIC WALL: DEEP FASCIA AND PECTORALIS MAJOR MUSCLES.

Pectoralis fascia—25 :22.

(Sternalis muscle)—24 :73.

Pectoral major muscle—24 :74–77. (Not including its insertion.)

Exposed by removing the pectoral fascia but leaving intact the axillary fascia.

5. AXILLARY FOSSA, AND STRUCTURES SUBJACENT TO THE PECTORALIS MAJOR MUSCLE.

a. Structures in relation to the base of the axillary fossa.

Axillary fascia—26 :40.

Intercostobrachial nerves—70 :7.

Thoracodorsal nerve—69 :33.

Thoracodorsal artery—49 :10.

Lateral thoracic artery—49 :7.

Long Thoracic nerve—69 :28.

Axillary lymph glands—56 :45.

b. Structures exposed by the reflection of the clavicular part of the pectoralis major muscle.

Demonstrated by detaching the clavicular part of the pectoralis major muscle at its origin and reflecting it toward its insertion.

Coracoclavicular fascia—25 :23.
Thoracoacromial artery—49 :2.
Acromial ramus—49 :3.
Acromial network—49 :4.
Deltoid ramus—49 :5.
Pectoral rami—49 :6.
Thoracoacromial vein—54 :27.
Cephalic vein—54 :37.
Anterior thoracic nerves—69 :29.

c. Structures exposed by the reflection of the sternocostal part of the pectoralis major muscle.

Demonstrated by dividing the sternocostal part of the pectoralis major muscle midway between its origin and insertion and reflecting the two parts medially and laterally respectively.

Coracoclavicular fascia—25 :23.
Pectoralis minor muscle—24 :78.

d. Contents of the superior part of the axillary fossa.

Exposed by removing the portion of the coracoclavicular fascia extending between the clavicle and the superior margin of the pectoralis minor muscle.

Axillary artery—48 :70. (Its first part.)
Axillary veins—54 :29.
Brachial plexus—69 :24.
Medial cord—69 :39.
Lateral cord—69 :38.
Posterior cord—69 :40.
Lymph glands.

e. Contents of the inferior part of the axillary fossa.

Exposed by removing the fascia and adipose tissue inferior to the pectoralis minor muscle.

Axillary artery—48 :70. (Its third part.)
Median nerve—69 :48.
Musculocutaneous nerve—69 :41.
Medial antibrachial cutaneous nerve—69 :45.
Axillary vein—54 :29.
Medial brachial cutaneous nerve—69 :44.
Ulnar nerve—69 :55.

f. Structures in relation to the medial wall of the axillary fossa.

Intercostobrachial nerves—70 :7.
Long thoracic nerve—69 :28.
Lateral thoracic artery—49 :7.
Pectoral lymph glands—56 :47.

g. Structures in relation to the posterior wall of the axillary fossa.

Thoracodorsal nerve—69 :33.
Subscapular artery—49 :9.
Thoracodorsal artery—49 :10.
Circumflex scapular artery—49 :11. (Origin only.)

Subscapular nerves—69 :32.
Subscapular lymph glands—56 :46.

h. Axillary vessels.

The exposure of the entire extent of these vessels may be completed by the reflection of the pectoralis minor muscle.

Axillary artery—48 :70.
Highest thoracic artery—49 :1.
Thoracoacromial artery—49 :2.
Lateral thoracic artery—49 :7.
External mammary rami—49 :8.
Subscapular artery—49 :9.
Thoracodorsal artery—49 :10.
Circumflex scapular artery—49 :11.
Anterior circumflex humeral artery—49 :12.
Posterior circumflex humeral artery—49 :13.

Axillary vein—54 :29.
Lateral thoracic vein—54 :30.
Thoracoepigastric veins—54 :32.
Costoaxillary veins—54 :31.
Cephalic vein—54 :37.

i. Subclavius muscle—24 :79.

j. Brachial plexus.

Its exposure may be completed—i.e., so far as it is related to the axillary fossa—by detaching the subclavius muscle at its insertion, removing the middle third of the clavicle, and dividing the axillary artery and vein at the level of the clavicle and reflecting them distally.

Lateral cord—69 :38.
Anterior thoracic nerve—69 :29.
Musculocutaneous nerve—69 :41.
Median nerve—69 :48. (Lateral head.)

Medial cord—69 :39.
Anterior thoracic nerve—69 :29.
Median nerve—69 :48. (Medial head.)
Ulnar nerve—69 :55.
Medial antibrachial cutaneous nerve—69 :45.
Medial brachial cutaneous nerve—69 :44.

Posterior cord—69 :40.
Subscapular nerves—69 :32.
Thoracodorsal nerve—69 :33.
Axillary nerve—69 :34.
Radial nerve—69 :65.
Subclavian nerve—69 :30.
Long thoracic nerve—69 :28.

k. Serratus anterior muscle—25 :1.

III. Superior Extremity: General Characteristics.

1. SUBDIVISIONS.

Axilla—5:10. (Cf. Superior Extremity, II:1.)
Anterior and posterior axillary folds—5:11, 12.
Acromion—5:13.
Arm—5:14.
Anterior and posterior surfaces—5:15, 16.
Lateral and medial surfaces—5:17, 18.
Lateral and medial bicipital sulci—5:19, 20.
Elbow—5:21.
Forearm—5:22.
Dorsal and volar surfaces—5:23, 24.
Radial and ulnar margins—5:25, 26.
Hand—5:27.
Carpus or wrist—5:20.
Metacarpus—5:29.
Dorsum of hand—5:30.
Palm or volar aspect of hand—5:31.
Thenar—5:32.
Hypothenar—5:33.
Digits of hand—5:34.
Thumb of pollex—5:35.
Index—5:36.
Middle digit—5:37.
Ring digit—5:38.
Smallest digit—5:39.
Dorsal and volar surfaces—5:40, 41.
Radial and ulnar margins—5:42, 43.

For the osteology of the free part of the superior extremity see 13:66–15:4.

2. REGIONS OF THE SUPERIOR EXTREMITY—83:37. (Pls. 11, 12.)

Acromial region—83:38.
Deltoid region—83:39.
Lateral and medial regions of arm—83:40, 41.
Anterior and posterior regions of arm—83:42, 43.
Anterior region of elbow—83:44.
Cubital fossa—83:45.
Posterior region of elbow—84:1.
Olecranon region—84:2.
Lateral and medial regions of elbow—84:3, 4.
Volar and dorsal regions of forearm—84:5, 6.
Radial and ulnar margins of forearm—84:7, 8.
Dorsal and volar regions of hand—84:9, 10.
Digital regions of hand—84:11.
Dorsal, unguicular and volar regions of digits—84:12–14.

IV. Region of the Shoulder.

1. FASCIA, CUTANEOUS NERVES, AND CEPHALIC VEIN.

Superficial fascia—23:36.
Exposed by reflecting the skin of the shoulder distally as far as the insertion of the deltoid muscle.
Posterior supraclavicular nerves—69:20.

Lateral brachial cutaneous nerves—69 :36.
Cephalic vein—54 :37.
Deep fascia.
Subscapular fascia—26 :41.
Supraspinous fascia—26 :42.
Infraspinous fascia—26 :43.

2. MUSCLES, NERVES, VESSELS, AND LIGAMENTS OF THE SHOULDER.

Deltoid muscle—25 :63.
Subcutaneous acromial bursa—28 :22.

The subsequent structures are exposed by detaching the deltoid muscle at its origin and reflecting the muscle toward its insertion.

Subdeltoid bursa—28 :24.
Subacromial bursa—28 :23.
Anterior humeral circumflex artery—49 :12.
Posterior humeral circumflex artery—49 :13.
Axillary nerve—69 :34.
Muscular rami—69 :35.
Lateral cutaneous nerve of the arm—69 :36.
Teres major muscle—25 :67.
Bursa of the teres major muscle—28 :28.
Pectoralis major muscle—24 :74. (Insertion only.)
Latissimus dorsi muscle—23 :17. (Insertion only.)
Bursa of the teres major muscle—28 :28.
Coracoacromial ligament—19 :42.
Acromioclavicular articulation—19 :45.
Articular capsule—19 :46.
Acromioclavicular ligament—19 :47.
Articular disc—19 :48.
Coracoclavicular ligament—19 :49.
Trapezoid ligament—19 :50.
Conoid ligament—19 :51.

The following muscles may be exposed by sawing through the acromion at its junction with the spine of the scapula, dividing the fascia covering the teres minor muscle and reflecting it medially, but guarding at the same time the circumflex artery of the scapula.

Supraspinatous muscle—25 :64.
Teres minor muscle—25 :66.
Infraspinatous muscle—25 :65.
Subscapularis muscle—25 :68.
Bursa of the subscapularis muscle—28 :27.

In demonstrating the following structures the infraspinatous and supraspinatous muscles are divided near their insertions, and both muscles reflected toward their origins.

Bursa of the infraspinatous muscle—28 :26.
Transverse scapular artery—48 :60.
Acromial ramus—48 :61.
Transverse scapular vein—54 :25.
Suprascapular nerve—69 :31.
Circumflex scapular artery—49 :11.
Superior transverse scapular ligament—19 :43.
Inferior transverse scapular ligament—19 :44.

V. Arm and Superficial Structures of the Forearm and Dorsum of the Hand.

1. SURFACE ANATOMY OF ARM AND FOREARM. (Pls. 1, 2.)

Lateral bicipital sulcus—5:19.
Medial bicipital sulcus—5:20.
Medial margin of the humerus—14:4.
Medial epicondyle—14:11.
Groove for the ulnar nerve—14:8.
Lateral margin of the humerus—14:5.
Lateral epicondyle—14:12.
Olecranon—14:19.
Styloid process of the radius—14:30.
Dorsal margin of the ulna—14:44.
Styloid process of the ulna—14:49.

2. ARM (ANTERIOR ASPECT) AND FOREARM: SUPERFICIAL STRUCTURES.

a. Cutaneous nerves.

Skin incisions: (*a*) along the mid-line of the anterior surface of the arm and the volar surface of the forearm to the level of the radiocarpal articulation; (*b*) transversely around the forearm just proximal to the radiocarpal articulation.

Intercostobrachial nerves—70:7.
Medial antibrachial cutaneous nerve—69:45.
Ulnar ramus—69:47.
Volar ramus—69:46.
Medial brachial cutaneous nerve—69:44.
Posterior brachial cutaneous nerve—69:66.
Dorsal antibrachial cutaneous nerve—69:68.
Lateral antibrachial cutaneous nerve—69:43.

b. Veins and lymphatics.

Basilic vein—54:38.
Cephalic vein—54:37.
Median vein of the elbow—54:40.

In cases where the preceding vein is absent, the following veins may take its place:

Median vein of the forearm—54:41.
Median basilic vein—54:42.
Median cephalic vein—54:43.
Superficial lymph glands of the elbow—56:49.

3. ARM (ANTERIOR ASPECT): DEEP STRUCTURES.

a. Deep fascia.

Brachial fascia—26:44.
Lacertus fibrosus—25:73.

The following fascial septa may be demonstrated by dividing the brachial fascia by a longitudinal incision along the median line of the front of the arm and reflecting the medial and lateral flaps of deep fascia, leaving intact, however, the lacertus fibrosus.

Medial intermuscular septum—26:45.
Lateral intermuscular septum—26:46.

b. Arteries.

Brachial artery—49 :14.
Deep brachial artery—49 :15.
Superior ulnar collateral artery—49 :20.
Inferior ulnar collateral artery—49 :21.

c. Veins.

Brachial veins—54 :34.
Basilic vein—54 :39.
Cephalic vein—54 :37.

d. Nerves.

Medial brachial cutaneous nerve—69 :44.
Medial antibrachial cutaneous nerve—69 :45.
Median nerve—69 :48.
Ulnar nerve—69 :55.
Musculocutaneous nerve—69 :41.
Muscular rami—69 :42.
Lateral antibrachial cutaneous nerve—69 :43.

e. Muscles.

Biceps brachii muscle—25 :69.
Long head—25 :70. (Not including its origin.)
Short head—25 :72.
Coracobrachialis muscle—25 :74.
Brachialis muscle—25 :75.

4. CUBITAL FOSSA—83 :45.

The following structures are dealt with here only in so far as they are related to the cubital fossa.

Lacertus fibrosus—25 :73.
Brachial artery—49 :14.
Radial artery—49 :22.
Ulnar artery—49 :36.
Tendon of biceps brachii muscle.
Median nerve—69 :48.
Brachialis muscle—25 :75.
Pronator teres muscle—26 :3.
Supinator muscle—26 :24.

The following structures are exposed by dividing the lacertus fibrosus and widening the space between the pronator teres and brachioradialis muscles.

Radial nerve—69 :65.
Deep ramus—69 :69.
Superficial ramus—60 :71.
Radial recurrent artery—49 :23.
Inferior ulnar collateral artery—49 :21.
Ulnar recurrent artery—49 :47. (Volar.)

5. ARM: POSTERIOR ASPECT.

Triceps brachii muscle—25 :76.
Long head—25 :77.
Lateral head—25 :78.
Medial head—25 :79.
Radial nerve—69 :65.

Exposed by dividing the lateral head of the triceps muscle along the course of the radial nerve.

Posterior brachial cutaneous nerve—69 :66.
Muscular rami—69 :67.
Dorsal antibrachial cutaneous nerve—69 :68.
Deep brachial artery—49 :15.
Deltoid ramus—49 :17.
Middle collateral artery—49 :18.
Radial collateral artery—49 :19.
Nutrient arteries of the humerus—49 :16.
Ulnar nerve—69 :55.
Superior ulnar collateral artery—49 :20.
Inferior ulnar collateral artery—49 :21.
Subtendinous bursa of the olecranon—28 :32.

6. DORSUM OF THE HAND: SUPERFICIAL STRUCTURES.

Skin incisions: (*a*) along the radial and ulnar margins of the hand; (*b*) along the middle line of the dorsal aspect of each digit.

Superficial ramus of the radial nerve—69 :71.
Ulnar anastomotic ramus—69 :72.
Dorsal digital nerves—69 :73.
Dorsal ramus of the hand from the ulnar nerve—69 :57.
Dorsal digital nerves—69 :58.
Venous network of the back of the hand—54 :44.
Dorsal metacarpal veins—54 :49.
Digital venous arch—54 :52.
Dorsal fascia of the hand—26 :50.
Dorsal carpal ligament—26 :51.

7. FOREARM: VOLAR ASPECT AND ULNAR MARGIN.

a. Deep fascia and cutaneous nerves piercing it.

For the superficial fascia and certain cutaneous nerves of the forearm, see Superior Extremity, V :2.

Fascia of the forearm—26 :49.
Palmar cutaneous ramus of the ulnar nerve—69 :56.
Palmar ramus of the median nerve—69 :51.
Superficial ramus of the radial nerve—69 :71.
Volar carpal ligament—26 :55.

b. Radial artery and nerve.

Exposed by turning aside the volar ramus of the medial cutaneous nerve of the forearm, the lateral cutaneous nerve of the forearm, the superficial veins, and removing the deep fascia of the forearm except where it gives origin to underlying muscles.

Radial artery—49 :22.
Radial recurrent artery—49 :23.
Superficial volar ramus—49 :26.
Muscular rami—49 :24.
Volar carpal ramus—49 :25.
Radial nerve—69 :65.
Deep ramus—69 :69. (Origin only.)
Superficial ramus—69 :71.

c. Superficial muscles.

Brachioradialis muscle—26 :17.
Palmaris longus muscle—26 :7.

Pronator teres muscle—26 :3.
Humeral head—26 :4.
Ulnar head—26 :5.
Flexor carpi radialis muscle—26 :6.
Flexor carpi ulnaris muscle—26 :8.
Humeral head—26 :9.
Ulnar head—26 :10.
Flexor digitorum sublimis—26 :11.
Humeral head—26 :12.
Ulnar head—26 :13.

d. Ulnar vessels and median nerve.

Ulnar artery—49 :36.
Recurrent ulnar arteries—49 :37.
Common interosseous artery—49 :39.
Volar interosseous artery—49 :42. (Origin only.)
Dorsal interosseous artery—49 :40. (Origin only.)
Volar carpal ramus—49 :46.
Dorsal carpal ramus—49 :45.
Muscular rami—49 :44.
Ulnar veins—54 :36.
Ulnar nerve—69 :55.
Palmar cutaneous rami—69 :56.
Dorsal ramus of the hand—69 :57.
Volar ramus of the hand—69 :59. (Origin only.)
Muscular rami—60 :64.
Median nerve—69 :48.
Exposed by reflecting the humeral head of the pronator teres muscle and the radial head of the flexor digitorum sublimis muscle.
Muscular rami—69 :49.
Volar interosseous nerve of the forearm—69 :50. (Origin only.)
Palmar ramus of the median nerve—69 :51. (Origin only.)

e. Deep structures on the volar aspect of the forearm.

Flexor digitorum profundus muscle—26 :14.
Flexor pollicis longus muscle—26 :15.
Pronator quadratus muscle—26 :16.
Volar interosseous artery—49 :42.
Median artery—49 :43.
Muscular rami—49 :44.
Volar interosseous nerve—69 :50.

VI. Wrist and Hand: Volar Aspect.

1. SURFACE ANATOMY. (Pls. 1, 2.)

Thenar eminence—5 :32.
Hypothenar eminence—5 :33.
Tubercule of the navicular bone—14 :54.
Tubercle of the greater multangular bone—14 :59.
Pisiform bone—14 :57.
Metacarpal bones—14 :68.
Phalanges—14 :74.

2. FASCIA AND CUTANEOUS NERVES.

Skin incisions: (*a*) longitudinally along the middle line of the palm; (*b*) transversely at the level of the proximal ends of the interdigital clefts from the radial to the ulnar margin of the hand; (*c*) longitudinally along the middle line of each digit.

Superficial fascia—23 :36.
Palmaris brevis muscle—26 :29.
Palmar branch of the median nerve—69 :51.
Palmar cutaneous branch of the ulnar nerve—69 :56.
Superficial branch of the radial nerve—69 :71.
Palmar aponeurosis—26 :52.
  Transverse fasciculi—26 :53.
Volar carpal ligament—26 :55.

3. MUSCLES, NERVES, VESSELS, AND LIGAMENTS.

a. Nerves and vessels superficial to the muscles and flexor tendons of the palm.

Exposed by dividing the proximal part of the palmar aponeurosis transversely, reflecting it distally and then removing the entire aponeurosis together with the palmaris brevis muscle and the volar carpal ligament.

Superficial volar arch—49 :48.
Superficial volar ramus of the radial artery—49 :26.
Common volar digital arteries—49 :49.
  Proper volar digital arteries—49 :50.
Median nerve—69 :48.
  Muscular rami—69 :49.
  Common volar digital nerves—69 :53.
  Proper volar digital nerves—69 :54.
Volar ramus of the ulnar nerve in the hand—69 :59.
  Deep ramus—69 :63. (Origin only.)
  Superficial ramus—69 :60.
    Common volar digital nerves—69 :61.
    Proper volar digital nerves—69 :62.

b. Ligaments and mucous sheaths of the flexor tendons.

Transverse carpal ligament—26 :54.
Vagina tendinum mm. flexorum communium—28 :48.
Vagina tendinis m. flexoris pollicis longi—28 :49.
Vaginal ligaments of the digits—26 :59.
  Annular ligaments of the digits—26 :60.
  Cruciate ligaments of the digits—26 :61.
Vinculum tendinum—26 :57.
Carpal canal—20 :24.
Chiasma tendinum—26 :56.

c. Muscles.

Lumbricales muscles—26 :37.

Exposed by dividing the superficial volar arch just distal to the deep ramus of the ulnar artery and also at its junction with the superficial volar ramus of the radial artery and reflecting the arch distally, dividing the median nerve at the level of the wrist and reflecting it distally, and dividing the flexor digitorum sublimis muscle at the middle of the forearm and reflecting the distal part toward its insertion.

The demonstration of the following structures may be completed by dividing the flexor digitorum profundus in the forearm and reflecting it and the lumbricales muscles toward their insertions, noting at the same time the muscular rami from the deep branch of the ulnar nerve to the two (ulnar) lumbrical muscles.

Abductor pollicis brevis muscle—26 :30.
Flexor pollicis brevis muscle—26 :3.
Opponens pollicis muscle—26 :32.
Adductor pollicis muscle—26 :33.
Abductor pollicis muscle—26 :33.
Flexor digiti quinti brevis muscle—26 :35.
Opponens digiti quinti muscle—26 :36.

d. Nerves and vessels, internal to the flexor tendons and muscles of the palm.

Deep ramus of the ulnar nerve—69 :63.
Muscular rami—69 :64.
Deep volar arch—49 :33.
Volar metacarpal arteries—49 :34.
Perforating rami—49 :35.
Princeps pollicis artery—49 :31.
Demonstrated by detaching the adductor pollicis muscle at its origin and reflecting it toward its insertion.
Volar radial artery of the index digit—49 :32.

VII. Forearm: Dorsal Aspect and Radial Margin.

1. FASCIA, MUSCLES, NERVES, AND VESSELS.

a. Deep fascia of forearm.

For the superficial fascia, cutaneous nerves and superficial vessels, see Superior Extremity, V :2.

Fascia of forearm—26 :49.
Dorsal carpal ligament—26 :51.

b. Superficial muscles.

Exposed by removing the deep fascia from the dorsum of the forearm, except where it gives origin to subjacent muscles as in the region of the elbow (retaining intact, however, the dorsal carpal ligament).

Brachioradialis muscle—26 :17.
Extensor carpi radialis longus muscle—26 :18.
Extensor carpi radialis brevis muscle—26 :19.
Vagina of the extensor carpi radialis brevis muscle—28 :38.
Extensor digitorum communis muscle—26 :20.
Extensor digiti quinti proprius muscle—26 :22.
Anconaeus muscle—26 :1.
Extensor carpi ulnaris muscle—26 :23.

c. Nerves and vessels.

Exposed by dividing the extensor digitorum communis and extensor digiti quinti muscles at the middle of the forearm, and reflecting the proximal and distal segments of the divided muscles toward their origin and insertion, respectively.

Dorsal interosseous artery—49 :40.
Recurrent interosseous artery—49 :41.
Arterial network of the elbow—49 :38.

Volar interosseous artery—49 :42.
Deep ramus of the radial nerve—69 :69.
Dorsal interosseous nerve—69 :70.

d. Deep muscles.

Abductor pollicis longus muscle—26 :25.
Extensor pollicis brevis muscle—26 :26.
Vagina tendinum mm. abductor longi et extensoris pollicis brevis—28 :37.
Extensor pollicis longus muscle—26 :27.
Vagina tendinis m. extensoris pollicis longi—28 :39.
Extensor indicis proprius muscle—26 :28.
Supinator muscle—26 :24.

VIII. Wrist and Hand :Dorsal Aspect.

1. MUSCLES, NERVES, AND VESSELS.

a. Vessels.

For the cutaneous nerves and superficial vessels see Superior Extremity, V :6.

Radial artery—49 :22.
Dorsal carpal ramus—49 :27.
Dorsal carpal rete—49 :28.
Dorsal metacarpal arteries—49 :29.
Dorsal digital arteries—49 :30.
Perforating rami—49 :35.

b. Muscles, nerves, and ligaments.

Dorsal carpal ligament—26 :51.
Juncturae tendinum—26 :21.
Dorsal interosseous nerve—69 :70.
Transverse ligaments of the heads of the metacarpal bones—20 :41.
Volar interosseous muscles—26 :39.
Dorsal interosseous muscles—26 :38.
Flexor pollicis brevis muscle—26 :31. (Deep head.)

Demonstrated by reflecting the radial head of the first dorsal interosseous muscle.

IX. Articulations of the Superior Extremity.

1. SHOULDER JOINT—19 :58.

Articular capsule—19 :59.
Coracohumeral ligament—19 :61.
Glenoid lip—19 :60.
Long head of the biceps muscle—25 :70.
Synovial membrane—18 :32.
Intertubercular mucous sheath—25 :71.
Bursa subscapularis—28 :28.

2. ELBOW JOINT—19 :62.

Articular capsule—19 :66.
Ulnar collateral ligament—19 :67.
Radial collateral ligament—19 :68.
Synovial membrane—18 :32.
Humeroulnar articulation—19 :63.
Humeroradial articulation—19 :64.

3. JOINT OF THE HAND—20:8.

a. Radiocarpal articulation—20:9.
Articular capsule—20:11.
Dorsal radiocarpal ligament—20:12.
Volar radiocarpal ligament—20:13.
Ulnar collateral carpal ligament—20:15.
Radial collateral carpal ligament—20:16.

b. Intercarpal articulation—20:10.
Articular capsule—20:11.
Radiate carpal ligament—20:14.
Dorsal intercarpal ligaments—20:17.
Volar intercarpal ligaments—20:18.
Interosseous intercarpal ligaments—20:19.

4. PISIFORM ARTICULATION—20:20.

Articular capsule—20:21.
Pisohamate ligament—20:22.
Pisometacarpal ligament—20:23.
Carpal canal—20:24.

5. RADIOULNAR ARTICULATIONS.

Proximal radioulnar articulation—19:65.
Annular ligament of the radius—19:69.
Recessus sacciformis—20:1.
Distal radioulnar articulation—20:4.
Articular disc—20:6.
Articular capsule—20:5.
Recessus sacciformis—20:7.
Interosseous membrane of forearm—20:2.
Oblique cord—20:3.

6. CARPOMETACARPAL ARTICULATIONS—20:25.

Articular capsules—20:32.
Dorsal carpometacarpal ligaments—20:27.
Volar carpometacarpal ligaments—20:28.
Carpometacarpal articulation of the thumb—20:29.
Articular capsule—20:30.

7. INTERMETACARPAL ARTICULATIONS—20:31.

Articular capsules—20:32.
Dorsal basal ligaments—20:33.
Volar basal ligaments—20:34.
Interosseous basal ligaments—20:35.

8. METACARPOPHALANGEAL ARTICULATIONS—20:37.

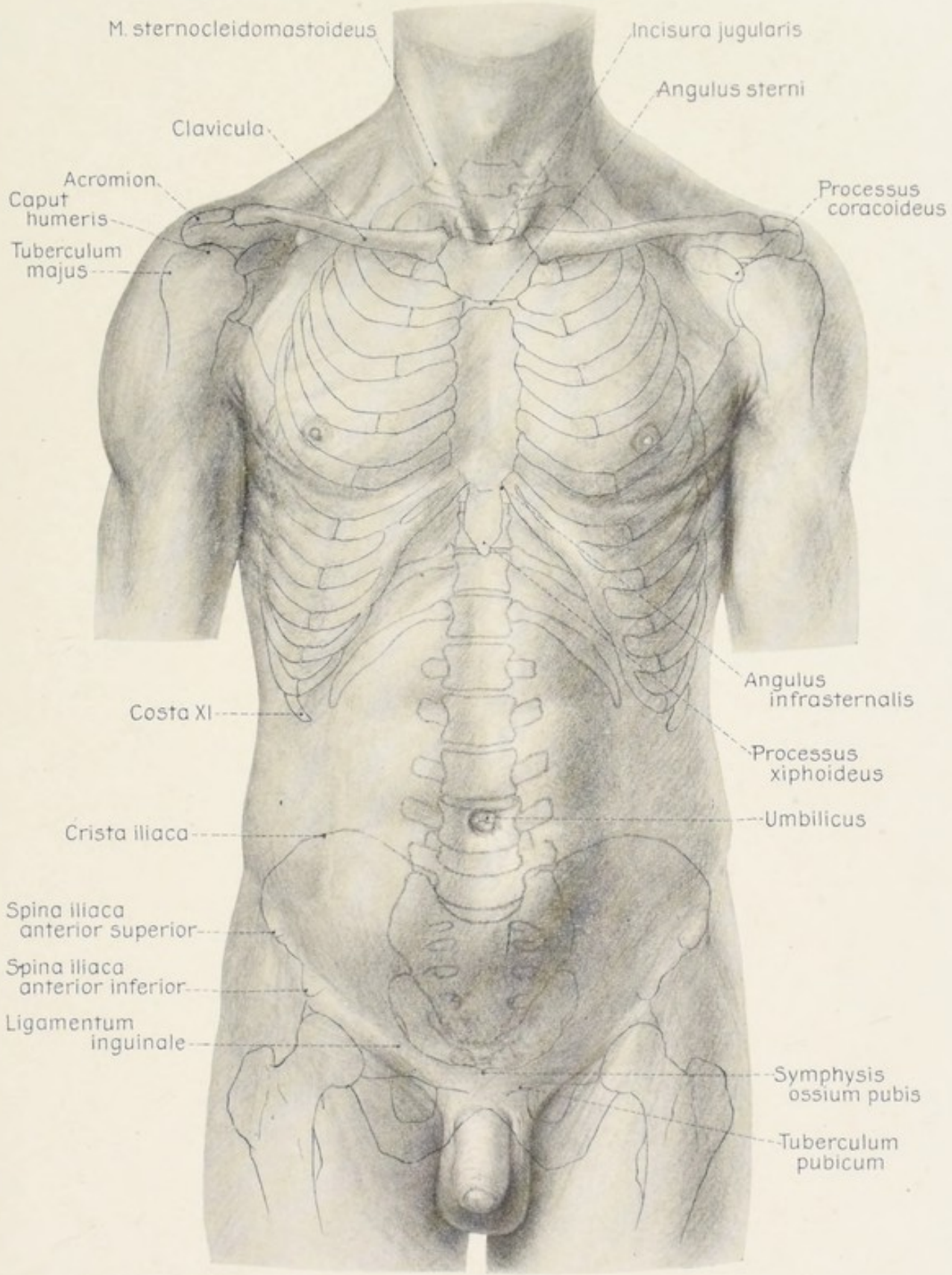
Articular capsules—20:38.
Collateral ligaments—20:39.
Volar accessory ligaments—20:40.
Transverse ligaments of the heads of the metacarpal bones—20:41.

9. ARTICULATIONS OF THE DIGITS—20:42.

Articular capsules—20:43.
Collateral ligaments—20:44.

Plate III

Anterior aspect of the trunk showing surface anatomy and surface projection of the skeleton in relation to the thorax, abdomen and pelvis.


M. sternocleidomastoideus
Incisura jugularis
Angulus sterni
Clavicula
Acromion
Caput humeris
Tuberculum majus
Processus coracoideus
Angulus infrasternalis
Costa XI
Processus xiphoideus
Umbilicus
Crista iliaca
Spina iliaca anterior superior
Spina iliaca anterior inferior
Ligamentum inguinale
Symphysis ossium pubis
Tuberculum pubicum

THORAX
AND DEEP STRUCTURES OF THE BACK

THORAX AND DEEP STRUCTURES OF THE BACK

I. General Characteristics.

1. SUBDIVISIONS OF THORAX AND BACK.

Thorax—4:47.

(For osteology of the thorax see 7:27–64.)

Thoracic cavity—4:48.

Breast—4:49.

Mamma—4:50.

Mammary papilla—4:51.

Back—4:52.

Vertebral column—4:53.

Spinal canal—4:54.

2. SURFACE ANATOMY.

For the surface anatomy of the thorax and back see Superior Extremity, I:1, and II:1.

3. GENERAL OSTEOLOGICAL CHARACTERISTICS OF THORAX.

Thoracic cavity—7:58.

Superior aperture of the thorax—7:59.

Inferior aperture of the thorax—7:60.

Costal arches—7:61.

Intercostal spaces—7:62.

Infrasternal angle—7:63.

4. REGIONS OF THORAX AND BACK.

For regions of the thorax and back refer to Superior Extremity, I:2 and II:2, and plates 11 and 12.

II. Thoracic Wall: Anterior and Lateral Parts.

1. INTERCOSTAL MUSCLES, LIGAMENTS, AND NERVES.

For structures of the thoracic wall external to the costal arches and intercostal muscles see Superior Extremity, II:3, 4.

External intercostal muscles—25:5.

External intercostal ligaments—19:32.

Internal intercostal muscles—25:6.

Exposed by dividing the external intercostal muscles and external intercostal ligaments along the inferior margins of the intercostal spaces and reflecting the muscles and ligaments upward.

Internal intercostal ligaments—19:33.

Anterior rami (intercostal nerves) of thoracic nerves—70:1.

Muscular rami—70:2.

Lateral cutaneous rami—70:3.

Posterior and anterior rami—70:4, 5.

Lateral mammary rami—70:6.

Intercostobrachial nerves—70:7.

Anterior cutaneous rami—70:8.

Medial mammary rami—70:9.

2. BLOOD VESSELS.

Highest intercostal artery—48:63.
Intercostal arteries—48:59.
Anterior rami—49:65.
Muscular rami—49:66.
Lateral cutaneous rami—49:67.
Posterior rami—49:68.
Anterior rami—50:1.
Lateral mammary rami—50:2.
Anterior cutaneous rami—50:3.
Medial mammary rami—50:4.
Posterior rami—49:60. (See also Superior Extremity, I:3.)
Intercostal veins—54:56.
Internal mammary artery—48:34.
Exposed by removing the intercostal muscles and ligaments from the anterior ends of the intercostal spaces, guarding against injury to the pleura.
Sternal rami—48:39.
Perforating rami—48:40.
Mammary rami—48:41.
Muscular rami—48:42.
Cutaneous rami—48:43.
Intercostal rami—44:45.
Musculophrenic artery—44:46.
Exposed by cutting away the medial end of the sixth costal cartilage.
Superior epigastric artery—44:47. (Its origin only.)
Internal mammary vein—52:65.
Transverse thoracic muscle—25:8.

III. Thoracic Cavity and Viscera

1. PLEURA AND PLEURAL CAVITIES.

The pleura may be exposed by removing the intercostal muscles, separating the pleura from the internal surfaces of the sternum and ribs, and with a saw and bone-forceps, removing the sternum and costal arches by the following incisions, but retaining the pleura intact: (*a*) transversely through the sternum at the level of the lower margin of the first costosternal junction; (*b*) transversely through the sternum at the level of the upper margin of the sixth costosternal junction; (*c*) dividing the second, third, fourth, and fifth ribs at the junction of the middle and posterior thirds of each.

Endothoracic fascia—38:2.

The pericardium may be identified by inserting the finger between the lines of sternal reflection of the right and left pleurae and passing it through the areolar tissue of the anterior mediastinal cavity.

Incisions through the pleura exposing the pleural cavity: (*a*) longitudinally through the costal pleura midway between the sternum and vertebral column extending from the first to the sixth rib; (*b*) transversely along the inferior margin of the first rib and along the superior margin of the sixth rib, extending medially to within about 2 cm. of the line of sternal reflection of the pleura and laterally to the line of the cut ends of the second to fifth ribs.

Pulmonary ligament—38:16.
Cupula of pleura—38:5.
Pulmonary pleura—38:6.

Parietal pleura—38:7.
Costal pleura—38:11.
Mediastinal pleura—38:8.
Mediastinal layers—38:9.
Pericardial pleura—38:10.
Diaphragmatic pleura—38:12.
Pleural sinuses—38:13.
Phrenicocostal sinus—38:14.
Costomediastinal sinus—38:15.
Adipose folds—38:17.
Pleural villi—38:18.
Mediastinal septum—38:19.
Anterior mediastinal cavity—38:20.
Posterior mediastinal cavity—38:21.

2. LUNGS.

The lung may be removed by dividing its root close to the medial surface of the lung.

a. Surface anatomy of lungs.

Base of lung—37:57.
Apex of lung—37:58.
Costal surface—37:60.
Mediastinal surface—37:61.
Diaphragmatic surface—37:62.
Anterior margin—37:63.
Inferior margin—37:64.
Hilus of lung—37:65.
Root of lung—37:66.
Subclavian groove—37:59.
Interlobar incisure—37:71.
Superior lobe—37:68.
Middle lobe—37:69.
Inferior lobe—37:70.
Cardiac notch—37:67.

b. Internal structure of lungs.

Bronchi—37:41.

May be demonstrated by tearing and removing parts of the pulmonary tissue and following the bronchi and blood vessels and their subdivisions as far as possible into the substance of the lung.

Bronchioles—37:74.
Respiratory bronchioles—37:75.
Alveolar ductules—37:76.
Pulmonary alveoli—37:77.
Bronchial lymph glands—37:78.
Bronchial lymphatic nodules—37:79.
Pulmonary lymph glands—37:80.

3. ROOT OF LUNG AND RELATED STRUCTURES.

a. Structures in relation to the right and left roots.

Anterior:

Anterior pulmonary plexus of the vagus nerve—68:45.
Phrenic nerve—69:21.
Pericardiacophrenic artery—48:38.

Posterior:
Vagus nerve—68:22.
Posterior pulmonary plexus of the vagus nerve—68:46.
Inferior:
Pulmonary ligament—38:16.
In relation to the left root only:
Azygos vein—54:53.
Superior vena cava—52:50.
In relation to the left root only:
Aortic arch—46:49.
Descending aorta—46:51.

b. Structures within the root of each lung.

Bronchial arteries—49:53.
Pulmonary artery—46:40.
Right and left rami—46:41, 42.
Pulmonary veins—52:37.
Right and left pulmonary veins—52:38, 39.
Bronchus, right and left—37:47.
Bronchial rami—37:48.
Eparterial bronchial ramus—37:49.
Hyparterial bronchial rami—37:50.
Bronchial lymph glands—56:52.

4. PHRENIC NERVE AND NERVES TO THE SUPERFICIAL PART OF THE CARDIAC PLEXUS.

Phrenic nerve—69:21.
Pericardiac ramus—69:22.
Phrenicoabdominal rami—69:23.

Nerves in relation to the superficial part of the cardiac plexus:

Superior cardiac nerve—71:59. (From the cervical sympathetic.)
Superior cardiac ramus—68:34. (Inferior cervical cardiac ramus. From the left vagus nerve.)
Cardiac ganglion—72:11.

5. THYMUS—38:31.

Usually in a condition of atrophy in the adult, but showing the following structures in the child:

Right and left lobes—38:32.
Central tract—38:33.
Lobules of the thymus—38:34.

6. PERICARDIUM.

Sternopericardial ligaments—45:43.

Incisions exposing the pericardial cavity: (*a*) longitudinally through the pericardium from the aorta to the diaphragm; (*b*) transversely from the middle of the right to the middle of the left root of the lung.

Pericardium—45:41.
Epicardium—45:45.
Pericardial fluid—45:42.
Transverse sinus of the pericardium—45:44.

7. GREAT VEINS OF THE THORAX AND THEIR TRIBUTARIES.

Superior vena cava—52 :50.

Right and left innominate veins—52 :51.

Inferior thyreoid veins—52 :52. (Termination only.)

Thyreoidea ima vein—52 :53.

The first five of the following tributaries are small and usually difficult to demonstrate:

Thymic veins—52 :56.

Pericardiac veins—52 :57.

Superior phrenic veins—52 :58.

Anterior mediastinal veins—52 :59.

Anterior bronchial veins—52 :60.

Vertebral vein—52 :63. (Termination only.)

Internal mammary vein—52 :65.

Highest intercostal vein—52 :68.

Azygos vein—54 :53.

Inferior vena cava—55 :3.

8. HEART AND AORTA.

a. Surface anatomy.

Apex of heart—45 :36.

Sternocostal surface—45 :34.

Diaphragmatic surface—45 :35.

Right atrium—46 :1.

Right auricle—46 :7.

Left atrium—46 :26.

Left auricle—46 :27.

Right ventricle—46 :13.

Left ventricle—46 :29.

Coronary sulcus—45 :40.

Anterior longitudinal sulcus—45 :38.

Posterior longitudinal sulcus—45 :39.

Notch at apex of heart—45 :37.

b. Nerve and vascular supply.

Right coronary artery of the heart—46 :52.

Posterior descending ramus—46 :53.

Left coronary artery of the heart—46 :54.

Circumflex ramus—46 :55.

Anterior descending ramus—46 :56.

Coronary sinus—52 :41.

Its exposure may sometimes be facilitated by severing the inferior vena cava at its termination.

Great cardiac vein—52 :42.

Posterior vein of left ventricle—52 :43.

Oblique vein of left atrium—52 :44.

Middle cardiac vein—52 :46.

Small cardiac vein—52 :47.

Anterior veins of the heart—52 :48.

Smallest veins of the heart—52 :49.

Anterior coronary plexus—72 :10.

Posterior coronary plexus—72 :12.

c. Cavities of the heart. Pulmonary vessels.

Right atrium—46 :1.

Incisions exposing the cavity of the right atrium: (*a*) longitudinally from a point just anterior to the superior vena cava, downward and backward to the inferior vena cava; (*b*) from the middle point of the preceding incision obliquely upward to the tip of the right auricle.

Epicardium—45 :45.
Myocardium—45 :46.
Endocardium—45 :47.
Sulcus terminalis of right atrium—46 :3.
Crista terminalis—46 :4.
Sinus venarum [cavarum]—46 :5.
Pectinate muscles—46 :2.
Intervenous tubercle—46 :8.
Septum of the atria—45 :54.
Membranous part—45 :55.
Fossa ovalis—46 :10.
Limbus fossae ovalis—46 :6.
Valve of the inferior vena cava—46 :9.
Valve of the coronary sinus—46 :11.
Venous orifice—45 :56.
Foramina of the smallest cardiac veins—46 :12.

Right ventricle—46 :13.

Incisions exposing the cavity of the right ventricle: (*a*) from the diaphragmatic surface of the heart upward ½ cm. to the right of and parallel with the anterior longitudinal sulcus to the origin of the pulmonary artery; (*b*) from the upper end of the preceding incision transversely to the right, parallel with and 1 cm. inferior to the coronary sulcus.

Conus arteriosus—46 :19.
Supraventricular crest—46 :18.
Venous orifice—45 :56.
Tricuspid valve—46 :14.
Anterior cusp—46 :15.
Posterior cusp—46 :16.
Medial cusp—46 :17.
Papillary muscles—45 :60.
Chordae tendinae—45 :61.
Trabeculae carneae—45 :58.
Pulmonary artery—46 :40.
Right and left ramus—46 :41, 42.
Ligamentum arteriosum—46 :44.
Ductus arteriosus*—46 :43.
Arterial orifice [of right ventricle]—45 :57.
Semilunar valves of pulmonary artery—46 :20.
Anterior, right, and left semilunar valves—46 :21, 23.
Nodules of the semilunar valves—46 :24.
Lunulae of the semilunar valves—46 :25.

Left atrium—46 :26.

The cavity and vascular communications of the left atrium may be exposed by dividing the inferior vena cava, turning the heart

upward and making an incision through the left atrial wall extending from the middle of its posterior margin forward to the tip of the left auricle.

Valve of the foramen ovalis—46 :28.

Left ventricle—46 :29.

Incisions exposing the cavity of the left ventricle: (*a*) beginning near the coronary sulcus anteriorly and extending parallel and 1 cm. to the left of the anterior longitudinal sulcus to the apex of the heart; (*b*) beginning posteriorly near the coronary sulcus and extending parallel and 1 cm. to the left of the posterior longitudinal sulcus and joining the end of the first incision at the apex of the heart.

Trabeculae carneae—45 :58.
Papillary muscles—45 :60.
Chordae tendineae—45 :61.
Venous orifice—45 :56.
Arterial orifice—45 :57.
Bicuspid valve—46 :30.
Anterior and posterior cusps—46 :31, 32.
Ventricular septum—45 :49.
Muscular septum of ventricle—45 :50.
Membranous septum of ventricle—45 :51.

d. Aorta and its branches.

Ascending aorta—46 :46.
Bulb of aorta—46 :47.
Sinus of aorta—46 :48.
Right and left coronary arteries—46 :52, 54.
Aortic arch—46 :49.
Isthmus of aorta—46 :50.
Innominate artery—46 :57.
(Thyreoidea ima artery)—46 :58.
Common carotid artery [left]—46 :59.
Subclavian artery [left]—48 :20.
Descending aorta [thoracic portion]—46 :51. (Origin only.)
Semilunar valves of aorta—46 :33.
Right, left and posterior semilunar valves—46 :34–36.
Nodules and lunulae of the semilunar valves—46 :37, 38.

e. Myocardium and fibrous rings of the heart.

The subsequent structures are exposed to better advantage after the great blood vessels have been divided near their juncture with the heart and the heart removed.

Atrioventricular bundle of His.

Demonstrated more favorably in a sheep or ox heart.

Fibrous rings—45 :63.

Exposed by removing the atria of the heart.

Fibrous trigones—45 :62.

f. Cardiac plexus.

For the superficial part of the cardiac plexus, see III :4.
The following nerves entering into the formation of the deep part of the cardiac plexus may be exposed by dividing the aortic arch at its junction with the descending aorta and turning aside the aortic arch.

Middle cardiac nerve of sympathetic system—71 :61.
Inferior cardiac nerve of sympathetic system—71 :64.
Superior cardiac nerves of vagus—68 :34.
(Depressor nerve)—68 :35.
Inferior cardiac rami of the recurrent nerve—68 :37.
Cardiac plexus—72 :9.

9. TRACHEA AND BRONCHI.

Bronchial lymph glands—56 :52.
Trachea—37 :41.
Bifurcation of the trachea—37 :46.
Right and left bronchi—37 :47.
Bronchooesophageal muscle**—32 :72.

10. POSTERIOR MEDIASTINAL CAVITY AND STRUCTURES WITHIN IT.

Posterior mediastinal cavity—38 :21.

The following structures may be exposed, so far as they are in relation to the posterior mediastinal cavity, by making a longitudinal incision through the posterior wall of the pericardial cavity and reflecting the pericardium.

Vagus nerve—68 :22.
Recurrent nerve—68 :36.
Anterior and posterior bronchial rami—68 :43, 44.
Anterior and posterior pulmonary plexuses—68 :45, 46.
Cf. Thorax, III :3.
Oesophageal rami—68 :47.
Anterior and posterior oesophageal plexuses—68 :48, 49.
Thoracic part of oesophagus—32 :68.
Thoracic aorta—59 :51.
Visceral rami—49 :52.
Bronchial arteries—49 :53.
Oesophageal arteries—49 :54.
Pericardiac rami—49 :55.
Parietal rami—49 :56.
Mediastinal rami—49 :57.
Superior phrenic arteries—49 :58.
Intercostal arteries—49 :59.
Thoracic duct—56 :25.
Posterior mediastinal lymph glands—56 :54.

IV. Thoracic Wall: Posterior Part.

1. THORACIC PART OF THE SYMPATHETIC NERVOUS SYSTEM.

Exposed by removing the parietal pleura from the posterior part of the thoracic wall.

Sympathetic trunk—71 :30.
Thoracic ganglia—72 :2.
Rami communicantes—68 :72.
Great splanchnic nerve—72 :3.
Splanchnic ganglion—72 :4.
Small splanchnic nerve—72 :5.
(Lowest splanchnic nerve)—72 :7.

2. STRUCTURES IN RELATION TO THE INTERNAL SURFACE OF THE POSTERIOR THORACIC WALL.

Subcostal muscles—25:7. (Not constant in degree of development.)
Internal intercostal muscles—25:6.
Intercostal arteries—49:59.
Highest intercostal artery—48:63.
Intercostal nerves—70:1.
Intercostal veins—54:56.
Azygos vein—54:53.
Hemiazygos vein—54:54.

The following veins are variable in their relationship and degree of development:

Accessory hemiazygos vein—54:55.
Oesophageal veins—54:59.
Posterior bronchial veins—54:60.

V. Deep Structures of the Back.

1. POSTERIOR SERRATI MUSCLES AND THE LUMBODORSAL FASCIA.

For the muscles and related structures external to the posterior serrati muscles, see Superior Extremity, I:3, 4.

For the structures of the back of the neck, see Head and Neck, IV:2–4.

Serratus posterior superior muscle—23:22.
Serratus posterior inferior muscle—23:21.
Lumbodorsal fascia—24:5.

A longitudinal incision through its posterior layer and a medial displacement of the subjacent sacrospinalis muscle exposes its anterior layer. A longitudinal incision through this anterior (designated middle by some authors) layer close to its attachment to the tips of the transverse processes and a medial displacement of the lateral margin of the subjacent quadratus lumborum muscle exposes the transversalis fascia.

2. INTRINSIC MUSCLES OF THE BACK.[2]

For the corresponding muscles of the neck see Head and Neck, IV:3.

Sacrospinalis muscle—23:25.
Iliocostalis muscle—23:26.

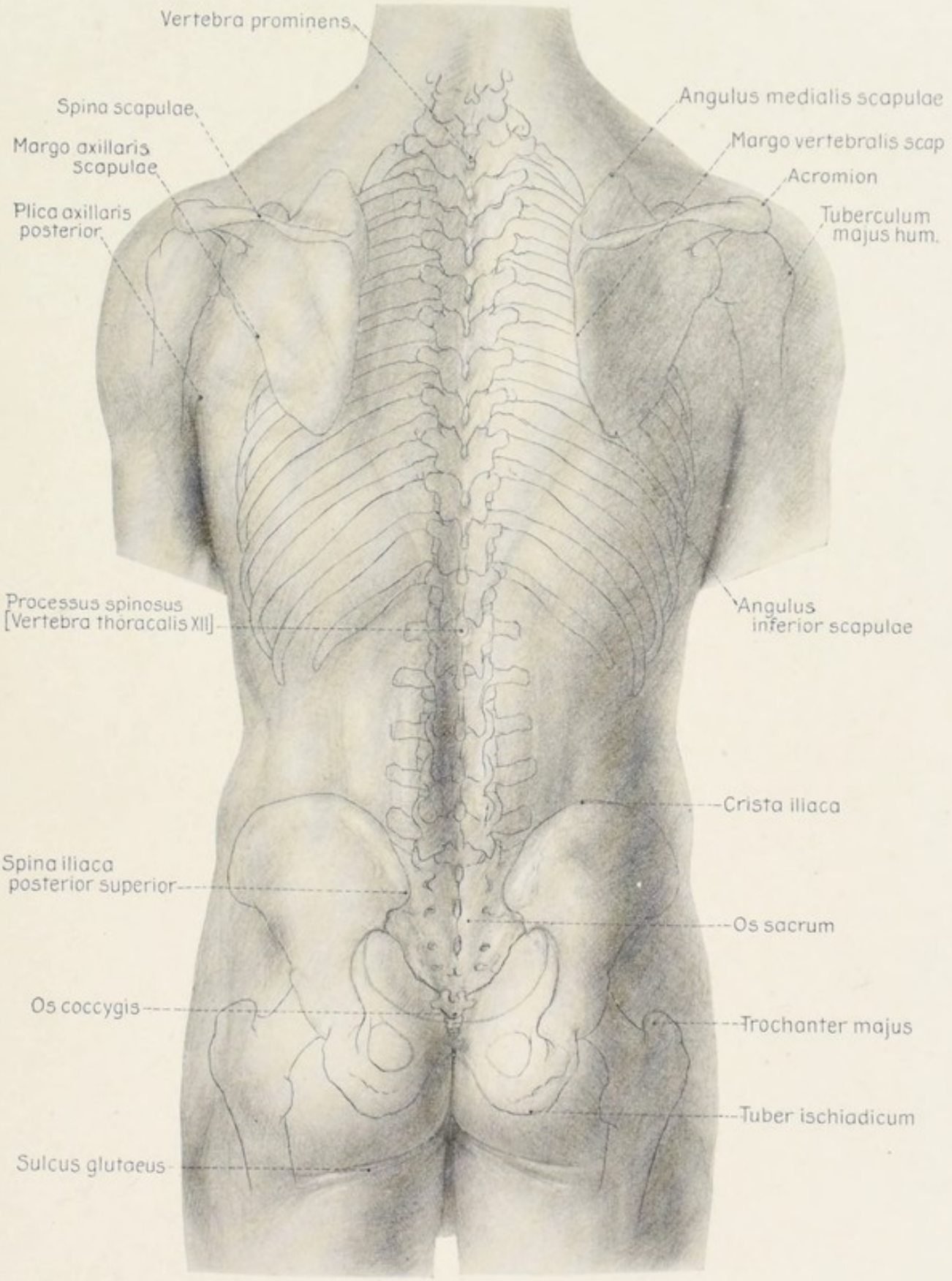
Demonstrated by successive lateral eversions of its inferior, middle and superior subdivisions, guarding the nerves and vessels emerging between the iliocostalis and the longissimus dorsi muscles.

Iliocostalis lumborum muscle—23:27.
Iliocostalis dorsi muscle—23:28.
Iliocostalis cervicis muscle—23:29. (Origin only.)
Longissimus muscle—23:30.
Longissimus dorsi muscle—23:31.
Longissimus cervicis muscle—23:32. (Origin only.)
Longissimus capitis muscle—23:44. (Thoracic origin only.)
Spinalis muscle—23:45.
Spinalis dorsi muscle—23:46.

[2] Many of the structures indicated in sections 2 to 6 may also be demonstrated as exposed in a cross-section of the posterior thoracic wall made at about the level of the fourth thoracic vertebra.

PLATE IV

Posterior aspect of the trunk showing surface anatomy and surface projection of the skeleton in relation to the thorax, abdomen and pelvis.


Vertebra prominens
Spina scapulae
Margo axillaris scapulae
Plica axillaris posterior
Angulus medialis scapulae
Margo vertebralis scap
Acromion
Tuberculum majus hum.
Processus spinosus [Vertebra thoracalis XII]
Angulus inferior scapulae
Crista iliaca
Spina iliaca posterior superior
Os sacrum
Os coccygis
Trochanter majus
Tuber ischiadicum
Sulcus glutaeus

Semispinalis muscle—23 :49.

Exposed by removing the spinalis dorsi muscle and reflecting the longissimus dorsi muscle laterally.

Semispinalis dorsi muscle—23 :50.

Semispinalis cervicis muscle—23 :51. (Thoracic portion only.)

Multifidus muscle—23 :53.

Demonstrated by detaching the semispinalis muscle at its insertion and reflecting it laterally.

Rotatores muscle—23 :54.

Exposed by removing the multifidus muscle, guarding against injury to thoracic and lumbar nerves and vessels.

Rotatores longi muscle—23 :55.

Rotatores breves muscle—23 :56.

The following muscles are not so well developed in the back as in the neck:

Interspinalis muscles—23 :57.

Intertransversarii muscles—23 :58.

Intertransversarii mediales muscles—23 :60.

Intertransversarii laterales muscles—23 :59.

3. NERVES AND BLOOD VESSELS.

Posterior rami of thoracic nerves—69 :75.

Lateral cutaneous rami—69 :76.

Medial cutaneous rami—69 :77.

Posterior rami of lumbar nerves—70 :12.

Medial ramus—70 :13.

Lateral ramus—70 :14.

Posterior rami of sacral and coccygeal nerves—70 :18.

Posterior rami of intercostal arteries—49 :60.

Muscular rami—49 :62.

Medial cutaneous rami—49 :63.

Lateral cutaneous rami—49 :64.

Dorsal rami of the highest intercostal artery—48 :64.

Dorsal ramus of lumbar arteries—50 :10.

Dorsal ramus of intercostal veins—54 :57.

The lumbar veins also have dorsal tributaries from the back comparable to the dorsal rami of the lumbar arteries.

4. VERTEBRAL CANAL: BLOOD VESSELS AND MENINGES.

The contents of the vertebral canal may be exposed by cutting through the laminae of the vertebral arches close to the articular processes, dividing the ligamentum flava and removing the posterior wall of the vertebral canal.

Ligamenta flava—18 :40.

Supraspinous ligament—18 :44.

Interspinous ligaments—18 :43.

Arteries supplying the vertebral column:

Spinal ramus of posterior rami of intercostal arteries—49 :61.

Spinal ramus of lumbar arteries—50 :11.

Cavum epidurale—65 :42.

Dura mater spinalis—65 :40.

Filum durae matris spinalis—65 :41.

The following structures may be exposed by making a median incision through the dura, guarding against injury to the subjacent arachnoidea.

Cavum subdurale—65:43.
Pia mater spinalis—65:54.
Arachnoidea spinalis—65:44.
Cavum subarachnoideale—65:46.
Ligamentum denticulatum—65:55.

5. SPINAL CORD: NERVES, BLOOD VESSELS, AND SURFACE ANATOMY.

For the cervical part of the spinal cord see Head and Neck, IX:4.

a. Spinal nerves.

Thoracic nerves—69:74.
Lumbar nerves—70:10.
Sacral nerves—70:17.
Coccygeal nerves—70:17.
Cauda equina—68:74.
Anterior root—68:67.
Posterior root—68:68.
Filia radicularia—68:66.
Spinal ganglion—68:69.
Anterior ramus—68:70.
Posterior ramus—68:71.
Ramus meningeus—68:73. (Difficult to demonstrate.)

In demonstrating the remaining structures of the spinal cord, the spinal nerve trunks may be cut, the cord divided transversely at about the level of the first thoracic vertebra, and the cord, and its membranes removed from the vertebral canal.

b. Blood vessels of the spinal cord. (Usually difficult to demonstrate.)

Spinal rami of posterior rami of intercostal arteries—49:61.
Spinal rami of lumbar arteries—50:11.
Spinal ramus of iliolumbar artery—50:60.
Spinal rami of lateral sacral artery—50:63.
Internal spinal veins—55:2.
Posterior external spinal veins—55:1.
Anterior external spinal veins—54:70.
Intervertebral veins—54:69.

c. Surface anatomy of the spinal cord.

Thoracic part—58:23.
Lumbar part—58:24.
Lumbar enlargement—58:25.
Medullary cone—58:26.
Ventriculus terminalis—58:28.
Filum terminale—58:27.
Anterior median fissure—58:29.
Posterior median sulcus—58:30.
Anterior lateral culcus—58:31.
Posterior lateral sulcus—58:32.
Posterior intermediate sulcus—58:33.
(Anterior intermediate sulcus)—58:34.

Funiculi of the spinal cord—58:45.
Anterior funiculus—58:36.
Lateral funiculus—58:37.
Posterior funiculus—58:38.

6. SPINAL CORD: INTERNAL STRUCTURE.

Demonstrated by making transverse sections through the spinal cord at various levels, and in some instances requiring the aid of a hand lens.

a. Gray matter.

Central canal—58:40.
Central gray matter—58:41.
Anterior gray commissure—58:43.
Posterior commissure—58:44.
Gray columns—58:45.
Anterior column—48:46.
Lateral column—58:47.
Reticular formation—58:53.
Posterior column—58:48.
Neck of posterior column—58:49.
Apex of posterior column—58:50.
Gelatinous substance—58:51.

b. White matter.

Anterior white commissure—58:42.
Anterior funiculus—58:54.
Anterior cerebrospinal or pyramidal fasciculus—58:55.
Lateral funiculus—59:2.
Lateral cerebrospinal or pyramidal fasciculus—59:3.
Cerebellospinal fasciculus—59:4.
Posterior funiculus—59:7.
Fasiculus gracilis—59:8.
Fasiculus cuneatus—59:9.

VI. Articulations of the Thorax.

1. STERNOCOSTAL ARTICULATIONS—19:25.

Articular capsule—19:26.
Interarticular sternocostal ligament—19:27.
Radiate sternocostal ligaments—19:28.
Membrane of sternum—19:29.
Costoxiphoid ligaments—19:30.
Interchondral articulations—19:34.

2. SYNCHONDROSIS STERNALIS—7:49.

3. COSTOVERTEBRAL ARTICULATIONS—19:12.

a. Capitular articulations—19:13.

Articular capsules—19:14.
Radiate ligament of head of rib—19:15.
Interarticular ligament of head of rib—19:16.

b. Costotransverse articulations—19:17.

Articular capsules—19:18.
Ligament of neck of rib—19:20.
Anterior costotransverse ligament—19:21.
Posterior costotransverse ligament—19:22.
Lumbocostal ligament—19:23.
Costotransverse foramen—19:24.

4. ARTICULATIONS OF THE VERTEBRAL COLUMN.

For the ligaments in relation to the vertebral arches, see Thorax, V:4.

Anterior longitudinal ligament—18:46.
Posterior longitudinal ligament—18:47.
Intervertebral fibrocartilages—18:37.

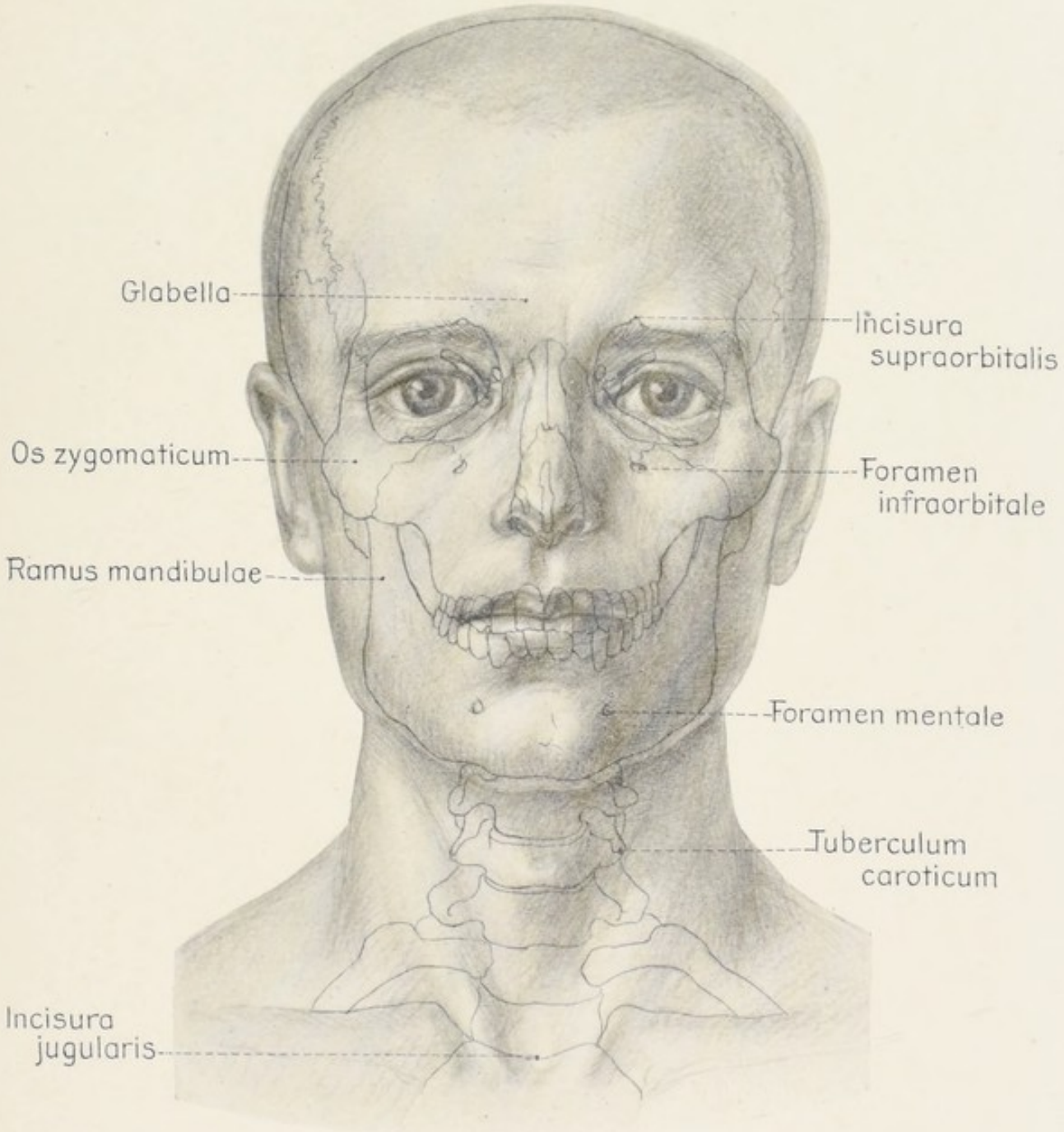
The following structures may be demonstrated by dividing the thorax at about the level of the fourth thoracic intervertebral disc, and making incisions through the disc:

Annulus fibrosus—18:38.
Nucleus puplosus—18:39.

HEAD AND NECK

PLATE V

Anterior aspect of the head and neck showing surface anatomy and surface projection of the bones of the cranium and cervical vertebrae.


Glabella
Incisura supraorbitalis
Os zygomaticum
Foramen infraorbitale
Ramus mandibulae
Foramen mentale
Tuberculum caroticum
Incisura jugularis

HEAD AND NECK

I. Structures in Relation to the Scalp and Temporal Region.

1. GENERAL CHARACTERISTICS OF CRANIUM.

a. Subdivisions of cranium.

Cranium—4:7.

For bones of the cranium see 7:65, 12:14.

Vertex—4:8.

Sinciput—4:9.

Forehead—4:10.

Occiput—4:11.

Temples—4:12.

Ear—4:13.

Auricles—4:14.

b. Regions of head—82:1. (Fig. 1 and pls. 11, 12.)

Frontal region—82:2.

Supraorbital region—82:3.

Parietal region—82:4.

Occipital region—82:5.

Temporal region—82:6.

Auricular region—82:7.

Mastoid region—82:8.

2. SCALP AND TEMPORAL REGIONS: SUPERFICIAL BLOOD VESSELS AND NERVES.

a. Frontal region.

Incisions for skin reflection: (*a*) median longitudinal from the glabella to the external occipital protuberance; (*b*) frontal over the vertex from the right to the left mastoid processes; (*c*) from a point on the latter incision just above the ear, downward and slightly anteriorly to the root of the zygomatic arch.

Supratrochlear nerve—66:22.

Supraorbital nerve—66:20.

Frontal artery—48:12.

Supraorbital artery—48:5.

Angular vein—53:71.

b. Temporal region.

Temporal branches of facial nerve—67:58.

Auriculotemporal nerve—67:16.

Zygomaticotemporal branch of zygomatic nerve—66:41.

Superficial temporal artery—47:36.

Frontal ramus—47:42.

Parietal ramus—47:43.

Superficial temporal veins—54:7.

c. Mastoid and occipital regions.

Posterior auricular nerve—67:52.

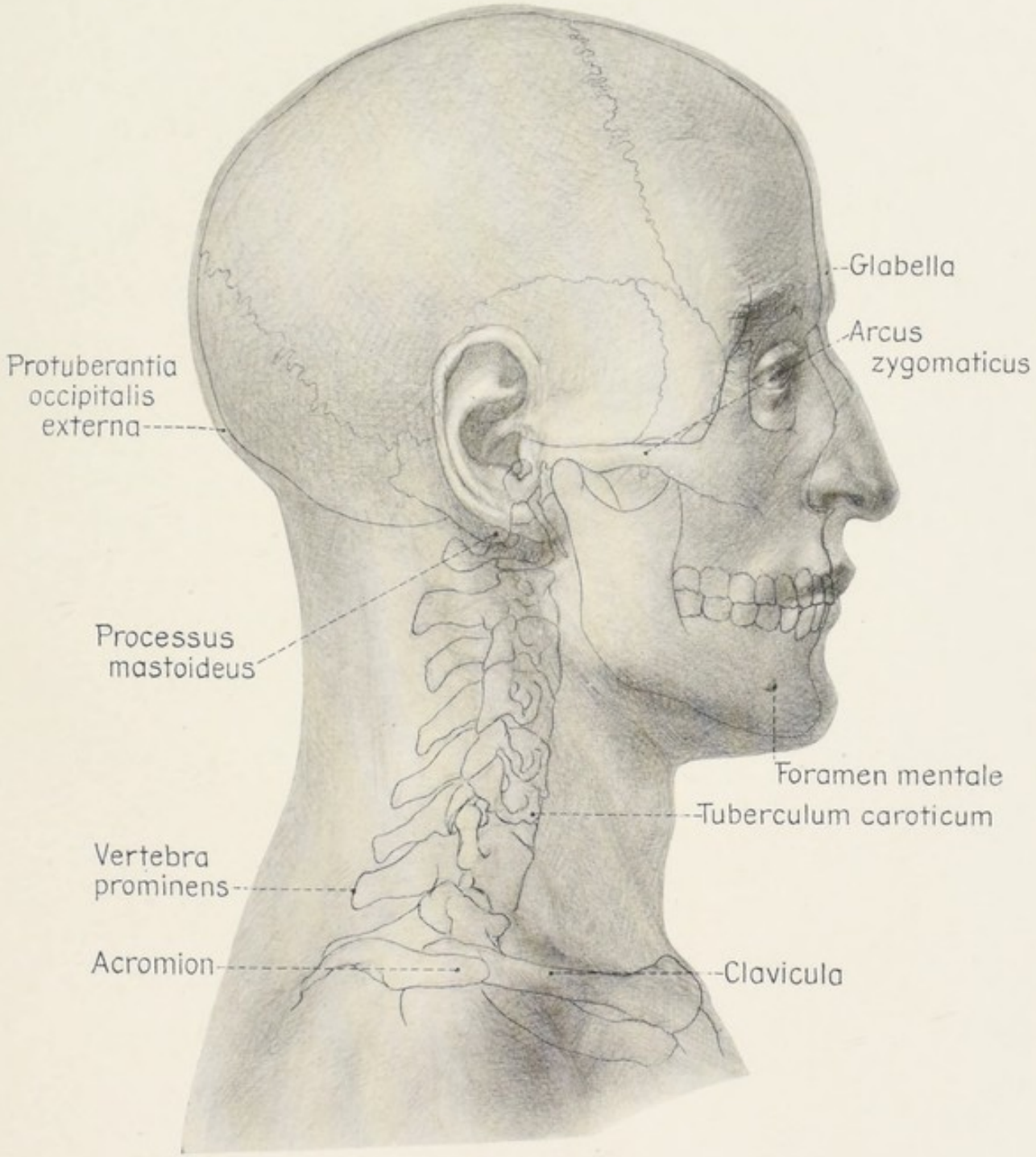
Occipital ramus**—67:33.

Posterior ramus of great auricular nerve**—69:12.

Lesser occipital nerve—69:10.

Plate VI

Lateral aspect of the head and neck showing surface anatomy and surface projections of the bones of the cranium, cervical vertebrae, and girdle of the superior extremity.


Glabella
Arcus zygomaticus
Protuberantia occipitalis externa
Processus mastoideus
Foramen mentale
Tuberculum caroticum
Vertebra prominens
Acromion
Clavicula

Great occipital nerve—69 :6.
Posterior auricular artery—47 :29.
Occipital artery—47 :22.
Posterior auricular vein—54 :21.
Occipital vein—54 :20.

3. SCALP: DEEPER STRUCTURES.

a. Muscles.

Epicranius muscle—24 :8.
Frontal muscle—24 :9.
Procerus muscle—24 :11.
Occipitalis muscle—24 :10.
Auricularis anterior muscle—24 :20.
Auricularis superior muscle—24 :21.
Auricularis posterior muscle—24 :22.
Galea aponeurotica—24 :42.
Pericranium—12 :16.

Exposed by dividing the galea aponeurotica by two incisions, about 4 cm. in length, intersecting each other at right angles at the vertex and reflecting the flaps, identifying at the same time the loose areolar connective tissue external to it.

b. Lymphatics.

Occipital lymph glands—56 :35.
Posterior auricular glands—56 :36.
Anterior auricular glands—56 :37.

4. AURICLE OR EXTERNAL EAR.

Lobule of the auricle—78 :33.
Tragus—78 :46.
Incisura intertragica—78 :49.
Incisura anterior—78 :45.
Concha of auricle—78 :43.
Cymba of concha—78 :44.
Cavity of concha—78 :45.
Helix—78 :35.
Crus helicis**—78 :36.
Spina helicis**—78 :37.
Cauda Helicis**—78 :38.
Anthelix—78 :39.
Crura anthelicis**—78 :41.
Fossa triangularis**—78 :40.
(Tuberculum auriculae)**—78 :50.
Fossa anthelix**—78 :59.
Eminentia conchae**—78 :60.
Eminentia scaphae**—78 :61.
Eminentia fossae triangularis**—78 :62.

The muscles and ligaments of the external ear—78 :67–74—may be exposed by removing the skin from the auricle.

II. Intracranial Structures in Relation to the Brain and Cranial Wall

1. STRUCTURES EXPOSED BY THE REMOVAL OF THE CALVARIA.

The calvaria may be removed by: (*a*) making a median longitudinal incision through the galea aponeurotica and pericranium, extending from the glabella to the external occipital protuberance, and reflecting the two flaps laterally to the level of the temporal lines; (*b*) detaching the temporal muscle and temporal fascia from the bone and completing the reflection of the galea aponeurotica, pericranium, temporal fascia, and muscle downward to the level of the ears; (*c*) with a saw making a cut along the largest horizontal circumference of the cranium passing just superior to the glabella anteriorly and a little above the external occipital protuberance posteriorly, sawing through the outer table of the skull only; (*d*) with a mallet and chisel splitting the inner table of the bone along the line of the preceding cut, inserting a hook or other instrument into the cut in front and forcibly wrenching off the skull cap.

Dura mater of the brain—65 :33.

Middle meningeal artery—47 :50.

Arachnoideal granulations—65 :53.

The following structures may be exposed: (*a*) by making two sagittal incisions through the dura mater, one on each side of the superior sagittal sinus, along its entire length anteriorly and posteriorly; (b) from the middle of each of the preceding incisions, cutting lateralward through the dura mater down to the cut margins of the skull and reflecting the four flaps of the dura mater.

Subdural cave—65 :43.

Arachnoid of the brain—65 :45.

Pia mater of the brain—65 :67.

Venae cerebri—53 :41.

Superior sagittal sinus—53 :19.

Its interior may be exposed by an incision extending throughout its entire length.

Falx cerebri—65 :34.

2. STRUCTURES EXPOSED BY THE REMOVAL OF THE BRAIN.

a. Roots of cerebral nerves.

As preliminary to the removal of the brain[3] the roots of the cerebral nerves may be exposed by: (*a*) detaching the falx cerebri from the crista galli and pulling it backward; (*b*) raising the frontal lobes of the brain from the floor of the cranium (facilitated by letting the head hang backward over a head block) and detaching the olfactory bulbs from the lamina cribrosa of the ethmoid bone and thus at the same time severing the olfactory nerves; (*c*) dividing (preferably with a scissors) the optic nerves, internal carotid arteries, infundibulum oculomoter nerves and the trochlear nerves (the latter being found in relation to the free margin of the tentorium cerebelli); (*d*) exposing the tentorium from the middle cranial fossae, dividing the tentorium along its attachment to the superior angle of the temporal bone on each side; and (*e*) identifying and dividing in succession the following cerebral nerves:

Trigeminal nerve—66 :11.

Abducent nerve—67 :46.

[3] A second method for the removal of the brain which may be adopted at stage (*d*) in the above procedure is to displace the temporal lobes of the cerebrum, dividing the mid-brain, removing the cerebrum and studying the structures thus exposed within the base of the cranium. Next divide the tentorium along its attached border, study the exposed surface of the cerebellum and then proceed as in stages (*e*) and (*f*). The former method is the one usually adopted in an autopsy; the latter method is perhaps more instructive, although it does not leave the brain intact.

Facial nerve—67 :47.
Acoustic nerve—67 :65.
Glossopharyngeal nerve—68 :8.
Vagus nerve—68 :22.
Accessory nerve—68 :57.
Hypoglossal nerve—68 :60.

(*f*) The detachment of the brain may then be completed by dividing the vertebral arteries and spinal cord just below the level of the foramen magnum and removing the organ.

b. General structural characteristics of the exposed base of the cranium and related dura mater.

The following structures may be identified by inspection:

Anterior, middle, and posterior cranial fossae—12 :29–31.
Crista galli—10 :38.
Small wing of the sphenoid bone—8 :41.
Anterior clinoid process—8 :44.
Opthalmic artery—47 :70.
Posterior clinoid process—8 :31.
Diaphragm sellae—65 :37.
Cisterna interpeduncularis—65 :51.
Falx cerebellum—65 :36.
Great cerebral veins—53 :48.
Basal vein—53 :51.

The foramina transmitting the cerebral nerves may be demonstrated in a skeletal preparation of the skull.

c. Sinuses of the dura mater—53 :13.

In opening and demonstrating the following sinuses, the dura should be left *in situ* in the floor of the cranium.

Transverse sinus—53 :14.
Confluence of the sinuses—53 :15.
Occipital sinus—53 :17.
Superior sagittal sinus—53 :19.
Inferior sagittal sinus—53 :20.
Straight sinus—53 :21.
Inferior petrosal sinus—53 :22.
Superior petrosal sinus—53 :23.
Cavernosus sinus—53 :24. (Its walls and contents should be left intact.)
Anterior and posterior intercavernosus sinuses—53 :25–26.
Circular sinus—53 :28.
Sphenoparietal sinus—53 :28.
Basilar plexus—53 :18.
Diploic veins—53 :29–33.
Emissary veins—53 :34–37.

d. Arteries.

The cut ends of the following arteries may be identified by inspection of the floor of the cranium and the base of the brain, and their osseous relations in the cranium demonstrated in a skeletal preparation of the skull.

Internal carotid artery—47 :68.
Vertebral artery—48 :21.
Middle meningeal artery—47 :50.

c. Hypophysis—62:30.

May be isolated for study by detaching the diaphragma sellae and removing the hypophysis from the sella turcica.

Anterior and posterior lobes—62:31, 32.

The relations of its lobes may be further examined by dividing the hypophysis in the sagittal plane.

To retain the structure in the floor of the cranium for later study the cranial cavity may be filled with tow or gauze soaked with preservative fluid, the calvarium replaced and the scalp flaps stitched in position over it.

III. Structures in the Lateral and Anterior Regions of the Neck.

1. SURFACE ANATOMY. (Pls. 5, 6.)

Hyoid bone—12:10.
Greater cornua—12:13.
Laryngeal prominence—36:19.
Thyreoid cartilage—36:21.
Cricoid cartilage—36:35.
Trachea—37:41.
Carotid tubercle of the 6th cervical vertebra—6:42.
Jugular notch—7:54.
Clavicle—13:59.
Mandible—11:60. (Its inferior margin.)
Mastoid process—8:78.
Sternocleidomastoid muscle—24:55.

2. REGIONS OF THE NECK. (Fig. 1 and pls. 11, 12.)

Anterior regions of the neck—82:24.
Submental region—82:25.
Hyoid region—82:26.
Subhyoid region—82:27.
Laryngeal region—82:28.
Thyreoid region—82:29.
Suprasternal region—82:30.
Jugular fossa—82:31.
Submaxillary region—82:32.
Carotid fossa—82:33.
Sternocleidomastoid region—82:34.
Lesser supraclavicular fossa—82:35.
Lateral regions of the neck—82:36.
Larger supraclavicular fossa—82:37.
Omoclavicular triangle—82:38.
Posterior regions of the neck—82:39.
Nuchal region—82:40.

3. SUPERFICIAL FASCIA, PLATYSMA, VEINS, AND CUTANEOUS NERVES.

Incisions for skin reflection: (*a*) in the middle line from the chin to the manubrium; (*b*) from the middle of the superior margin of the manubrium obliquely upward and backward along the sternocleidomastoid muscle to the mastoid process; (*c*) from the middle of the superior margin of the manubrium laterally along the clavicle to the acromion.

Superficial fascia—23:36.
Platysma muscle—24:54.

The following structures may be exposed by reflecting the platysma upward, confining the dissection only to the superficial region of the neck and thus guarding against disturbance of the deeper structures listed in the following sections.

External jugular vein—54:19.
Posterior auricular vein—54:21.
Anterior jugular vein—54:22.
Superficial cervical lymph glands—56:41.
Lesser occipital nerve—69:10.
Great auricular nerve—69:11.
Cutaneous nerve of the neck—69:14.
Superior rami—69:15.
Inferior rami—69:16.
Supraclavicular nerves—69:17.
Anterior supraclavicular nerves—69:18.
Middle supraclavicular nerves—69:19.
Posterior supraclavicular nerves—69:20.
Cervical branch of the facial nerve—67:62.

4. CERVICAL FASCIA AND STERNOCLEIDOMASTOID MUSCLE.

Cervical fascia—24:70.

The various subdivisions and certain deeper relations of the fascia can as yet not be completely exposed. In the region of the sternum the superficial or investing layer of the cervical fascia divides into two layers and encloses a suprasternal space (sometimes called the space of Burns) which may be exposed by making a transverse incision through the fascia immediately above the sternum and a second incision about 2 cm. in length along the anterior border of each sternocleidomastoid muscle, reflecting the fascial flap upwards and demonstrating the areolar tissue, content of the space and the lower parts of the anterior jugular veins and their anastomoses.

Sternocleidomastoid muscle—24:55.

5. POSTERIOR TRIANGLE OF THE NECK.

The following contents of the posterior triangle of the neck may be exposed by carefully removing the cervical fascia, noting its relations to the omohyoid muscle and the chain of deep cervical lymph glands along the posterior margin of the sternocleidomastoid muscle and confining the dissection to the triangle and its two subdivisions. All nerves and vessels must be carefully noted and guarded during the progress of the dissection of this complex region.

a. Occipital triangle.

Occipital artery—47:22.
Transverse cervical artery—48:67.
Occipital vein—54:20.
Transverse cervical veins—54:28.
Supraclavicular nerves—69:17–20.
Accessory nerve—68:57.
Muscular rami of the cervical nerves to the trapezius and levator scapulae muscles.
Superior deep cervical lymph glands—56:42.

b. Supraclavicular triangle.

This triangle has also been designated the subclavius triangle. Cf. omoclavicular trigone—82:38.

Inferior belly of the omohyoid muscle—24:59.
Prevertebral fascia—24:71.

The following structures are exposed by removing the prevertebral fascia.

Transverse cervical artery—48:67.
Transverse scapular artery—48:60.

Slightly inferior to the level of the triangle, strictly speaking.

Subclavian artery—48:20. (Its third part.)
External jugular vein—54:19.
Anterior jugular vein—54:22.
Transverse cervical veins—54:28.
Transverse scapular vein—54:25.
Subclavian vein—54:26.

Slightly inferior to the level of the triangle, strictly speaking.

Inferior deep cervical lymph glands—56:43.

c. Supraclavicular part of the brachial plexus—69:25.

Posterior thoracic nerves—69:26.
Dorsal scapular nerve—69:27.
Long thoracic nerve—69:28.
Anterior thoracic nerves—69:29.
Subclavian nerve—69:30.
Suprascapular nerve—69:31.
Thoracodorsal nerve—69:33.
Axillary nerve—69:34.

d. Muscles in floor of posterior triangle.

Splenius capitis muscle—23:24.
Levator scapulae muscle—23:20.
Scalenus medius muscle—24:67.
Scalenus posterior muscle—24:68.

6. ANTERIOR TRIANGLE.

The following structures should be dissected with reference to both their continuity throughout the anterior triangle as a whole as well as their relations to its three subdivisions (the submaxillary, carotid, and muscular triangles), removing at the same time the cervical fascia but guarding against injury to nerves.

a. Submaxillary or digastric triangle.

The following structures may be identified with very little if any dissection:

Submaxillary lymph glands—56:38.
Submaxillary gland—31:11.
External maxillary artery—47:13.
Submental artery**—47:16.
Mylohyoid ramus of the internal maxillary artery**—47:48.
Anterior facial vein—53:70.
Lingual vein**—53:6.

Hypoglossal nerve—68 :60.
Mylohyoid nerve—67 :32.
Mylohyoid muscle—24 :51.
Hyoglossus muscle—32 :3.

By making a short vertical slit in the hyoglossus muscle between the hypoglossal nerve and the tendon of the digastric muscle, the lingual artery may be exposed at a point where it is frequently ligated.

b. Carotid triangle.

Common carotid artery—46 :59.

In determining the relations of the carotid artery to the carotid sheath of the cervical fascia it will be observed that throughout the greater part of their course the structures within the carotid sheath together with the cervical part of the sympathetic nerve trunk are strictly speaking internal to the sternocleidomastoid muscle rather than within the carotid triangle, and that their exposure consequently involves a lateral retraction of this muscle.

External carotid artery—46 :60.
Superior thyreoid artery—46 :61.
Hyoid ramus—46 :62.
Sternocleidomastoid ramus—46 :63.
Superior laryngeal artery—46 :64.
Lingual artery—47 :8.
External maxillary artery—47 :13.
Sternocleidomastoid artery—47 :21.
Occipital artery—47 :22.
Ascending pharyngeal artery—47 :4.
Internal carotid artery—47 :68.
Internal jugular vein—52 :69.
Lingual vein—53 :6.
(Superior thyreoid veins)—53 :10.
Common facial vein—53 :69.
Anterior facial vein—53 :70.
Posterior facial vein—54 :6.
Hypoglossal nerve—68 :60.
Descending ramus—68 :61.
Ansa hypoglossi—68 :62.
Thyreohyoid ramus—68 :63.
Accessory nerve—68 :57. (Its external ramus—68 :59.)
Vagus nerve—68 :22.
Superior laryngeal nerve—68 :30.
External ramus—68 :31.
Internal ramus—68 :32.
Cervical part of the sympathetic trunk—71 :34.
Superior cervical ganglion—71 :35.
External carotid nerves—71 :45.
External carotid plexus—71 :46.
Superior deep cervical lymph glands—56 :42.
Larynx—36 :18. (Identified without dissection.)
Pharynx—32 :99. (Identified without dissection.)
Glomus caroticum—38 :30.

c. Muscular triangle.

Sternohyoid muscle—24:56.
Sternothreoid muscle—24:60.
Nerves to the sternothyreoid and sternohyoid muscles.
External ramus of the superior laryngeal nerve—68:31.
Inferior laryngeal nerve—68:40.

The following structures should be identified without dissection:

Larynx—36:18.
Trachea—37:41.
Thyreoid gland—38:22.
Oesophagus—32:66.

7. STRUCTURES IN RELATION TO THE ANTERIOR MEDIAN LINE OF THE NECK.

The relations of the following structures should be observed with very little, if any, dissection:

a. Suprahyoid region.

Platysma muscle—24:54. (Already exposed, III:3.)
Superficial fascia—23:36.
Anterior bellies of the digastric muscles—24:48.

The submental triangle and its contents are situated between them.

Mylohyoid muscles—24:51. (Separated by a raphe.)

b. Infrahyoid region.

Hyothyreoid membrane—36:34.
Thyreoid cartilage—36:21.
Cricothyreoid ligament—36:45.
Cricoid cartilage—36:35.
Cricothyreoid muscles—36:78.
Trachea—37:41.
Isthmus of thyreoid gland—38:23.
(Pyramidal lobe of thyreoid gland)—38:24.
Inferior thyreoid veins—52:52.

8. MUSCLES OF THE NECK: SECOND AND THIRD LAYERS.

Digastric muscle—24:47.
Stylohyoid muscle—24:50.
Omohyoid muscle—24:57.
Sternohyoid muscle—24:56.
Sternothyreoid muscle—24:60.
Thyreohyoid muscle—24:61.

9. STERNOCLAVICULAR ARTICULATION—19:52.

May be exposed by dividing the sternal and clavicular heads of the sternocleidomastoid muscle and reflecting the muscle toward its insertion.

Sternoclavicular ligament—19:55.
Interclavicular ligament—19:57.
Costoclavicular ligament—19:56.
Articular capsule—19:53.
Articular disc—19:54.

10. ROOT OF THE NECK.

a. Muscles.

The exposure of the scalene muscles may be gradually completed as the following nerves and vessels are demonstrated.

Anterior scalene muscle—24:66.
Middle scalene muscle—24:67.
Posterior scalene muscle—24:68.

b. Blood vessels and lymphatics.

Many of the following structures have already been partly exposed in preceding dissections and are here re-listed with more especial reference to their relations to the root of the neck.

Subclavian artery—48:20.

In demonstrating the following blood vessels care should be taken to guard against injury to the cervical nerves and sympathetic trunk listed under subhead *c*.

Vertebral artery—48:21.
Internal mammary artery—48:34.
Thyreocervical trunk—48:48.
Inferior thyreoid artery—49:49.
Ascending cervical artery—48:55.
Superficial cervical artery—48:59.
Transverse scapular artery—48:60.
Costocervical trunk—48:62.
Highest intercostal artery—48:63.
Deep cervical artery—48:66.
Transverse cervical artery—48:67.
Right and left innominate veins—52:51.
Inferior thyreoid veins—52:52.
Inferior laryngeal vein**—52:55.
Lowest thyreoid vein—52:53.
Unpaired thyreoid plexus**—52:54.
Vertebral vein—52:63.
Deep cervical vein**—52:64.
Internal jugular vein—52:69.
Inferior bulb of the jugular vein—52:70.
Subclavian vein—54:26.
Thoracoacromial vein—54:27.
Transverse cervical veins—54:28.
Thoracic duct—56:25.
Right lymphatic duct—56:24.

c. Nerves.

Phrenic nerve—69:21.
Vagus nerve—68:22.
Cervical sympathetic trunk—71:34. (Its inferior part.)
Middle cervical ganglion—71:60.
Inferior cervical ganglion—71:62.
Superior cardiac nerve—71:59.
Middle cardiac nerve—71:61.
Inferior cardiac nerve—71:64.
Ansa subclavia—71:63.

d. Remaining structures at the root of the neck.

Structures identified without dissection.

Summit of pleura—38 :5.
Trachea—37 :41.
Oesophagus—32 :66.

11. CERVICAL PLEXUS AND VISCERA OF THE NECK.

Cervical plexus—69 :9.

The following organs should be left *in situ* for later reference:

Thyreoid gland—38 :22.
Isthmus—38 :23.
(Pyramidal lobe)—38 :24.
Right and left lobes—38 :25.
(Accessory thyreoid glands)—38 :28. (Also designated parathyreoid glands.)
Trachea—37 :41.
Tracheal cartilages—37 :42.
Membranous wall—37 :44.
Cervical part of oesophagus—32 :67.

IV. Back of the Head and Neck.

1. REGIONS OF THE BACK OF THE HEAD AND NECK. (Pl. 12.)

Parietal region—82 :4.
Occipital region—82 :5.
Posterior region of the neck—82 :39.
Nuchal region—82 :40.
Fovea nuchae—83 :1.

2. FASCIA, SUPERFICIAL NERVES AND VESSELS.

Incisions for skin reflection: (*a*) from the external occipital protuberance to the spine of the vertebra prominens; (*b*) from the spine of the vertebra prominens laterally on each side to the medial border of the acromion; (*c*) from the external occipital protuberance laterally on each side for about 6 cm.

Superficial fascia—23 :36.
Great occipital nerve—69 :6.
Small occipital nerve—69 :10.
Occipital vein—54 :20.
(Third occipital nerve)—69 :7.
Posterior rami of cervical nerves IV–VIII—69 :2.
Posterior ramus of great auricular nerve—69 :12.

For the relation of the first cervical nerve and vertebral artery to the suboccipital space see end of following section.

3. MUSCLES IN RELATION TO THE BACK OF THE NECK.

Trapezius muscle—23 :15. (Its cervical part only.)
Levator scapulae muscle—23 :20.

May be exposed by dividing the trapezius muscle at its origin from the superior nuchal line and external occipital protuberance, and cutting through the muscle about 1 cm. from the cervical vertebral spines and reflecting the cervical part of the muscle laterally, guarding against injury to underlying structures.

The following structures are either internal to the levator scapulae muscle or in relation to the superior margin of the scapula.

Descending ramus of the transverse cervical artery—48 :69.

Dorsal scapular nerve—69 :27.

Inferior belly of omohyoid muscle—24 :59.

Transverse scapular artery—48 :60.

Suprascapular nerve—69 :31.

Rhomboideus minor muscle—23 :19. (Its origin only.)

In demonstrating the following structures the rhomboideus minor muscle should be detached at its origin and reflected laterally.

Fascia nuchae—24 :6.

Ligamentum nuchae—18 :45.

Serratus posterior superior muscle—23 :22.

In demonstrating the following two muscles, the serratus posterior superior muscle should be detached at its origin and reflected laterally.

Splenius capitis muscle—23 :24.

Splenius cervicis muscle—23 :23.

The following muscles are exposed by dividing the attachments of the splenius capitis and splenius cervicis muscles close to the spines of the vertebrae and reflecting the muscles.

Iliocostalis cervicis muscle—23 :29.

Longissimus capitis muscle—23 :44.

Spinalis cervicis muscle—23 :47.

Spinalis capitis muscle—23 :48.

In demonstrating the following two muscles the longissimus capitis should be detached at its origin and reflected toward its insertion.

Semispinalis cervicis muscle—23 :51.

Semispinalis capitis muscle—23 :52.

Multifidus muscle—23 :53.

May be exposed by detaching the semispinalis capitis muscle from the transverse processes of the cervical vertebrae and reflecting the muscle toward its insertion. Guard the vessels and nerves internal to the muscle.

Rotatores muscles—23 :54.

May be exposed by removing the multifidus muscle.

Rotatores longi muscles—23 :56.

Rotatores breves muscles—23 :57.

Interspinales muscles—23 :58.

Rectus capitis posterior major muscle—23 :64.

Rectus capitis posterior minor muscle—24 :1.

Obliquus capitis superior muscle—24 :3.

Obliquus capitis inferior muscle—24 :4.

The following structures are in relation to the suboccipital space or triangle formed by rectus capitis posterior major and the oblique capitis superior and inferior muscles.

Suboccipital nerve—69 :5. (Its posterior ramus.)

Vertebral artery—48 :21. (Its third part only.)

Posterior arch of atlas—6 :59.

4. DEEPER BLOOD VESSELS AND NERVES OF THE BACK OF THE NECK.

For the more superficial vessels and nerves see I:2*c*.

Occipital artery—47:22.
- Muscular rami**—47:25.
  - Ramus descendens**—47:26.
- Mastoid ramus**—47:23.
- Auricular ramus**—47:24.
- Occipital rami**—47:28.

Ascending cervical artery—48:55.
Deep cervical artery—48:66.
Occipital vein—54:20.
- Mastoid emissary vein—53:35.

Deep cervical vein—52:64.
Posterior rami of cervical nerves—69:2.
- Medial rami—69:3.
- Lateral rami—69:4.

V. Face and Frontal Region of the Head.

1. SURFACE ANATOMY. (Pls. 5, 6.)

Glabella—10:21.
Supraorbital margin of frontal bone—10:9.
Infraorbital margin of maxillary bone—10:74.
Zygomatic arch—12:40.
Temporal fossa—12:39.
Ramus of the mandible—11:72.
Body of the mandible—11:61.
Fossa retromandibularis—82:22.
Nose—4:23.
- Dorsum—4:24.
- Apex—4:25.
- Ala—4:26.
- Septum—35:39.
- Nares—35:37.

Mouth—4:27.
- Superior and inferior lips—4:30, 31.
- Rima oris—4:32.
- Angle of the mouth—30:38.
- Nasolabial sulcus—4:28.
- Cheek—4:36.
- Chin—4:38.
- Mentolabial sulcus—4:37.

Eye—4:16.
- Superior and inferior eyelids—4:17, 18; 75:12, 13.
- Rima palpebrarum—4:19, 75:16.
- Medial and lateral palpebral commissures—75:17, 18.

Angulus oculi medialis and lateralis—7':19, 20.
Bulbus oculi—4:20.
Infrapalpebral sulcus—4:22.
Supercilium—4:21.
Anterior and posterior palpebral surfaces—75:14, 15.

Anterior and posterior palpebral margins—75:21, 22.
Tarsal glands—75:27. (Their openings only.)
Sebum palpebrale—75:28.
Tunica conjunctive palpebrarum—75:35.
Tunica conjunctive oculi—75:34.
Fornix conjunctive superior and inferior—75:36, 37.
Lacus lacrimalis—75:47.
Caruncula lacrimalis—75:33.
Plica semilunares conjunctivae—75:32.
Papilla lacrimalis—75:50.
Puncta lacrimalia—75:48.
Ductus lacrimales—75:49.

2. REGIONS OF THE FACE—82:9–21. (Fig. 1 and pl. 11.)

Nasal region—82:10.
Oral region—82:11.
Superior and inferior labial regions—82:16, 17.
Mental region—82:14.
Orbital region—82:15.
Superior and inferior palpebral regions—82:16, 17.
Infraorbital region—82:18.
Infraorbital region—82:20.
Buccal region—82:19.
Zygomatic region—82:20.
Parotideomasseteric region—82:21.
Retromandibular fossa—82:22.

3. FASCIA AND PAROTID GLAND.

Incisions for skin reflection: (*a*) median longitudinal from the forehead to the tip of the chin; (*b*) from the anterior median line transversely at the level of the rima palpebrarum, encircling the eye, and extending posteriorly to the ear; (*c*) transversely from the angle of the mouth to the posterior border of the ramus of the mandible.

Parotid gland—31:13.

May be exposed by removing the parotideomasseteric fascia, but guarding all nerves from injury.

Retromandibular process—31:14.
Accessory parotid gland—31:15.
Parotid duct—31:16.

4. SUPERFICIAL NERVES OF THE FACE.

Anterior ramus of the great auricular nerve**—69:13.

BRANCHES OF THE FACIAL NERVE:

Exposed by carefully removing the parotid gland, a part at a time. The exit of the facial nerve from the stylomastoid foramen may be exposed by cutting away (with saw and chisel) the free projecting part of the mastoid process, guarding against injury to the posterior auricular nerve.

Parotid plexus—67:57.
Temporal rami—67:58.
Zygomatic rami—67:59.
Buccal rami—67:60.
Marginal mandibular ramus—67:61.
Digastric ramus—67:54.
Stylohyoid ramus—67:55.

Branches of the Ophthalmic Division of the Trigeminal Nerve:

Supraorbital nerve—66 :20.
Frontal ramus—66 :21. (Of the frontal nerve.)
Supratrochlear nerve—66 :22.
Anterior nasal rami of the nasociliary nerve**—66 :28.
Superior and inferior palpebral rami of the infratrochlear nerve**—66 :34, 35.

Branches of the Maxillary Division of the Trigeminal Nerve:

Zygomaticotemporal ramus of the zygomatic nerve—66 :41.
Zygomaticofacial ramus of the zygomatic nerve—66 :42.
Inferior palpebral rami of the infraorbital nerve—66 :52.
External nasal rami of the infraorbital nerve—66 :53.
Superior labial rami of the infraorbital nerve—66 :55.

Branches of the Mandibular Division of the Trigeminal Nerve:

Buccinator nerve—67 :13.
May be identified at this stage of the dissection through its anastomoses with the facial nerve.
Auriculotemporal nerve—67 :16.
Mental nerve—67 :33.

5. SUPERFICIAL BLOOD VESSELS OF THE FACE.

Branches of the External Carotid Artery:

Superficial temporal artery—47 :36.
Parotid rami—47 :37.
Transverse artery of face—47 :38.
Anterior auricular rami—47 :39.
Zygomaticoorbital artery—47 :40.
Middle temporal artery—47 :41.
Internal maxillary artery—47 :44. (Its origin only.)
External maxillary artery—47 :13.
Inferior labial artery—47 :18.
Superior labial artery—47 :19.
Angular artery—47 :20.
Posterior facial vein and its tributaries—54 :6–9, 13, 14.
Anterior facial vein and its tributaries—53 :70–77, 54 :1–5.

6. MUSCLES OF THE FACE AND FRONT OF HEAD.

Platysma muscle—24 :54.
Frontalis muscle—24 :9.
Procerus muscle—24 :11.
Orbicularis oculi muscle—24 :16.
Pars palpebralis—24 :17.
Pars orbitalis—24 :18.
Pars lacrimalis—24 :19.
Nasalis muscle—24 :12.
Pars transversa—24 :13.
Pars alaris—24 :14.
Depressor septi nasi muscle—24 :15.
Orbicularis oris muscle—24 :23.
Quadratus labii superioris muscle—24 :28.
Caput zygomaticum—24 :29.
Caput infraorbitale—24 :30.
Caput angulare—24 :31.

Zygomatic muscle—24:27.
Risorius muscle—24:26.
Triangularis muscle—24:24.
Quadratus labii inferioris muscle—24:32.
Caninus muscle—24:33.
Buccinator muscle—24:34.
Buccopharyngeal fascia—24:43.
Incisivi labii superioris and inferioris muscles—24:35, 36.

VI. Structures in Relation to the Temporal and Infratemporal Fossae.

1. FASCIA, MUSCLES, AND VESSELS.

Temporal fascia—24:45.
Zygomatic and temporal rami of the facial nerve—67:59, 58.
Zygomaticofacial and zygomaticotemporal rami of the zygomatic nerve—66:42, 41.
Middle temporal artery—47:41.
Masseter muscle—24:38.

The following nerve and artery may be exposed as they pass through the mandibular notch by detaching the temporal fascia from the zygomatic arch, with a saw and bone forceps dividing the zygomatic arch immediately anterior and posterior to the origin of the masseter muscle (the anterior saw-cut being made obliquely downward and anteriorly connecting the anterior ends of the superior and inferior margins of the arch), and carefully reflecting the detached segment of the zygomatic arch and masseter muscle (the dissection may be complicated by a union of the masseter and temporal muscles).

Masseter nerve—67:9.
Masseteric artery—47:54.
Temporal muscle—24:39.

Exposed by dividing the masseteric nerve and artery and completing the reflection of the masseter muscle toward its insertion.

The deeper structures of the temporal fossa are demonstrated by removing the coronoid process of the mandible by a cut extending from the middle of the incisura mandibulae downward and anteriorly to the junction of the anterior margins of the coronoid process and ramus of the mandible (making the incision partially with a saw and completing the division with a bone forceps), reflecting the coronoid process and the attached temporal muscle upward (guarding at the same time against cutting the buccinator nerve), and with the handle of a scalpel detaching the deeper portion of the temporal muscle at its origin.

Anterior and posterior deep temporal nerves—67:11, 12.
Anterior and posterior deep temporal arteries**—47:56, 55.
Median temporal artery—47:41.
Zygomaticotemporal branch of the zygomatic nerve**—66:41.

The following structures in the infratemporal fossa may be more fully exposed by removing a segment of the ramus of the mandible. To this end two incisions may be made, one through the neck of the condyloid process of the mandible and a second transversely through the ramus of the mandible immediately superior to the level of the mandibular foramen (locating the level of the foramen by inserting the handle of a scalpel between the ramus and the subjacent structures and carrying it downwards until its progress is arrested by the vessels and nerves entering the foramen). In the case of both incisions the cut should be made through the lateral table of the bone with a saw and the incision completed with a bone

forceps; the isolated segment of the mandicular ramus is removed and the subjacent nerves, vessels and muscles exposed.

External pterygoid muscle—24:40.
Internal pterygoid muscle—24:41.
Buccinator muscle—24:34.
Buccopharyngeal fascia—24:43.
Pterygomandibular raphe—32:52.
Internal maxillary artery—47:44. (Its first and second parts.)
Deep auricular artery**—47:45. (Its origin only.)
Anterior tympanic artery**—47:46. (Its origin only.)
Inferior alveolar artery—47:47.
Mylohyoid ramus—47:48.
Middle meningeal artery—47:50.
(Accessory menigeal ramus)—47:51.
Masseteric artery—47:54.
Posterior and anterior deep temporal artery—47:55, 56.
Pterygoid rami**—47:57.
Buccinator artery**—47:58.
Posterior superior alveolar artery—47:59.

The following tributaries of the posterior fascial vein are seldom well enough preserved to be satisfactorily demonstrated by dissection:

Articular mandibular veins**—54:10.
Stylomastoid vein**—54:12.
Pterygoid plexus—54:13.
Transverse facial vein**—54:13.

2. MANDIBULAR ARTICULATION—19:35.

Articular capsule—19:36.
Temporomandibular ligament—19:38.
Sphenomandibular ligament—19:39.
Stylomandibular ligament—19:40.
Articular disc—19:37.

Exposed by removing the temporomandibular ligament.

3. NERVES.

The demonstration of the following nerves may be completed by disarticulating the condyloid process and reflecting it together with the external pterygoid muscle anteriorly, guarding at the same time against cutting the auriculotemporal nerve.

Mandibular nerve—67:6.
Spinosus nerve—67:7.
Masticator nerve—67:8.
Masseteric nerve—67:8.
Anterior and posterior deep temporal nerves—67:11, 12.
Buccinator nerve—67:13.
External pterygoid nerve—67:14.
Internal pterygoid nerve—67:15.
Auriculotemporal nerve—67:16.
Nerve of the external auditory meatus**—67:17.
Ramus to the tympanic membrane**—67:8.
Lingual nerve—67:23.
Inferior alveolar nerve—67:32.
Mylohyoid nerve—67:32.
Chorda tympani—67:64.

4. MANDIBULAR CANAL—12:3.

May be exposed by removing (by means of a saw, chisel, and bone forceps) the outer compact layer of the mandible.

Inferior alveolar artery—47:47.
Mylohyoid ramus—47:48.
Mental artery—47:49.
Inferior alveolar nerve—67:28.
Inferior dental plexus—67:29.
Inferior dental rami—67:29.
Inferior gingival rami—67:31.
Mylohyoid nerve—67:32.
Mental nerve—67:33.
Mental rami—67:33.
Mental rami—67:34.
Inferior labial rami—67:35.

VII. Submaxillary Region.

1. SUPERFICIAL STRUCTURES IN THE SUBMAXILLARY REGION.

With the exception of the following structures the more superficial structures in this region have already been listed in connection with the submaxillary or digastric triangle, III:6*a*.

Digastric muscle—24:47–49.
Stylohyoid muscle—24:50.
Submaxillary gland—31:11. (Its superficial part only.)

2. DEEPER STRUCTURES IN THE SUBMAXILLARY REGION.

Mylohyoid muscle—24:51.

Exposed by dividing the anterior belly of the digastric muscle near its attachment to the mandible, sawing through the mandible slightly lateral to the median plane on each side (so as to leave intact the attachments of the geniohyoid and genioglossus muscles), and everting the inferior border of the lateral part of the mandible.

Lingual nerve—67:23.

May be exposed by dividing the mylohyoid muscle slightly below its origin from the mylohyoid line of the mandible and along the median raphe, and reflecting the muscle downward over the hyoid bone, guarding at the same time against cutting the mucous membrane of the mouth.

Sublingual nerve**—67:26.
Lingual rami**—67:27.
Hypoglossal nerve—68:60.
Lingual rami**—68:64.
Submaxillary ganglion—67:43.
Rami communicating with the lingual nerve—67:44.
Submaxillary rami—67:45.
Glossopharyngeal nerve—68:8.
Submaxillary gland—31:11. (Its deep part.)
Submaxillary duct—31:12.
Sublingual gland—31:8.
Major and minor sublingual ducts—31:9, 10.
Hyoglossus muscle—32:3.
Styloglossus muscle—32:5.
Chondroglossus muscle**—32:4.

Genioglossus muscle—32:2.
Geniohyoid muscle—24:52.
Lingual artery—47:8.

Exposed by detaching the hyoglossus muscle from the hyoid bone and reflecting it upward.

Dorsal rami of the tongue**—47:11.
Sublingual artery**—47:10.
Deep artery of the tongue**—47:12.

Lingual vein—53:6.
Stylohyoid ligament—18:54.

VIII. Structures in Relation to the Deeper Regions of the Neck and Base of the Cranium.

1. OTIC GANGLION, TENSOR VELI PALATINI, STYLOPHARYNGEUS MUSCLES.

Otic ganglion—67:36.

Exposed by dividing the lingual and inferior alveolar nerves immediately inferior to their origins and carefully displacing the mandibular nerve.

ROOTS:

A short root from the mandibular nerve:**
A long root, the lesser superficial petrosal nerve**—67:37.
A sympathetic root from the plexus of the middle meningeal artery.**

BRANCHES OF DISTRIBUTION:

Tensor veli palatini nerve**—67:38.
Tensor tympani nerve**—67:39.

COMMUNICATING RAMI:

Anastomotic ramus with the spinous nerve**—67:40.
Anastomotic ramus with the auriculotemporal nerve**—67:41.
Anastomotic ramus with the chorda tympani**—67:42.

Tensor veli palatini muscle—32:25.

May be exposed by detaching the internal pterygoid muscle from the posterior border of the lateral lamina of the pterygoid process—8:61.

Stylopharyngeus muscle—32:32.

May be exposed by dividing the posterior belly of the digastric muscle near its origin and reflecting it toward its attachment to the hyoid bone, cutting through the external carotid artery just inferior to its termination, dividing the posterior auricular and occipital arteries at their origins and displacing the external carotid artery anteriorly (guarding against injury to the glossopharyngeal nerve).

2. BLOOD VESSELS.

Internal carotid artery—47:68.

In completing its exposure the base of the styloid process may be divided (with a bone forceps) and the styloid process together with the attached muscles reflected downward and anteriorly. The correlation of the structures at the base of the cranium with the structures previously exposed in the floor of the cranium may be facilitated by removing the calvarium (guarding, however, against drying of the cranial floor).

In demonstrating the superior portion of the cervical part of the internal carotid artery, the pharyngeal rami of the vagus nerve should first be

secured and the following four nerves identified in the interval between the internal jugular vein, namely, the glossopharyngeal, vagus, accessory and hypoglossal nerves.

Ascending pharyngeal artery**—47 :4.
Ascending palatine artery**—47 :14.
Tonsillar ramus of the external maxillary artery**—47 :15.
Internal jugular vein—52 :69.
Superior bulb of the jugular vein—52 :70.
Lingual vein—53 :6.
(Superior thyreoid veins)—53 :10.
Common facial vein—53 :69.

By slitting open the inferior part of the internal jugular vein the valve situated near the termination of the vein may be demonstrated.

3. NERVES.

Glossopharyngeal nerve—68 :8.
Lingual rami**—68 :21. (Their origin only.)
Tonsillar rami**—68 :20.
Stylopharyngeal ramus**—68 :19.
Pharyngeal rami**—68 :18.
Superior ganglion—68 :9.
Petrous ganglion—68 :10.
Tympanic nerve—68 :11.

The following nerve, in the middle cranial fossa, is in relationship with the tympanic nerve:

Lesser superficial petrosal nerve—67 :37.

Vagus nerve—68 :22.
Ganglion jugulare—68 :23.
Ganglion nodosum—68 :24.

The following rami cannot be satisfactorily demonstrated in an ordinary dissection.

Meningeal ramus**—68 :25.
Auricular ramus**—68 :26.
Anastomotic ramus with the glossopharyngeal nerve**—68 :27.

In review the following rami may be noted:

Pharyngeal rami—68 :28.
Superior laryngeal nerve and its rami—68 :30–33.
Superior cardiac rami—68 :34.
(Depressor nerve)—68 :35.
Recurrent nerve—68 :36.
Accessory nerve—68 :57.
Internal ramus**—68 :58.
External ramus—68 :59.
Hypoglossal nerve—68 :60.

The demonstration of its exit from the hypoglossal canal is facilitated by dividing the internal jugular vein 5 cm. below the base of the skull and reflecting it upward.

The following rami have already been exposed in preceding dissections:

Ramus descendens—68 :61.
Ansa hypoglossi—68 :62.
Thyreohyoid ramus—68 :63.
Lingual rami—68 :64.

4. SYMPATHETIC TRUNK.

Cervical part of the sympathetic trunk—71:34.
Superior cervical ganglion—71:35.
Jugular nerve**—71:36.
Internal carotid nerve**—71:38.
Internal carotid plexus**—71:38.
External carotid nerves**—71:45.
External carotid plexus**—71:46.
Laryngopharyngeal rami**—71:57.
Superior cardiac nerve—71:59.
Middle cervical ganglion—71:60.
Inferior cervical ganglion—71:62.
The remaining rami and plexuses of the cervical part of the sympathetic system are indicated in —71–47–54, 56, 58, 65–68.
Rectus capitis lateralis muscle**—24:2.

IX. Structures in Relation to the Cervical Part of the Vertebral Column and the Posterior Part of the Base of the Skull.

The head and neck may be divided into anterior and posterior parts by: (*a*) forcibly displacing the nerves and vessels of the neck together with the oesophagus and trachea anteriorly, away from the cervical vertebrae, and exposing the periosteum investing the base of the skull between the pharynx and prevertebral muscles; (*b*) with a chisel and mallet making a transverse incision through the pars basilaris of the occipital bone (directing the chisel as nearly as possible at right angles to the plane of the bone; (*c*) making two saw-cuts through the skull, one on each side, beginning at a point 2 cm. posterior to the mastoid process and extending obliquely anteromedially to a point immediately posterior to the jugular foramen; (*d*) with a chisel completing the division of the base of the skull by an incision on each side uniting the end of the preceding chisel-cut (*b*) with the adjacent end of the saw-cut (the incision in each case passing medialward between the jugular foramen and the hypoglossal canal); (*e*) dividing any remaining intervening soft parts and completing the separation of the anterior and posterior parts of the head and neck. The hypoglossal nerve will be divided close to the base of the skull and superior to the ganglion nodosum of the vagus nerve, but all other cerebral nerves should remain intact and be carried away with the anterior part of the skull.

1. MUSCLES, NERVES, AND BLOOD VESSELS.

Rectus capitis lateralis muscle**—24:2. (Previously listed in Section VIII:4.)
Rectus capitis anterior muscle**—24:65.
Longus capitis muscle**—24:64.
Longus colli muscle**—24:63.
Anterior, middle and posterior scalene muscles—24:66–68. (Their attachments only.)
Anterior and posterior intertransverse muscles**—23:62, 63.
Cervical nerves, I–VIII—69:1.
May be exposed by removing the prevertebral and scalene muscles.
Anterior rami—69:8.
Posterior rami—69:2.
Vertebral artery—48:21.
May be exposed by removing the intertransverse muscles, the rectus capitis lateralis, the obliquus capitis superior and the obliquus capitis inferior muscles, and with a bone forceps cutting away the anterior tubercles and costal portions of the transverse processes of the third to sixth cervical vertebral.
Spinal rami**—48:22.
Vertebral vein—52:63.

2. ARTICULATIONS OF THE CERVICAL VERTEBRAE III–VII.

Intervertebral fibrocartilages—18:37.
Fibrous ring—18:38.
Nucleus pulposus—18:38.
Ligamenta flava—18:40.
Articular capsules—18:41.
Intertransverse ligaments**—18:42. (Not well developed in the neck.)
Interspinous ligaments—18:43.
Ligamentum nuchae—18:45.
Anterior longitudinal ligament—18:46.
Posterior longitudinal ligament—18:47.

3. ARTICULATIONS OF THE EPISTROPHEUS, ATLAS, AND OCCIPITAL BONE.

Atlantooccipital articulation—19:1.
Articular capsule—19:2.
Anterior atlantooccipital membrane—19:3.
Posterior atlantooccipital membrane—19:4.
Atlantoepistropheal articulation—19:5.
Articular capsule—19:6.
Tectorial membrane—19:11.

Demonstrated by removing (with a bone forceps) the posterior arches of the atlas and epistropheus, making a saw-cut on each side of the occipital bone, extending from just posterior to the jugular process and occipital condyle to the foramen magnum, detaching the squamous portion of the occipital bone and removing the exposed portion of the dura mater.

Cruciate ligament of atlas—19:10.

Exposed by detaching the tectorial membrane from the epistropheus and reflecting it upward.

Transverse ligament of the atlas—19:9.
Alar ligaments—19:7.

Demonstrated by detaching the vertical part of the cruciate ligament at its superior attachment to the occipital bone and reflecting it downward.

Apical ligament of the dens—19:8.

4. CERVICAL PORTION OF THE VERTEBRAL CANAL AND SPINAL CORD.

The contents of the cervical portion of the vertebral canal may be exposed by cutting away all the muscles still remaining attached to the spinous processes and arches of the cervical vertebrae and removing the laminae of the vertebral arches. For the meninges and related structures, see Thorax, V:4.

Cervical nerves—69:1.
Anterior roots—68:67.
Posterior roots—68:68.
Spinal ganglia—68:69.
Anterior rami—68:70.
Posterior rami—68:71.
Spinal rami of the vertebral artery—48:22.
Posterior spinal artery—48:23.
Anterior spinal artery—48:24.

Cervical part of spinal cord—58:21.
Cervical enlargement—58:22.

For surface anatomy and internal structure of the spinal cord see Thorax, V:5.

X. Remaining Structures in the Anterior Part of the Head and Neck.

For division of the head and neck into anterior and posterior parts see Section IX.

1. PHARYNX—32:29, 4:43.

a. Muscles and fascia of the pharynx.

Buccopharyngeal fascia—24:43.
Pterygomandibular raphe—32:52.
Tunica muscularis of the pharynx—32:50.
Constrictor pharyngeus inferior muscle—32:62–64.
Constrictor pharyngeus medius muscle—32:59–61.
Constrictor pharyngeus superior muscle—32:53–57.

Exposed by dividing the pterygoideus internus muscle transversely at its middle and reflecting the two ends toward their origin and insertion, guarding against cutting the tensor veli palatini muscle.

Fascia pharyngobasilaris—32:44.

b. Cavity of the pharynx—32:30.

May be exposed by making the following incisions: (*a*) longitudinally in the middle line throughout the entire extent of the posterior wall of the pharynx; (*b*) from the superior extremity of the preceding incision, transversely through the fascia pharyngobasilaris, close to the base of the cranium and extending laterally as far as the cartilage of the Eustachian tube.

The following structures may be identified by inspection:

Pars nasalis—32:22.
Fornix pharyngis—32:31.
Pharyngeal opening of the Eustachian tube—32:35.
Anterior lip—32:36.
Posterior lip—32:37.
Torus tubarius—32:38.
Salpingopharyngeal fold—32:39.
Pharyngeal recess—32:40.
Pharyngeal tonsil—32:47.
Tonsillar crypts—32:48.
(Pharyngeal bursa)—32:41.
Soft palate—30:41.
Uvula—32:13.
Pars oralis—32:33.
Glossopalatine arch—32:15.
Pharyngopalatine arch—32:16.
Lateral glossoepiglottic fold—37:27.
Median glossoepiglottic fold—37:26.
Epiglottic vallecula—37:12.
Pars laryngis—32:34.
Aryepiglottic fold—37:28.
Aditus laryngis—37:13.
Piriform recess—32:42.
Fold of the laryngeal nerve—37:29.

Looking anteriorly from the nasal part of the pharynx the following are visible in relation to the posterior part of the nasal cavity:

Nasal septum—35:39.
Nasopharyngeal meatus—35:59.
Inferior nasal meatus—35:57.
Middle nasal meatus—35:55.
Inferior nasal concha—35:48.
Middle nasal concha—35:47.

2. MOUTH AND FAUCES.

To facilitate the demonstration of the following structures the anterior part of the head and neck may be divided into two lateral halves by making the following incisions: (*a*) with a knife dividing the uvula and soft palate in the median sagittal plane; (*b*) in a similar manner dividing the cartilaginous part of the nose as far as the nasal bone as nearly as possible in the mid-sagittal plane, (before making this incision it should be ascertained whether the nasal septum deviates to either the right or left of the mid-plane, and if so, making the cut through the cartilage close to the concave side of the septum, thus guarding against cutting the septum itself); (*c*) with a saw cutting through the floor of the anterior part of the skull, beginning posteriorly and sawing forward, making the cut pass through the hard palate and root of the nose just lateral to the nasal septum and, in line with preceding incision, through the cartilaginous part of the nose; (*d*) with a knife dividing the tongue and soft structures in the floor of the mouth, the pharynx, larynx, trachea, and any other remaining soft structures in the median sagittal plane; (*e*) completing the division by sawing through the anterior part of the mandible in the same plane.

a. General characteristics of the oral cavity.

Cheek—30:29.
Fat body of the cheek**—30:30.
Vestibule of the mouth—30:31.
Mouth cavity proper—30:32.
Oral fissure—30:33.
Lips—30:34–36.
Labial commissure—30:37.
Angles of the mouth—30:38.
Palate—30:39.
Hard palate—30:40.
Soft palate—30:41.
Raphe of the palate—30:42.

b. Mucous membrane of the mouth—30:43.

Frenulum of the upper and lower lips—30:44, 45.
Gum—30:46..
Sublingual caruncle—30:47.
Sublingual fold—30:48.
Transverse palatine folds—30:49.
Incisor papilla—30:50.

c. Glands of the mouth—31:1.

Only the openings of the ducts of the following glands can be demonstrated at this stage of the dissection.

Sublingual gland—31:8.
Major and minor ducts—31:9, 10.

Submaxillary gland—31:11.
Submaxillary duct—31:12.
Parotid gland—31:13–15.
Parotid duct—31:16.

The following structures are usually difficult to demonstrate in an ordinary dissection:

Labial glands—31:2.
Buccal glands—31:3.
Molar glands—31:4.
Palatine glands—31:5.
Lingual glands—31:6.
Anterior lingual gland—31:7.

d. Teeth—31:18.

Superior and inferior dental arches—31:45, 46.
Incisor teeth—31:47.
Canine teeth—31:48.
Premolar teeth—31:49.
Molar teeth—31:50.
Dens serotinus—31:51.
Permanent and deciduous teeth—31:52, 53.

e. Tongue—31:54.

Dorsum of the tongue—31:55.
Root of the tongue—31:56.
Body of the tongue—31:57.
Inferior surface—31:58, 59.
Lateral margin—31:60.
Apex—31:61.
Mucous membrane—31:62.

For the muscles and papillae of the tongue see X:7.

f. Fauces—32:10.

Isthmus of the fauces—32:11.
Velum palatinum—32:12.
Uvula—32:13.
Palatine arches—32:12.
Glossopalatine arches—32:15.
Pharyngopalatine arches—32:16.
Salpingopalatine fold**—32:17.
Palatine tonsil—32:18.
Tonsillar crypts—32:19.
Tonsillar sinus—32:20.
Plica triangularis—32:21.
Supratonsillar fossa—32:22.

3. SOFT PALATE AND RELATED STRUCTURES.

A satisfactory dissection of the soft palate is made with difficulty in the ordinary cadaver material; in demonstrating its structures the soft palate should be made tense by means of a hook and the mucous membrane removed from its oral and pharyngeal surfaces and from the surface of the glossopalatine and pharyngopalatine arches.

a. Muscles.

Glossopalatine muscle**—32:27.
Pharyngopalatine muscle**—32:28.

Salpingopharyngeus muscle**—32:58.
Uvulae muscle**—32:26.
Levator veli palatini muscle**—32:24.

May be exposed by removing the wall of the pharynx between the auditory tube superiorly and the upper margin of the superior pharyngeal constrictor muscle inferiorly.

Tensor veli palatini muscle—32:25.

b. Arteries.

Ascending palatine artery**—47:14.
Pharyngeal rami of the ascending pharyngeal artery**—47:6.
Descending palatine from the internal maxillary artery**—47:62.

c. Nerves.

Pharyngeal rami of the vagus nerve**—68:28.

Component fibres of these rami are derivatives of the accessory nerve.

Nerve of the tensor veli palatini**—67:38.
Posterior palatine nerve**—67:5.
Middle palatine nerve**—67:4.

4. AUDITORY TUBE—78:11.

Osseous part of the auditory tube—78:13.
Cartilaginous part of the auditory tube—78:16.
Cartilage of the auditory tube—78:17.
Medial cartilaginous lamina—78:18.
Lateral cartilaginous lamina—78:19.
Membranous lamina—78:20.
Tunica mucosa—78:21–23.
Pharyngeal opening of the auditory tube—78:24.

5. NASAL CAVITY.

a. Nasal septum—35:39.

Cartilaginous septum—35:40.

May be exposed by removing the mucous membrane from the septum.

Membranous septum—35:41.

The following structures may be demonstrated by carefully removing the cartilage and thin bony part of the septum (a small piece at a time), but retaining intact the mucous membrane of the opposite side.

Olfactory nerves—66:3.
Medial superior posterior nasal rami—66:62.
Nasopalatine nerve—66:63.
Medial nasal rami of the internal branch of the anterior ethmoidal nerve—66:31.
Posterior nasal arteries of the septum—47:67.
Anterior and posterior ethmoidal arteries—48:6, 7.

Difficult to demonstrate in ordinary material.

b. Cavity and lateral walls of the nose.

Nares—35 :37.
Choanae—35 :38.
Vestibule of the nose—35 :42.
Vibrissae—79 :34.
Limen nasi—35 :43.
Olfactory sulcus—35 :44.
Superior nasal concha—35 :46.
Middle nasal concha—35 :47.
Inferior nasal concha—35 :48.
(Concha suprema)—35 :45.
Mucous membrane—35 :49.
Cavernous plexus of the concha—35 :50.
Agger nasi—35 :51.
Sphenoethmoidal recess—35 :52.
Meatuses of the nose—35 :53.
Superior meatus—35 :54.
Middle meatus—35 :55.
Atrium of the middle meatus—35 :56.
Inferior meatus—35 :57.
Common meatus—35 :58.
Nasopharyngeal meatus—35 :59.
Respiratory region—35 :60.
Olfactory region—35 :61.
Olfactory glands—35 :62.
Nasal glands—35 :71.
Ethmoidal infundibulum—35 :68.
Exposed by forcing the middle concha upwards.
Hiatus semilunaris—35 :70.
Bulla ethmoidalis—35 :68.
Nasolacrimal duct—75 :54. (Its inferior opening only.)
Ethmoidal cells—35 :67. (Only their openings are exposed.)

c. Paranasal sinuses—35 :63.

Maxillary sinus—35 :64.
Its cavity may be exposed by sawing upwards through the base of the zygomatic process of the maxilla and removing its lateral wall.
Sphenoidal sinus—35 :65.
Frontal sinus—35 :66.

d. Nerves and vessels in the lateral wall of the nasal cavity.

Olfactory nerves—66 :3.
Lateral nasal rami of the internal branch of the anterior ethmoidal nerve—66 :30.
Branches from the sphenopalatine ganglion:
Lateral superior posterior nasal rami—66 :61.
Difficult to demonstrate in an ordinary dissection.
[Lateral] inferior posterior nasal rami—67 :1.
Sphenopalatine artery—47 :66.
The descending palatine branch of the internal maxillary artery—47 :62, and the anterior and posterior ethmoidal arteries—48 :6, 7, also contribute small twigs to the nasal muco-periosteum.

e. Nasal cartilages—36:6.

Lateral nasal cartilage—36:9.
Cartilage of the nasal septum—36:7. (See also X:5*a*.)
Greater alar cartilages—36:10.
Lateral crus—36:12.
Medial crus—31:12.
Lesser alar cartilages—36:13.

6. LARYNX—36:18.

a. Cavity of the larynx—37:11.

The laryngeal cartilages constituting the ground plan of the larynx are listed under subhead 6*d*.

Aperture of the larynx—37:13.
Aryepiglottic fold—37:28.
Cuneiform tubercle—36:74.
Corniculate tubercle—36:75.
Interarytenoid notch—37:35.
Median glossoepiglottic fold—37:26.
Lateral glossoepiglottic fold—37:27.
Epiglottic vallecula—37:12.
Vestibule of the larynx—37:14.
Rima vestibuli—37:15.
Ventricular folds—37:30.
Superior aperture of the glottis—37:34.
Laryngeal ventricle—37:21.
Appendix of the laryngeal ventricle—37:22.
Vocal fold—37:31.
Macula flava—37:32.

The vocal and ventricular folds subdivide the laryngeal cavity into three subdivisions: a superior, or the vestibule; a middle subdivision, corresponding to the ventricles; and an inferior subdivision, inferior to the level of the vocal cords.

Vocal lip—37:16.
Glottis—37:17.
Rima glottidis—37:18.
Intermembranous part—37:19.
Intercartilaginous part—37:20.
Inferior aperture of the glottis—37:33.
Laryngeal mucous membrane—37:23.
Laryngeal glands—37:36–39.
Lymphatic nodules of the larynx—37:40.

b. Laryngeal muscles, hyothyreoid and elastic membranes.

Having examined the relations of the thryeoid gland, the following structures may be exposed by removing this organ together with the omohyoid, sternohyoid, sternothyreoid, thyreohyoid, and inferior pharyngeal constrictor muscles, guarding against injury to the internal and external rami of the superior laryngeal nerve, the inferior laryngeal nerve, and the superior and inferior laryngeal arteries.

Hyothyreoid membrane—36:34.
Middle hyothyreoid ligament—36:33.
Lateral hyothyreoid ligament—36:31.
Triticeous cartilage—36:32.
Cricothyreoid muscle—36:78.

Straight part—36 :79.
Oblique part—37 :1.
Posterior cricoarytaenoid muscle—37 :2.

Exposed by removing the tunica mucosa from the posterior aspect of the cricoid and arytaenoid cartilages, retaining intact, however, the superior and laryngeal artery and nerve.

Oblique arytaenoid muscle—37 :9.
Aryepiglottic muscle—36 :77.
Transverse arytaenoid muscle—37 :10.

It is preferable to demonstrate the following muscles and the elastic membrane in only one half of the larynx, reserving the other half for the demonstration of nerves and vessels.

Lateral cricoarytaenoid muscle—37 :4.

Exposed by removing the cricothyreoid muscle, making an incision through the lamina of the thyreoid cartilage parallel to and a little to the right of the anterior median line, dividing the right lateral hyothyreoid ligament, disarticulating the right inferior cornu of the thyreoid cartilage and completing the removal of the lamina.

Thyreoarytaenoid muscle—37 :8.
Vocal muscle—37 :6.

May be exposed by carefully removing the lateral cricoarytaenoid muscle.

Thyreoepiglottic muscle—37 :7.
Ventricular muscle—37 :5.

Difficult to demonstrate in an ordinary dissection.

Elastic membrane of the larynx—37 :24.

Exposed by removing the vocal muscle.

Elastic cone—37 :25.
Vocal ligament—36 :63.
(Sesamoid cartilage)—36 :64.
Ventricular ligament—36 :62.

c. Laryngeal nerves and vessels.

The following structures may be demonstrated in the remaining half of the larynx:

Internal ramus of the superior laryngeal nerve—68 :32.

Its position in the piriform sinus may be determined by producing a traction on the nerve external to the hyothyreoid membrane and demonstrating the fold of the laryngeal nerve—37 :29.

Anastomotic ramus with the inferior laryngeal nerve—68 :33.
Inferior laryngeal nerve—68 :40.
Anterior ramus—68 :41.
Posterior ramus—68 :42.
Superior laryngeal artery—46 :64.
Inferior laryngeal artery—48 :50.

d. Laryngeal cartilages and ligaments.

Epiglottis—36 :67.
Petiolus epiglottidis—36 :68.
Epiglottic tubercle—36 :69.
Epiglottic cartilage—36 :70.
Thyreoepiglottic ligament—36 :71.
Hyoepiglottic ligament—36 :72.

Thyreoid cartilage—36 :21.
Right and left lamina—36 :22.
Prominentia laryngea—36 :16.
Superior thyreoid incisure—36 :23.
Inferior thyreoid incisure—36 :24.
Superior thyreoid tubercle—36 :25.
Inferior thyreoid tubercle—36 :26.
(Oblique line)—36 :27.
Superior cornu—36 :28.
Inferior cornu—36 :29.
(Thyreoid foramen)—36 :30.
Cricothyreoid articulation—36 :40.
Articular capsule—36 :41.
Ceratocricoid ligaments**—36 :42–44.
Cricoid cartillage—36 :35.

The exposure of the cricoid cartilage may be completed by dividing the ligaments connecting the thyreoid and cricoid cartilages and removing the thyreoid cartilage.

Arch—36 :36.
Lamina—36 :37.
Arytaenoid articular surface—36 :38.
Thyreoid articular surface—36 :39.
Cricotracheal ligament—36 :46.
Corniculate cartilage—36 :57.
Arycorniculate synchondrosis—36 :58.
Corniculopharyngeal ligament**—36 :61.
Cricopharyngeal ligament**—36 :60.
Arytaenoid cartilage—36 :47.
Apex—36 :54.
Base—36 :49.
Articular surface—36 :48.
Crista arcuata**—36 :50.
Colliculus**—36 :51.
Fovea oblongo**—36 :52.
Fovea triangularis**—36 :53.
Vocal process—36 :55.
Muscular process—36 :56.
Cuneiform cartilage—36 :73.
Cricoarytaenoid articulation—36 :59.
Articular capsule—36 :65.
Posterior cricoarytaenoid ligament**—36 :66.

7. TONGUE—31 :54.

a. General characteristics and surface anatomy.

Dorsum of tongue—31 :55.
Root of tongue—31 :56.
Body of tongue—31 :57.
Inferior surface—31 :58.
Fimbriated fold—31 :59.
Lateral margin—31 :60.
Apex of tongue—31 :61.
Mucous membrane of tongue—31 :62.

Frenulum of tongue—31:63.
Lingual papillae—31:64.
Filiform papillae—31:65.
Conical papillae—31:66.
Fungiform papillae—31:67.
Lenticular papillae—31:68.
Vallate papillae—31:69.
Foliate papillae—31:70.
Medial sulcus—31:71.
Terminal sulcus—31:72.
Foramen caecum—31:73.
(Lingual duct)—31:74.
Thyreoglossal duct—31:75.
Lingual tonsil—31:76.
Lingual follicles—31:77.

b. Muscles of the tongue—32:1.

Preferably demonstrated in one half of the tongue only, retaining the other half for the demonstration of nerves and vessels.

Genioglossus muscle—32:2.
Hyoglossus muscle—32:3.
Chondroglossus muscle—32:4.
Styloglossus muscle—32:5.

The four preceding muscles may be characterized as extrinsic and the next three as intrinsic muscles of the tongue:

Longitudinalis superior muscle**—32:6.
Longitudinalis inferior muscle**—32:7.
Transversus linguae muscle**—32:8.
Verticalis linguae muscle**—32:9.
Septum of tongue—31:78.

c. Nerves and vessels of the tongue.

Lingual rami of the glossopharyngeal nerve—68:21.
Lingual nerve—67:23.
Sublingual nerve—67:26.
Lingual rami—67:27.
Hypoglossal nerve—68:60.
Lingual rami—68:64.
Lingual artery—47:8.
Dorsal rami of tongue—47:11.
Deep artery of tongue—47:12.

8. STRUCTURES IN THE MIDDLE CRANIAL FOSSA.

Incisions for removal of the dura mater: (*a*) having secured the cut ends of the oculomotor, trochlear, and trigeminal nerves as they pierce the dura, an incision is made through the dura just lateral to these nerves from the anterior clinoid process to the apex of the petrous portion of the temporal bone (the cut should be made no deeper than the thickness of the dura), and then extended from the apex of the petrous bone backward and laterally along the superior petrosal sinus to the sigmoid sulcus; (*b*) a second incision is made through the dura from the clinoid process anterolaterally along the posterior margin of the small wing of the sphenoid bone; (*c*) the dura may then be reflected lateralward, carefully disengaging it from any underlying nerves or other structures which may be attached to it.

Cavernous sinus—53:24.
Superior ophthalmic vein—53:54.

Inferior opthalmic vein—53:68.
Sphenoparietal sinus—53:28.
Trigeminal nerve—66:11.
Portio major—66:12.
Portio minor—66:14.
Semilunar ganglion—66:13.
Mandibular nerve—67:6. (Origin and foramen of exit only.)
An accessory meningeal artery—(47:51) is sometimes associated with it in its foramen of exit.
Maxillary nerve—66:38. (Origin and foramen of exit.)
Meningeal ramus—66:39.
Ophthalmalic nerve—66:15.
Lacrimal nerve—66:17. (Its origin only.)
Nasociliary nerve—66:23. (Its origin only.)
Frontal nerve—66:19. (Its origin only.)

The following three nerves are listed with reference to the cavernous sinus only:

Oculomotor nerve—66:5.
Trochlear nerve—66:9.
Abducent nerve—67:46.
Cavernous plexus of the sympathetic—71:39. (Difficult to demonstrate.)
Internal carotid artery—47:68.
Ophthalmic artery—47:70. (Its origin only.)
Internal carotid plexus of the sympathetic—71:38. (Difficult to demonstrate in an ordinary dissection.)
Greater superficial petrosal nerve—66:59.
Lesser superficial petrosal nerve—67:37.
Middle meningeal artery—47:50.
Superficial petrosal ramus**—47:52.
(Accessory meningeal ramus)—47:51.

9. EYELIDS AND LACRIMAL APPARATUS.

For the surface anatomy of the eye see Section V:1.

a. Eyelids—75:11.

In demonstrating the following structures the palpebral part of the orbicularis oculi muscle may be removed, guarding against injury to underlying nerves and vessels.

Orbital septum—75:5.
Superior tarsus—75:23.
Inferior tarsus—75:24.
Tarsal glands—75:27.
Lateral palpebral raphe—75:26.
Medial palpebral ligament—75:25.
Levator palpebrae superioris muscle—75:3. (Its tendon of insertion only.)

For nerves and vessels of the eyelids see I:2*a* and V:4.

b. Lacrimal apparatus—75:41.

Superior lacrimal gland—75:42.

Should be identified with a minimum dissection.
May be exposed by dividing the palpebral fascia at the upper and lateral angle of the orbit.

Inferior lacrimal gland—75:43.

(Accessory lacrimal gland)—75:44.

Excretory ductules—75:45.

Lacrimal duct—75:49.

Exposed by reflecting the medial palpebral ligament.

Ampulla of the lacrimal duct—75:51.

Lacrimal sac—75:52.

Fornix of the lacrimal sac—75:53.

Nasolacrimal duct—75:54.

The following muscles may be exposed by dividing the eyelids through the middle by a sagittal section and removing the conjunctiva at the medial angle of the eye.

Tarsalis superior muscle**—75:29.

Tarsalis inferior muscle**—75:30.

10. STRUCTURES IN RELATION TO THE ORBIT.

a. Structures in the superior part of the orbit and fascia of the eyeball.

Exposed by removing (with a bone forceps, saw, and chisel) the thin roof or superior wall of the orbit (12:67), the thick cranial wall above the orbital opening (12:64), and the superior wall of the superior orbital fissure (12:71), retaining intact, however, the superorbital margin (12:65) of the orbital opening and a ring of bone around the optic foramen (cutting away the anterior clinoid process will also facilitate the subsequent dissection), dividing the periosteum longitudinally midway between the medial and lateral walls of the orbit and also transversely close to the anterior margin of the superior orbital wall, and reflecting the two periosteal flaps laterally and medially.

Frontal nerve—66:19.

Supraorbital nerve—66:20.

Frontal ramus—66:21.

Supratrochlear nerve—66:22.

Attention has already been directed to the peripheral distribution of these nerves. I:2*a* and V:4.

Corpus adiposum orbitae—75:9.

To be removed gradually during the ensuing dissection.

Trochlear nerve—66:9.

Lacrimal nerve—66:17.

Lacrimal glands—76:42–45. (See also 9*b*.)

Levator palpebrae superioris muscle—75:3.

Fascia of eyeball—75:7.

May be exposed by dividing the frontal nerve and levator palpebrae superioris muscle in the middle of the orbit and reflecting their cut ends.

Interfascial space—75:8.

Its extent may be determined by making an opening through fascia and introducing the handle of a scalpel or a blunt forceps into the opening.

Rectus superior muscle—74:65.

Obliquus superior muscle—74:71.

Trochlea—75:1.

b. Optic nerve, nasociliary nerve, and ciliary ganglion.

The following structures may be exposed by dividing superior rectus muscle midway between its origin and insertion, reflecting the cut ends (noting the superior division of the oculomotor nerve subjacent to its posterior part), and carefully removing the orbital fat.

Optic nerve—66 :4.

Nasociliary nerve—66 :23.

Long root of the ciliary ganglion—66 :24.

Long ciliary nerves—66 :25.

Posterior ethmoidal nerve—66 :26.

Anterior ethmoidal nerve—66 :27.

Infratrochlear nerve—66 :33–35.

Ciliary ganglion—66 :63.

Short ciliary nerves—66 :37.

c. Blood vessels of the orbit.

Ophthalmic artery—47 :71.

Central artery of retina—47 :72.

Lacrimal artery—47 :72.

Muscular rami—47 :74.

Ciliary arteries—47 :75, 76, 48 :1–4.

Supraorbital artery—48 :5.

Anterior and posterior ethmoidal arteries—48 :6, 7.

Medial palpebral arteries—48 :9–11.

Frontal artery—48 :12.

Dorsal artery of nose—48 :13.

Superior ophthalmic vein—53 :54.

Inferior ophthalmic vein—53 :68.

Central vein of retina—53 :69.

Tributaries of the ophthalmic veins are indicated in 53 :55, 53 :64–67.

d. Remaining structures of the orbit.

Rectus medialis muscle—74 :67.

Rectus inferior muscle—74 :66.

Rectus lateralis muscle—74 :68.

Lacertus of rectus lateralis muscle**—74 :69.

Common tendinous ring of Zinn—74 :70.

May be exposed by dividing the optic nerve close to the optic foramen and turning the eyeball anteriorly.

Oculomotor nerve—66 :5.

Superior ramus—66 :6.

Inferior ramus—66 :7.

Short root of ciliary ganglion—66 :8.

Abducens nerve—67 :46.

Obliquus inferior muscle—75 :2.

May be exposed by replacing the eyeball in its normal position, everting the lower eyelid, carefully removing the conjunctiva in the region of the inferior fornix.

Zygomatic nerve—66 :40.

11. STRUCTURES IN THE CAROTID AND INFRAORBITAL CANALS, AND IN THE PTERYGOPALATINE FOSSA.

a. Carotid canal—9 :41.

The contents of the carotid canal may be exposed by removing (with a bone forceps) the inferior wall of the carotid canal, guarding against injury to the auditory tube.

Internal carotid artery—47 :68.

Caroticotympanic ramus**—47 :69.

Internal carotid nerve of sympathetic system—71 :37.

Internal carotid plexus—71 :38.

Deep petrosal nerve—66 :60. (Its origin only.)

b. Maxillary nerve and infraorbital canal.

The structures in relation to the infraorbital canal and pterygopalatine fossa may be exposed by making the following dissections: (*a*) beginning at the cut margin of the skull just above the external acoustic meatus, saw through the squamous part of the temporal bone and great wing of the sphenoid bone in a plane passing obliquely downward and forward to the medial end of the superior orbital fissure, the saw-cut passing just lateral to the foramen rotundum; (*b*) make a second saw-cut extending from the cut margin of the cranial wall, just above the anterior margin of the great wing of the sphenoid, downward into the superior orbital fissure, joining the first saw-cut; (*c*) detach the wedge of bone included between the two saw-cuts and with a bone forceps remove what remains of the great wing of the sphenoid bone lateral to the foramen rotundum, retaining intact, however, the bony circumference of this aperture; (*d*) and, finally, with a bone forceps (and chisel if necessary) remove the superior wall of the infraorbital canal.

Maxillary nerve—66 :38.

Zygomatic nerve—66 :40.

Sphenopalatine nerves—66 :43.

Posterior superior alveolar rami—66 :45.

Infraorbital nerve—66 :46.

Middle superior alveolar ramus—66 :47.

Anterior superior alveolar rami—66 :48.

Superior dental plexus—66 :49.

This plexus also includes the posterior superior alveolar rami.

Superior dental rami—66 :50.

Superior gingival rami—66 :51.

Infraorbital artery—47 :60.

Anterior superior alveolar arteries—47 :61.

c. Sphenopalatine ganglion.

The sphenopalatine ganglion may be located by following the lateral superior nasal rami, together with the nasopalatine nerve, back to the sphenopalatine foramen, and the lateral posterior inferior rami of the anterior palatine nerve back to the pterygopalatine canal, carefully opening the canal and following the palatine nerves upward to the sphenopalatine ganglion which is situated in the pterygopalatine fossa; the exposure of the ganglion may also be facilitated by removing the orbital process of the palatine bone and a portion of the body of the sphenoid bone.

Sphenopalatine ganglion—66 :56.

Nerve of the pterygoid canal—66 :58.

This nerve may be exposed by cutting away the sphenoidal process of the palate bone and carefully opening the pterygoid process of the sphenoid bone, a dissection difficult, however, to make.

Greater superficial petrosal nerve—66:59.
Deep petrosal nerve—66:60.
Orbital rami—66:57.
Lateral superior posterior nasal rami—66:61.
Medial superior posterior nasal rami—66:62.
Nasopalatine nerve—66:63.
[Lateral] inferior posterior nasal rami—67:1.
Palatine nerve—67:2.
Anterior palatine nerve—67:3.
Middle palatine nerve—67:4.
Posterior palatine nerve—67:5.

d. Internal maxillary artery.

The following terminal branches of the internal maxillary artery are in relation to the pterygopalatine fossa with reference to their origin only.

Posterior superior alveolar artery—47:59.
Infraorbital artery—47:60.
Descending palatine artery—47:62.
Sphenopalatine artery—47:66.

12. AUDITORY APPARATUS: EXTERNAL AND MIDDLE EAR.

It will be observed that the incisions made through the skull in the course of the preceding dissections have resulted in the isolation of a somewhat wedge-shaped segment of the cranium including the greater part of the temporal bone and the organ of hearing. With reference to the three subdivisions of the organ of hearing, some of the structures relative to the external ear have already been listed under Section I:4, and attention directed to the auditory tube of the middle ear under Section X:4.

a. Walls of the tympanic cavity.

The tympanic cavity and its several walls may be demonstrated by removing the squamous part of the temporal bone by a horizontal saw-cut made just above the level of the petrous part of the temporal bone and making an opening through the tegmen tympani of the temporal bone (9:12) just lateral to the arcuate eminence (9:13), and about 1 cm. anterior to the superior angle (9:8) of the pars petrosa or pyramid (9:3), thus exposing the tympanic antrum of the mastoid wall of the tympanic cavity (77:17); this opening may then be carefully enlarged with a bone forceps and the entire roof or tegmental wall of the tympanic cavity removed.

Tegmental wall—75:69.
Epitympanic recess—77:1.
Pars cupularis—77:2.
Jugular wall—77:3.
Styloid prominence**—77:4.
Mastoid wall—77:16.
Tympanic antrum—77:17.
Prominence of lateral semicircular canal—77:18.
Prominence of facial canal—77:19.
Pyramidal eminence—77:20.
Fossa of incus**—77:21.
Posterior sinus**—77:22.
Tympanic aperture of canaliculus of the chorda—77:23.
Carotid wall—77:26.

Labyrinthic wall—77 :5.
Fenestra vestibuli—77 :6, 7.
Promontory—77 :8–10.
Sinus of tympanum**—77 :11.
Fenestra cochlae—77 :12–14.
Processus cochleariformis**—77 :15.
Mastoid cells—77 :24.
Tympanic cells—77 :25.
Membranous wall—77 :27.
Tympanic membrane—77 :28.
Pars flaccida—77 :29.
Pars tensa—77 :30.
Limbus membranae tympani—77 :31.
Anterior malleolar fold—77 :32.
Posterior malleolar fold—77 :33.
Malleolar prominence—77 :34.
Malleolar stria—77 :35.
Umbo membranae tympani—77 :36.
Fibrocartilaginous ring—77 :38.
Structurally the tympanic membrane consists of several tissue layers—77 :37–41.
Mucous membrane of the tympanic cavity—78 :1.

b. Auditory ossicles, articulations, ligaments, and muscles.

Stapes—77 :43.
Head—77 :44.
Anterior limb—77 :45.
Posterior limb—77 :46.
Base—77 :47.
Incus—77 :48.
Body—77 :49.
Long limb—77 :50.
Lenticular process—77 :51.
Short limb—77 :52.
Malleus—77 :53.
Manubrium——77 :54.
Head—77 :55.
Neck—77 :56.
Lateral process—77 :57.
Anterior process—77 :58.
Articulations of the auditory ossicles—77 :59.
Articulation between incus and malleus—77 :60.
Articulation between incus and stapes—77 :61.
Syndesmosis of stapes and tympanum—77 :62.
Ligaments of the auditory ossicles—77 :63.
The following ligaments are difficult to expose in an ordinary dissection:
Anterior ligament of malleus—77 :64.
Superior ligament of malleus—77 :65.
Lateral ligament of malleus—77 :66.
Superior ligament of incus—77 :67.
Posterior ligament of incus—77 :68.

Obturator membrane of stapes—77 :69.
Annular ligament of base of stapes—77 :70.
Muscles of auditory ossicles—77 :72.
Tensor tympani muscle—77 :73.
Stapedius muscle—77 :74.
Auditory tube—78 :11. (See also Section X :4.)

c. External acoustic meatus—78 :25.

Its interior is exposed by removing (with a bone forceps and chisel) the anterior wall of the external acoustic meatus, guarding against injury to the tympanic membrane.

External acoustic porus—78 :26.
Tympanic incisure—78 :27.
Cartilaginous external acoustic meatus—78 :28.
Cartilage of acoustic meatus—78 :29–31.

The auricle of the external ear has been dealt with under Section I :4.

13. INTRAOSSEOUS COURSE OF THE FACIAL, INTERMEDIATE, AND ACOUSTIC NERVES.

The squamous portion of the temporal bone has already been removed, X :12*a*, and the upper part of the petrous part of the bone may now be removed by a horizontal saw-cut just above the roof of the internal acoustic meatus, the cut extending laterally into the tympanum. In relation to the mastoid wall of the tympanum attention has already been directed to the prominence of the facial canal in which runs the facial nerve, X :12*a*. This canal may now be opened with a bone forceps and chisel, followed into the labyrinthic wall of the tympanum, the roof of the internal acoustic meatus removed and the facial nerve exposed throughout the superior part of the facial canal. The inferior part of the facial canal may be demonstrated by removing the bone posterior and lateral to it by means of the two following saw-cuts: (*a*) a frontal (vertical transverse) cut in a plane just posterior to the stylomastoid foramen; (*b*) a sagittal (vertical anteroposterior) cut just lateral to the stylomastoid foramen to meet the first cut, removing the excised bone with a bone forceps and chisel.

Facial nerve—67 :47.
Genu of the facial nerve—67 :48.
Geniculate ganglion—67 :49.
Stapedius nerve—67 :50.
Anastomosing ramus with the tympanic plexus—67 :51.
Intermediate nerve—67 :63.
Greater superficial petrosal nerve—66 :59.

This nerve, while transmitting sensory fibers of the intermediate nerve, is classed systematically with the sphenopalatine ganglion and not as a branch of the intermediate nerve.

Chorda tympani—67 :64.
Acoustic nerve—67 :65.

14. AUDITORY APPARATUS: INTERNAL EAR.

a. Osseous labyrinth—76 :31.

May either be exposed by carefully chiselling away parts of the temporal bone or by means of the following saw-cuts: (*a*) an anteroposterior cut extending from the superior surface of the petrous portion of the temporal bone downward to the floor of the tympanum, along the junction of its medial and posterior walls; (*b*) a horizontal cut extending from the apex of the petrous part of the temporal bone laterally to the tympanum, intersecting the vertical incision and entering the tympanic cavity at the level of the middle of the promontory.

Vestibulum—76 :32.
Recessus sphaericus—76 :33.
Recessus ellipticus—76 :34.
Crista vestibuli—76 :35.
Pyramic vestibuli—76 :36.
Recessus cochlearis—76 :37.
Maculae cribrosae—76 :38.
Macula cribosa superior—76 :39.
Macula cribrosa media—76 :40.
Macula cribrosa inferior—76 :41.
Canales semicirculares ossei—76 :42.
Canalis semicircularis superior—76 :43.
Canalis semicircularis posterior—76 :44.
Canalis semicircularis lateralis—76 :45.
Ampullae osseae—76 :46.
Ampullae ossea superior—76 :47.
Ampullae ossea posterior—76 :48.
Ampullae ossea lateralis—76 :49.
Crura ampullaria—76 :50.
Crus commune—76 :51.
Crus simplex—76 :52.
Cochlea—76 :53.
Cupula—76 :54.
Basis cochleae—76 :55.
Canalis spiralis cochleae—76 :56.
Modiolus—76 :57.
Basis modioli—76 :58.
Lamina modioli—76 :59.
Lamina spiralis ossea—76 :60.
Hamulus laminae spiralis—76 :61.
Scala vestibuli—76 :62.
Scala tympani—76 :63.
Helicotrema—76 :64.
Lamina spiralis secundaria—76 :65.
Canalis spiralis modioli—76 :66.
Canalis longitudinales modioli—76 :67.
Meatus acusticus internus—76 :68.
Porus acusticus internus—76 :69.
Fundus meatus acustici interni—76 :70.
Crista transversa—76 :71.
Area N. facialis—76 :72.
Area cochleae—76 :73.
Tractus spiralis foraminosus—76 :74.
Area vestibularis superior—76 :75.
Area vestibularis inferior—76 :76.
Foramen singulare—76 :77.

b. Membranous labyrinth—75 :59.

An adequate demonstration of some of the following structures requires sections and the aid of a hand-lens or dissecting microscope.

Ductus endolymphaticus—75 :60.
Saccus endolymphaticus—75 :61.
Ductus utriculosaccularis—75 :62.

Utriculus—75 :63.
Ductus semicirculares—75 :64.
Ductus semicircularis superior—75 :65.
Ductus semicircularis posterior—75 :66.
Ductus semicircularis lateralis—75 :67.
Ampullae membranaceae—75 :68.
Sulcus ampullaris—75 :69.
Crista ampullaris—75 :70.
Ampulla membranacea superior—75 :71.
Ampulla membranaceae posterior—75 :72.
Ampulla membranacea lateralis—75 :73.
Sacculus—75 :74.
Ductus reuniens [Henseni]—75 :75.
Maculae acusticae—75 :76.
Macula acustica utriculi—75 :77.
Macula acustica sacculi—75 :78.
Otoconia—76 :1.
Endolympha—76 :2.
Perilympha—76 :3.
Spatium perilymphaticum—76 :4.
Ductus perilymphatici—76 :5.
Ductus cochlearis—76 :6.
Caecum cupulare—76 :7.
Caecum vestibulare—76 :8.
Lamina basilaris—76 :9.
Membrana vestibularis (Reissneri)—76 :10.
Lig. spirale cochleae—76 :11.
Prominentia spiralis—76 :12.
Stria vascularis—76 :13.
Sulcus spiralis—76 :14.
Labium tympanicum—76 :15.
Foramina nervosa—76 :16.
Labium vestibulare—76 :17.
Ganglion spirale cochleae—76 :18.
Organon spirale [Cortii]—76 :19.

c. Vessels of the internal ear—76 :20.

Internal auditory artery—76 :21.
Vestibular rami—76 :22.
Cochlear ramus—76 :23.
Arterial glomeruli of cochlea—76 :24.
Internal auditory veins—76 :25.
Spiral vein of the modiolus—76 :26.
Vas prominens—76 :27.
Vestibular veins—76 :28.
Vein of aqueduct of vestibule—76 :29.
Vein of canaliculus of cochlea—76 :30.

XI. Brain: General Characteristics, Meninges, Blood Vessels, and Cerebral Nerves.

1. LARGER SUBDIVISIONS OF THE BRAIN.

For the removal of the brain see II:2*a*. A demonstration of its structures can best be undertaken in a specimen which has been hardened in formalin. The following subdivisions of the brain may be identified by inspection without disturbing the meninges and blood vessels.

Encephalon—59:10.
- Rhombencephalon—59:11.
  - Myelencephalon—59:12.
    - Medulla oblongata—59:13.
  - Metencephalon—60:18.
    - Pons—60:19.
      - Cerebellum—60:53.
- Cerebrum—61:36.
  - Mesencephalon—61:40.
  - Prosencephalon—62:12.
    - Diencephalon—62:13.

      Cannot be favorably demonstrated in the intact brain.
    - Telencephalon—63:5.

      Subdivided into hemispheres—63:6 separated by the longitudinal fissure of the cerebrum—63:8.

2. MENINGES AND BLOOD VESSELS OF THE BRAIN.

Some of the following structures have already been listed in connection with the removal of the brain II:1.

a. Meninges—65:32.
- Dura mater of brain—65:33.
  - Falx cerebri—65:34.
  - Tentorium cerebelli—65:35.
  - Falx cerebelli—65:36.
  - Diaphragma sellae—65:37.
  - Foramen diaphragmatis—65:38.
  - Incisura tentorii—65:39.
- Arachnoid of brain—65:45.
  - Subarachnoid cavity—65:46.
  - Subarachnoid cisterns—65:47.

    The structural characteristics of the subarachnoid cisterns may be demonstrated by making a median sagittal incision through the arachnoid membrane in the region of the anterior surface of the medulla oblongata and pons, and carefully reflecting the two flaps of the arachnoid laterally.
    - Cisterna cerebellomedullaris**—65:48.
    - Cisterna fossae lateralis cerebri sylvii**—65:49.
    - Cisterna chiasmatis**—65:50.
    - Cisterna interpeduncularis**—65:51.
    - Cisterna venae magnae cerebri**—65:52.
  - Arachnoidal granulations—65:53. (See also II:1.)
- Pia mater of the brain—65:54.

b. Blood vessels of the brain.

Demonstrated by carefully removing the arachnoid membrane with scissors and forceps so far as this can be done without injuring or lacerating the brain itself.

Vertebral artery—48 :21.
- Posterior spinal artery**—48 :23.
- Anterior spinal artery**—48 :24.
- Posterior inferior cerebellar artery—48 :26.

Basilar artery—48 :27.
- Anterior inferior cerebellar artery—48 :28.
- Internal auditory artery**—48 :29.
- Pontine rami**—48 :30.
- Superior cerebellar artery—48 :31.
- Posterior cerebral artery—48 :32.
- Arterial circle of willis—48 :33.

Internal carotid artery—47 :68.
- Posterior communicating artery—48 :15.
- Chorioid artery**—48 :16.
- Anterior cerebral artery—48 :17.
  - Anterior communicating artery—48 :18.
- Middle cerebral artery—48 :19.

Veins of the brain—53 :41.

For the sinuses of the dura mater, see II :2*c*. The cerebral veins are tributaries of these sinuses. The deeper veins cannot be favorably demonstrated at the present stage of the dissection; the following veins are superficial in position:

- Superior cerebral veins—53 :42.
- Middle cerebral vein—53 :43.
- Inferior cerebral veins—53 :44.
- Superior cerebellar veins—53 :45.
- Inferior cerebellar veins—53 :46.
- Basal vein—53 :51.

3. BASE OF THE BRAIN AND THE CEREBRAL NERVES.

a. Base of the brain.

Exposed by removing (with a forceps and scissors) the remaining parts of meninges and blood vessels from the base of the brain, care being taken to guard against the tearing away of the cerebral nerves.

- Cerebral peduncles—61 :46.
- Optic chiasma—62 :36.
- Optic tract—62 :33.
- Interpenduncular fossa—61 :42.
  - Anterior recess**—61 :43.
  - Posterior recess**—61 :44.
- Posterior perforated substance—61 :45.
- Mamillary bodies—62 :26.
- Tuber cinereum—62 :28.
- Infundibulum—62 :29.
- Longitudinal fissure of cerebrum—63 :8.
- Lateral fissure of cerebrum—63 :16.
- Pons—60 :19.
- Medulla oblongata—59 :13.

b. Cerebral nerves.

Olfactory nerves—66:3.
Optic nerve—66:4.
Oculomotor nerve—66:5.
Trochlear nerve—66:9.
Trigeminal nerve—66:11.
Portio major—66:12.
Portio minor—66:14.
Abducens nerve—67:46.
Facial nerve—67:47.
Intermediate nerve—67:63.
Acoustic nerve—67:65.
Vestibular root—67:66.
Cochlear root—67:67.
Glossopharyngeal nerve—68:8.
Vagus nerve—68:22.
Accessory nerve—68:57.
Hypoglossal nerve—68:60.

XII. Brain: Surface Anatomy of the Rhombencephalon and Mesencephalon.

1. RHOMBENCEPHALON—59:11.

To facilitate the exposure of structures in the rhombencephalon and mesencephalon the following incisions may be made for the removal of the right hemisphere of the cerebrum and the right half of the cerebellum: (*a*) with a sharp, thin knife making a transverse incision through the right cerebral peduncle just behind the right corpus mamillare, pressing apart the two cerebral hemispheres, exposing the corpus callosum and beginning at the corpus callosum, making a nearly median sagittal incision through all the structures in the middle line of the prosencephalon; the latter incision should preferably pass slightly to the left of the midline, leave the septum pellucidum attached to the right hemisphere, and then should be carried posteriorly until it meets the transverse incision just made through the cerebral peduncle, thus detaching the right cerebral hemisphere; (*b*) in the same manner a second median sagittal incision is made through the vermis of the cerebellum, guarding against cutting into the floor of the fourth ventricle but carrying the incision forward through the anterior medullary velum as far as the inferior colliculi of the mesencephalon; finally by cutting through the brachium conjunctivum, brachium pontis and the corpus restiforme on the right, the right half of the cerebellum is detached (both the right cerebral hemisphere and the right half of the cerebellum being transferred to preserving fluid for later reference).

a. Medulla oblongata—59:13.

Posterior median fissure—59:14.
Anterior median fissure—59:15.
Foramen caecum—59:16.
Pyramid—59:17.
Decussation of pyramids—59:18.
Anterior lateral sulcus—59:19.
Posterior lateral sulcus—59:20.
Olive—59:21.
Restiform body—59:22.

Funiculus lateralis—59 :23.
Funiculus cuneatus—59 :24.
Tuberculum cinereum—59 :25.
Funiculus gracilis—59 :26.
Clava—59 :27.
External arcuate fibres—59 :28.

b. Pons—60 :19.
Basilar sulcus—60 :20.
Brachium pontis—60 :23.

c. Isthmus of rhombencephalon—61 :25.
Brachium conjunctivum—61 :26.
Lemniscus—61 :27.
Trigonum lemnisci—61 :30.
Anterior medullary velum—61 :31.
Frenulum of anterior medullary velum—61 :32.

d. Cerebellum.
Gyri of the cerebellum—60 :54.
Sulci of the cerebellum—60 :55.
Vallecula cerebelli—60 :56.
Incisura cerebelli anterior—60 :57.
Incisura cerebelli posterior—60 :58.
Horizontal sulcus—60 :59.
Transverse fissure**—60 :60.
Vermis—60 :61.
Lingula cerebelli—60 :62, 63.
Central lobe—60 :64.
Monticulus—60 :65.
Culmen—60 :66.
Declive—60 :67.
Folium vermis—60 :68.
Tuber vermis—60 :69.
Uvula—60 :71.
Nodule—60 :72.
Hemisphere of cerebellum—60 :73.
Superior surface—60 :14.
Ala lobuli centralis—60 :75.
Lobulus quadrangularis—60 :78.
Pars anterior—60 :77.
Pars posterior—60 :78.
Lobulus semilunaris superior—61 :1.
Inferior surface—61 :2.
Lobulus semilunaris inferior—61 :3.
Lobulus biventer—61 :4.
Tonsil of cerebellum—61 :5.
Flocculus—61 :6.

2. FOURTH VENTRICLE—59:58.

a. Floor of the fourth ventricle.

Rhomboid fossa—59:59.

Pars inferior [calamus scriptorius]—59:60.

Pars intermedia—59:62.

Lateral recess—59:63.

Pars superior—59:64.

Sulcus limitans—59:65.

Fovea inferior—59:66.

Fovea superior—60:1.

Trigonum n. hypoglossi—60:2.

Striae medullares—60:3.

Eminentia medialis—60:4.

Folliculus facialis—60:5.

Ala cinerea—60:6.

Area acustica—60:7.

Locus caeruleus—60:8.

b. Roof of the fourth ventricle—60:9.

Posterior medullary velum—60:10.

Taenia ventriculi quarti—60:11.

Obex—60:12.

Epithelial chorioid layer—60:13.

Median aperture [foramen of magendie]—60:14.

Lateral aperture—60:16.

Fastigium—60:17.

3. MESENCEPHALON—61:40.

For structures relative to the inferior surface of the mesencephalon—61:41–45, see XI:3*a*.

Cerebral peduncles—61:46.

Aquaeductus cerebri—61:47.

Sulcus lateralis—61:48.

Sulcus n. oculomotorii—61:49.

Quadrigeminal bodies—62:1.

Lamina quadrigemina—62:2.

Colliculus superior—62:3.

Colliculus inferior—62:4.

Brachium quadrigeminum superius—62:5.

Brachium quadrigeminum inferius—62:6.

XIII. Brain: Surface Anatomy of the Prosencephalon.

1. GENERAL SUBDIVISIONS OF THE PROSENCEPHALON.

The remaining cerebral hemisphere may be detached by carefully cutting through the left cerebral peduncle just posterior to the left mamillary body, the rhombencephalon and mesencephalon being transferred to preserving fluid for later reference.

Prosencephalon—62:12.

Diencephalon—62:13.

Thalamencephalon—62:51.

Pars mammillaris hypothalami—62:25.

Telencephalon—63:5.

Hemisphere—63:6.

Pars optica hypothalami—62:27.

2. TELENCEPHALON.

a. Pallium: general characteristics.

Longitudinal fissure of cerebrum—63 :8.
Transverse fissure of cerebrum—63 :9.
Sulci of the cerebrum—63 :13.
Gyri of the cerebrum—63 :10.
Gyri profundi—63 :11.
Gyri transitivi—63 :12.
Gray substance—58 :5.
White substance—58 :4.
Petrosal impression—63 :14.
Lateral cerebral fossa—63 :15.
Lateral cerebral fissure sylvian—63 :16.
Posterior ramus—63 :17.
Ascending anterior ramus—63 :18.
Horizontal anterior ramus—63 :19.

The pallium as a whole is subdivided into the following five lobes and related fissures and sulci:

Lateral cerebral fissure [Sylvian]—63 :16.
Central sulcus—63 :30.
Parieto-occipital fissure—64 :12.
Collateral fissure—63 :60.
Circular sulcus—63 :25.
Frontal lobe—63 :33.
Temporal lobe—63 :50.
Occipital lobe—63 :63.
Parietal lobe—63 :70.
Insula—63 :21.

b. Lobes of the cerebrum.

Frontal lobe—63 :33.
Frontal pole—63 :34.
Anterior central gyrus—63 :31.
Precentral sulcus—63 :35.
Superior frontal gyrus—63 :36.
Superior frontal sulcus—63 :37.
Middle frontal gyrus—63 :38.
Pars superior—63 :39.
Pars inferior—63 :40.
Inferior frontal sulcus—63 :41.
Inferior frontal gyrus—63 :42.
Pars opercularis—63 :43.
Pars triangularis—63 :44.
Pars orbitalis—63 :45.
Straight gyrus—63 :46.
Olfactory sulcus—63 :47.
Orbital gyri—63 :48.
Orbital sulci—63 :49.
Parietal lobe—63 :70.
Posterior central gyrus—63 :32.
Superior parietal lobule—63 :71.
Interparietal sulcus—63 :72.

Inferior parietal lobule—63:73.
Supramarginal gyrus—63:74.
Angular gyrus—63:75.
Temporal lobe—63:50.
Temporal pole—63:51.
Transverse temporal sulci—63:52.
Transverse temporal gyri—63:53.
Superior temporal gyrus—63:54.
Superior temporal sulcus—63:55.
Middle temporal gyrus—63:56.
Middle temporal sulcus—63:57.
Inferior temporal gyrus—63:58.
Inferior temporal sulcus—63:59.
Collateral fissure—63:60.
Fusiform gyrus—63:61.
Lingual gyrus—63:62.
Occipital lobe—63:62.
Occipital pole—63:64.
Transverse occipital sulcus—63:65.
Superior occipital gyri—63:66.
Superior occipital sulci—63:67.
Lateral occipital gyri—63:68.
Lateral occipital sulci—63:69.
Insula—63:21.
Operculum—63:26.
Pars frontalis—63:27.
Pars parietalis—63:28.
Pars temporalis—63:29.
Gyri insulae—63:22.

Exposed by pulling apart the margins of the lateral fissure, cutting away a part of the operculum if necessary.

Gyrus longus insulae—63:23.
Gyrus breves insulae—63:24.
Sulcus centralis—63:30.
Sulcus circularis—63:25.

c. *Medial surface of the hemisphere*—63:76.
Sulcus corporis callosi—63:77.
Sulcus cinguli—63:78.
Pars subfrontalis—63:79.
Pars marginalis—64:1.
Sulcus subparietalis—64:2.
Fissura hippocampi—64:3.

In the fissura hippocampi the fascia dentata hippocampi—64:56, and the fimbria hippocampi—64:53, may be observed.

Gyrus fornicatus—64:4.
Gyrus cinguli—64:5.
Isthmus gyri fornicati—64:6.
Gyrus hippocampi—64:4.
Uncus—64:8.
Substantia reticularis alba—64:9.
Lobulus paracentralis—64:10.
Praecuneus—64:11.

Fissura parietooccipitalis—64:12.
Fissura calcarina—64:13.
Cuneus—64:14.

d. Rhinencephalon—64:58.

Sulcus parolfactorius anterior—64:59.
Pars anterior—64:60.
Lobus olfactorius—64:61.
Bulbus olfactorius—64:62.
Tractus olfactorius—64:63.
Trigonum olfactorium—64:64.
Stria medialis—64:65.
Stria intermedia—64:66.
Area parolfactoria—64:67.
Sulcus parolfactorius posterior—64:68.
Pars posterior—64:69.
Gyrus subcallosus—64:70.
Substantia perforata anterior—64:71.
Stria olfactoria lateralis—64:72.
Limen insulae—64:73.

e. Hypothalamus—62:24.

Pars optica hypothalami—62:27.

Only the optic part of the hypothalamus is in relation to the telencephalon; the mamillary part—62:25 includes the corpus mamillare—62:26.

Tuber cinereum—62:28.
Infundibulum—62:29.
Hypophysis—62:30.
Lobus anterior—62:31.
Lobus posterior—62:32.
Tractus opticus—62:33.
Radix medialis—62:34.
Radix lateralis—62:35.
Chiasma opticum—62:36.
Lamina terminalis—62:37.

f. Corpus callosum—64:15.

The corpus callosum may be demonstrated by slicing off the upper part of the right hemisphere at the level of the sulcus cinguli (incidentally exposing the centrum semiovale—64:76), cutting transversely through the middle of the gyrus cinguli and carefully tearing away the anterior and posterior parts of the gyrus cinguli, exposing at the same time parts of the radiatio corporis callosi—65:6–11, and the cingulum—65:2.

Splenium corporis callosi—64:16.
Truncus corporis callosi—64:17.
Genu corporis callosi—64:18.
Rostrum corporis callosi—64:19.
Lamina rostralis—64:20.
Striae transversae—64:21.
Stria longitudinalis medialis—64:22.
Stria longitudinalis lateralis—64:23.
Fasciola cinerea—64:24.

g. Ventriculus lateralis—64:35.

The lateral ventricle may be exposed by making the following dissections: (*a*) making a longitudinal incision through the corpus callosum about 1 cm. from the medial sagittal plane, reflect lateralward and detach the part of the corpus callosum lateral from the incision, taking care to leave *in situ* the part of the corpus callosum medial to the incision and the pars occipitalis of the radiatio corporis callosi—65:10; (*b*) cutting backward and lateralward through the medullary substance forming the roof of the ventricular cavity, remove enough of the roof to expose the interior of the central part of the cavity; (*c*) to open the inferior cornu extend the preceding incision downward and forward through the lateral part of the temporal lobe toward the temporal pole, following the course of the cavity (which lies nearly parallel to the superior temporal sulcus), and remove the part of the temporal lobe superior to this incision together with the pars temporalis of the operculum—63:26, guarding the insula from injury.

Cornu anterius—64:37.

Caput nuclei caudati—64:42.

Pars centralis—64:36.

Nucleus caudatus—64:41.

Stria terminalis—64:44.

Terminal vein—53:50.

Lamina affixa—64:45.

Lamina chorioidea epythelialis—64:47.

Plexus chorioideus ventriculi lateralis—65:62.

Taenia chorioidea—64:64.

Thalamus—62:52.

Largely covered by the chorioid plexus.

Taenia fornicis—64:28

Cornu posterius—64:38.

Tapetum—65:11.

With reference only to the roof and lateral wall of the posterior cornu.

Calcar avis—64:48.

(Bulbus cornu posterioris)—64:49.

Cornu inferius—64:39.

The mutual relations of the inferior cornu and the insula may be more thoroughly examined by insinuating the fingers beneath the pars frontalis and pars parietalis of the operculum—63:27, 28, and carefully tearing away the cortex in an upward direction. The following two structures are in relation to the inferior wall:

Eminentia collateralis—64:50. (Sometimes absent.)

Trigonum collaterale—64:51.

The following structures are in relation to the lateral and superior walls of the inferior cornu:

Tapetum—65:11.

Nucleus amygdalae—65:21.

Stria terminalis—64:44.

Cauda nuclei caudati—64:43.

In relation to the medial wall the following structures may be observed:

Hippocampus—64:52.

Digitationes hippocampi—64:55.

Fimbria hippocampi—64:53.

Chorioid plexus—65:62.

Taenia fimbriae—64:54.

h. Septum pellucidum, fornix, and tela chorioidea.

The septum pellucidum and fornix may be exposed by cutting through the occipital part of the radiation of the corpus callosum (of the right hemisphere) and through the fimbria hippocampi at the point where it passes into the crus fornicis, then carrying the knife anteriorly from the anterior end of the inferior horn, above the level of the uncus, through the temporal pole, separating the temporal lobe, together with the hippocampal gyrus medial to it, from the remainder of the brain along the line of the transverse fissure of the cerebrum; finally paring away enough of the cut edge of the medial part of the corpus callosum necessary to satisfactorily demonstrate the septum pellucidum and fornix.

Septum pellucidum—64:32.

Lamina septi pellucidi—64:33.

Cavum septi pellucidi—64:34.

Exposed by cutting through the remaining medial part of the corpus callosum just posterior to the genu, carefully detaching it from the septum pellucidum and fornix, and separating the two laminae of the septum.

Fornix—64:25.

Crus fornicis—64:26.

Corpus fornicis—64:27.

Taenia fornicis—64:28.

Columna fornicis—64:29.

Pars libera columnae fornicis—64:30.

Pars tecta columnae fornicis—64:31.

Tela chorioidea ventriculi tertii—65:60.

Exposed by cutting transversely through the middle of the corpus fornicis, carefully raising the two parts of the fornix and reflecting them anteriorly and posteriorly, noting the commissura hippocampi—64:57, situated between the crura of the fornix.

Internal cerebral veins—53:47.

Vein of septum pellucidum—53:49.

Terminal vein—53:50.

Chorioid vein—53:52.

Plexus chorioideus ventriculi lateralis—65:62.

Glomus chorioideum—65:63.

Plexus chorioideus ventriculi tertii—65:61.

Exposed by dividing the terminal vein at its junction with the internal cerebral vein, seizing the apex of the tela chorioidea and pulling it backward exposing the cavity of the third ventricle, but guarding against injury to the attachments of the corpus pineale—62:62.

2. THALAMENCEPHALON—62:51.

a. Thalamus—62:52.

Pulvinar—62:53.

Tuberculum anterius thalami—62:54.

Taenia thalami—62:55.

Stria medullaris—62:56.

Lamina chorioidea epithelialis—62:57.

b. Metathalamus—62:58.

Corpus geniculatum mediale—62:59.

Corpus geniculatum laterale—62:60.

c. Epithalamus—62:61.
Corpus pineale—62:62.
Recessus pinealis—62:63.
Recessus suprapinealis—62:64.
Habenula—62:65.
Commissura habenularum—62:66.
Trigonum habenulae—62:67.

3. VENTRICULUS TERTIUS—82:14.
Aditus ad aquaeductum cerebri—62:15.
Commissura posterior—62:16.
Foramen ventriculare—62:17.
Sulcus hypothalamicus—62:18.
Massa intermedia—62:19.
Recessus opticus—62:20.
Recessus infundibuli—62:21.
Commissura anterior—62:22.
Recessus triangularis—62:23.

XIV. Brain: Sections through the Brain.

The majority of the structures to be observed in stained and unstained sections of the brain require a hand lens or microscope for their demonstration. These structures have not been repeated in detail here, since they are given complete in Part II, as originally listed in the B N A.

1. STRUCTURES IN SECTIONS OF THE MEDULLA OBLONGATA—59:29–57.
Exposed in transverse sections made at (*a*) the level of the decussation of the pyramids; (*b*) between the decussation of the pyramids and the olives; and (*c*) through the middle of the olives.

2. STRUCTURES IN SECTIONS OF THE PONS—62:24–52.
May be demonstrated in transverse sections made at (*a*) about the junction of the pons and medulla, passing through point of entrance of the acoustic nerve; (*b*) at the level of the roots of the facial and abducens nerves; (*c*) at the level of the roots of the trigeminal nerves, and (*d*) through the anterior medullary velum and the middle of the pons.

3. STRUCTURES IN SECTIONS OF THE CEREBELLUM—61:10–24.
May be demonstrated in the following sections: (*a*) a median sagittal section through the vermis; (*b*) a frontal section through about the middle of one half the cerebellum; and (*c*) a horizontal section through the other half of the cerebellum in the plane of the brachium conjunctivum.

4. STRUCTURES IN SECTIONS OF THE RHOMBENCEPHALIC ISTHMUS AND THE MESENCEPHALON.
May be demonstrated in transverse sections made (*a*) through the inferior colliculus at the level of the nucleus of the trochlear nerve; and (*b*) through the superior colliculus and lateral geniculate body at the level of the roots of the oculomotor nerve and the nucleus ruber.

a. Sections of the isthmus rhombencephali—61:33–35.

b. Sections of the pedunculus cerebri—61:50–65.

c. Sections of the corpora quadrigemina—62:7–11.

5. STRUCTURES IN SECTIONS THROUGH THE PROSENCEPHALON.

For the demonstration of these structures, horizontal sections about ½ to 1 cm. thick should be made through the remainder of the right cerebral hemisphere. In the left hemisphere, which should have been retained intact, either vertical frontal or obliquely frontal sections may be made.

The *vertical frontal* sections should pass through the following regions: (*a*) through the genu of the corpus callosum; (*b*) through the septum pellucidum between the body and rostrum of the corpus callosum; (*c*) through the tips of the temporal lobes; (*d*) through the foramen interventriculare; (*e*) through the corpora mamillaria; (*f*) through the subthalamic region; (*g*) through the upper end of the aquaeductus cerebri.

The *obliquely frontal* sections should all be parallel to the sulcus centralis and pass through the following regions (in accordance with the method of Pitris, 1877): (*a*) through the lobus frontalis about 5 cm. anterior to the sulcus centralis; (*b*) through the pars opercularis of the gyrus frontalis inferior and the corresponding portions of the gyrus medius and gyrus frontalis superior; (*c*) through the middle of the gyrus centralis anterior; (*d*) through the middle of the gyrus centralis posterior; (*e*) through the anterior ends of the lobulus parietalis superior and lobulus parietalis inferior; (*f*) through the posterior part of the cerebrum about 1 cm. anterior to the fissura parietooccipitalis.

In addition to the preceding horizontal and frontal sections, the following sections are especially instructive: (*a*) through the brain in a plane passing parallel to the course of the brachia conjunctiva and through them; and (*b*) through the brain in a plane parallel to the course of the cerebral peduncles and through them.

a. Sections of the hypothalamus—62:38–50.

b. Sections of the thalamencephalon—62:68–73, 63:1–4.

c. Sections of the telencephalon—64:75–77, 65:1–31.

XV. Organ of Vision.

1. OPTIC NERVE—73:4. (See also X:10*b*.)

Vaginae n. optici—73:5.

Spatia intervaginalis—73:6.

2. BULBUS OCULI—73:7.

As a rule, the ordinary cadaver material is not favorable for the present purpose and must consequently be supplemented by eyeballs obtained from the ox or pig, in which the various structures may be demonstrated in both fresh specimens and in material hardened in formalin. The conjunctiva and fascia bulbi are caught with a forceps, cut through close to and entirely around the cornea, and these structures, together with any other soft parts, removed from the surface of the sclera, and two hardened eyeballs cut into halves, the one by a sagittal, and the other by a coronal, section.

Anterior pole—73:8.

Posterior pole—73:9.

Equator—73:10.

Meridians—73:11.

External axis of eyeball—73:12.

Internal axis of eyeball—73:13.

Optic axis—73:14.

[Line of vision]—73:15.

Ophthalmic vesicle*—73:16.

Ophthalmic cup*—73:17.

3. TUNICA FIBROSA OCULI—73:18.

a. Sclera—73:19.

May be exposed by cutting through the sclera at the equator with a sharp knife and with scissors carrying the incision completely around the eyeball along the line of the equator (carefully guarding against injury to the black chorioid coat); separating both parts of the sclera from the subjacent structures and reflecting the anterior part forward, breaking the attachment of the ciliary muscle to its deep surface, and separating the posterior part by dividing the fibers of the optic nerve in a plane corresponding to the inner surface of the sclera.

Sulcus sclerae—73:20.
Rima cornealis—73:21.
Sinus venosus sclerae—73:22.
Lamina fusca—73:23.
Lamina cribrosa sclerae—73:24.
(Raphe sclerae)—73:25.
(Funiculus sclerae)—73:26.

b. Cornea—73:27.

Annulus conjunctivae—73:28.
Vertex corneae—73:29.
Limbus corneae—73:30.
Facies anterior—73:31.
Facies posterior—73:32.

The following structures can be adequately demonstrated only in thin sections by means of a hand lens and microscope.

Epithelium corneae—73:33.
Lamina elastica anterior—73:34.
Substantia propria—73:35.
Lamina elastica posterior—73:36.
Endothelium camerae anterioris—73:37.

4. TUNICA VASCULOSA OCULI—73:38.

a. Chorioidea—73:39.

Lamina suprachorioidea—73:40.
Spatium perichorioideale—73:41.
Lamina vasculosa—73:42.

The vorticose veins—53:60, may be exposed by brushing away the pigment with a camel's hair brush.

Lamina choriocapillaris—73:43.
Lamina basalis—73:44.
(Raphe chorioideae)—73:45.

b. Corpus ciliare—73:46.

Corona ciliaris—73:47.

May be demonstrated by making a coronal section through an eyeball slightly anterior to the equator and carefully removing the vitreous humor from the anterior segment of the eyeball.

Processus ciliares—73:48.
Plicae ciliares—73:49.
Orbicularis ciliaris—73:50.
Ciliary muscle—73:51.

The following fibers require a microscope for their adequate demonstration:

Fibrae meridionales—73:52.
Fibrae circulares—73:53.
Plexus gangliosus ciliaris—73:54.

c. Iris—73:55.

May be exposed by cutting around the sclerocorneal junction and removing the cornea, making several meridional incisions through the anterior part of the sclera; the strips of sclera may then be separated from the ciliary muscle, bent aside and pinned to the bottom of a cork-lined tray filled with water, the iris examined and then removed for a more complete demonstration of its structure.

Margo pupillaris—73:56.
Margo ciliaris—73:57.
Facies anterior—73:58.
Facies posterior—74:1.
Annulus iridis major—74:2.
Annulus iridis minor—74:3.
Plicae iridis—74:4.
Pupilla—74:5.
Sphincter muscle of pupil—74:6.
Stroma iridis—74:7.
Dilator muscle of pupil—74:8.
Pectinate ligament of iris—74:9.
Spatia anguli iridis—74:10.
Greater arterial circle—74:11.
Lesser arterial circle—74:12.
(Membrana pupillaris)*—74:13.

d. Ciliary nerves and vessels.

Short ciliary nerves—66:37.
Long ciliary nerves—66:25.
Short posterior ciliary arteries—47:75.
Long posterior ciliary arteries—47:76.
Anterior ciliary arteries—48:1.
Venae vorticosae—53:60.

5. PIGMENT LAYER—74:14.

May be exposed by removing the chorioidea under water.

Stratum pigmenti retinae—74:15.
Stratum pigmenti corporis ciliaris—74:16.
Stratum pigmenti iridis—74:17.

6. RETINA—74:18.

May be exposed by removing the chorioidea from the eyeball from which the sclera and cornea have already been taken away.

Pars optica retinae—74:19.
Ora serrata—74:20.
Pars ciliaris retinae—74:21.
Papilla n. optici—74:22.
Excavatio papillae n. optici—74:23.
Macula lutea—74:24.
Fovea centralis—74:25.
Vasa sanguinea retinae—74:26–34.

May be examined in the living eye with the ophthalmoscope.

7. VITREOUS BODY—74:38.

May be obtained from an eyeball which has been kept for several days without preservatives, by dividing the coats of the eye at the equator, carefully turning back the cut edges and allowing the "eye-kernel" (vitreous body and crystalline lens) to slip out into a vessel of water; the demonstration of the hyaloid membrane, capsule of the lens, and the zonula ciliaris may also be facilitated by staining for a few minutes in strong picrocarmin solution and washing in water.

Hyaloid artery*—74:39.
Canalis hyaloidea—74:40.
Fossa hyaloidea—74:41.
Membrana hyaloidea—74:42.
Stroma vitreum—74:43.
Humor vitreus—74:44.

8. ZONULA CILIARIS—74:59.

Fibrae zonulares—74:60.
Spatia zonularia—74:61.

Their structural characteristics may be demonstrated by inserting the point of a fine blowpipe into the spaces and inflating them with air.

9. CRYSTALLINE LENS—74:45.

Isolated for observation by cutting through the zonular fibers of the zonula ciliaris and removing the lens.

Capsula lentis—74:51.
Polus anterior lentis—74:52.
Polus posterior lentis—74:53.
Facies anterior lentis—74:54.
Facies posterior lentis—74:55.
Axis lentis—74:56.
Aequator lentis—74:57.
Radii lentis—75:58.
Substantia lentis—74:46.

Exposed by cutting through the anterior wall of the capsule and pressing the lens out through the opening.

Substantia corticalis—74:47.
Nucleus lentis—74:48.

With the aid of a microscope the following structures may be demonstrated in a lens which has been hardened in alcohol and teased apart.

Fibrae lentis—74:49.
Epithelium lentis—74:50.

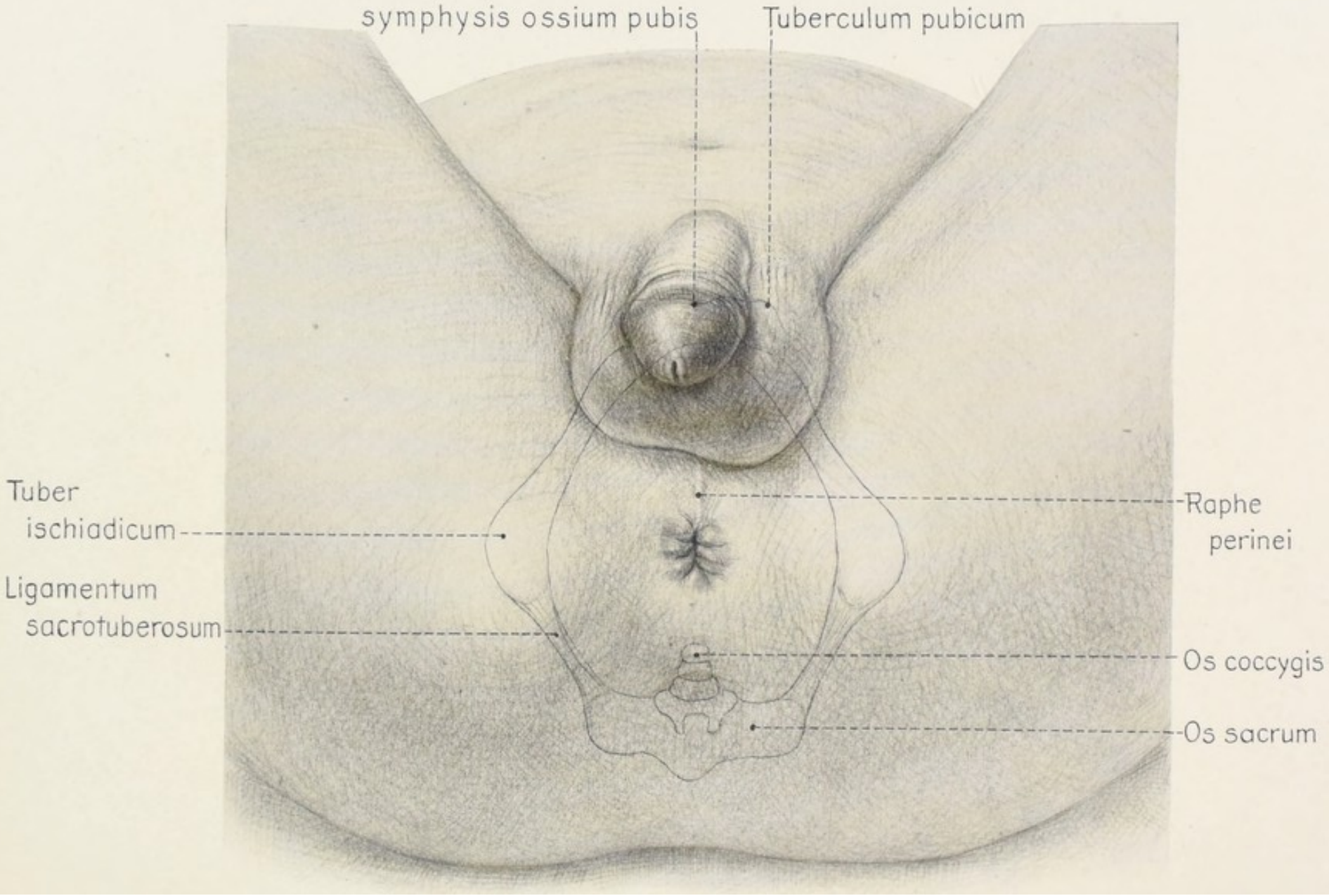
10. CHAMBERS OF THE EYEBALL.

Camera oculi anterior—74:35.
Angulus iridis—74:36.
Camera oculi posterior—74:37.

ABDOMEN AND PELVIS

Plate VII

Male perineum showing relations and surface projection of the inferior pelvic aperture as seen in the lithotomy position.


symphysis ossium pubis
Tuberculum pubicum
Tuber ischiadicum
Ligamentum sacrotuberosum
Raphe perinei
Os coccygis
Os sacrum

ABDOMEN AND PELVIS

I. General Characteristics.

1. SUBDIVISIONS OF ABDOMEN AND PELVIS.

Abdomen—4 :55.
- Abdominal cavity—4 :56.
- Scrobiculus cordis—4 :57.
- Umbilicus—4 :58.
- Flank—4 :59.
- Loin—4 :60.
- Groin—4 :61.

Pelvis—5 :1.
- Pelvic cavity—5 :2.
- Mons pubis—5 :3.
- Hip—5 :4.
- Buttock—5 :5.
- Anus—5 :6.
  - Anal cleft—5 :7.
- Perineum—5 :8.

2. SURFACE ANATOMY. (Pls. 3, 4, 7, 8.)

Xiphoid process—7 :52.
Ribs—7 :28. (Anterior ends of 7th to 12th ribs.)
Iliac crest—15 :18.
Posterior superior iliac spine—15 :24
Crista sacralis media—7 :18.
Anterior superior iliac spine—15 :22.
Inguinal ligament—25 :41.
Superior ramus of the pubic bone—15 :50.
Symphysis pubis—15 :53.
Pubic tubercle—15 :44.
Linea alba—25 :34.
Linea semilunaris—25 :49.
Subcutaneous inguinal ring—25 :44.
Spermatic cord—40 :37.
Round ligament of the uterus—42 :23.
Tuber ischiadicum—15 :36.
Inferior ramus of the ischium—15 :35.

3. REGIONS. (Pls. 11, 12, and figs. 2, 3.)

Epigastric region—83 :15.
Hypochondriac region—83 :16.
Mesogastric region—83 :17.
- Umbilical region—83 :18.
- Lateral abdominal region—83 :19.

Hypogastric region—83 :20.
- Pubic region—83 :21.
- Inguinal region—83 :22.

Regions of the back in relation to the pelvis:
Perineal region—83 :33.
Anal region—83 :34.
Urogenital region—83 :35.
Pudendal region—83 :36.

II. Perineal Region.[4]

1. SURFACE ANATOMY. (Pls. 7, 8.)

a. Perineal region in general.

Symphysis pubis—15:53.
Arcuate ligament—20:61.
Coccyx—7:25.
Inferior ramus of the pubis—15:49.
Inferior ramus of the ischium—15:35.
Sacrotuberous ligament—20:49.
Perineal raphe—43:18.

b. Pudendal region in the male.

Corpus penis—40:68.
Dorsum of penis—40:70.
Urethral surface—40:71.
Glans penis—40:72.
Corona glandis—40:73.
Septum glandis—40:74.
Collum glandis—40:75.
Prepuce—41:1.
Frenulum of prepuce—41:2.
External urethral orifice—41:28.
Scrotum—41:31.
Raphe of scrotum—41:32.

c. Pudendal region in the female.

Mons pubis—5:s.
Female pudendum—42:45.
Labium majus pudendi—42:46.
Anterior labial commissure—42:47.
Posterior labial commissure—42:48.
Frenulum of pudendal labia—42:49.
Rima pudendi—42:50.
Fossa navicularis—42:51.
Labium minus pudendi—42:52.
Vestibulum vaginae—42:53.
Orificium vaginae—42:57.
Clitoris—42:59.
Corpus clitoris—42:61.
Glans clitoris—42:62.
Frenulum of clitoris—42:63.
Prepuce of clitoris—42:64.
External orifice of urethra—42:71.
Hymen—42:29.
Hymen caruncles—42:30.

[4] For some purposes it may be an advantage to consider this region in more direct correlation with the pelvic structures; see Section VI:2.

2. UROGENITAL REGION: STRUCTURES EXTERNAL TO THE UROGENITAL DIAPHRAGM.

a. In the male.

Skin incisions (the body being in the ligthotomy position): (*a*) transversely between the anterior extremities of the ischial tuberosities; (*b*) median along the median raphe from the scrotum to the tip of the coccyx, encircling the anus.

Superficial perineal fascia—43:45.

The following structures in the compartment between the superficial perineal fascia and the urogenital diaphragm are exposed by making an incision through the deeper layer of the superficial perineal fascia, beginning in the median line at the base of the scrotum and extending to the ischial tuberosity on each side, and reflecting the fascial flaps.

Superficial transverse perineal muscle—43:42.
Ischiocavernosus muscle—43:43.
Bulbocavernosus muscle—43:44.
Perineal artery—51:19.
  Posterior scrotal arteries—51:20.
Perineal nerve—71:21.
  Posterior scrotal nerves—71:22.
Perineal rami of the posterior femoral cutaneous nerve—70:53.
Lymphatic vessels.
Root of penis—40:67.
Crura of penis—40:69.
Corpora cavernosa penis—41:4.

The following structures are exposed by dividing the bulbocavernosus muscle in the midline and reflecting the muscle.

Corpus cavernosum urethrae—41:5.
Bulbus urethrae—41:6.
  Hemispheres of bulb of urethra—41:7.
  Septum of bulb of urethra—41:8.

b. In the female.

Skin incisions (the body being in the lithotomy position): (*a*) transversely between the ischial tuberosities; (*b*) along the median line extending from the mons pubis to the tip of the coccyx, encircling the labia majora and the anal orifice.

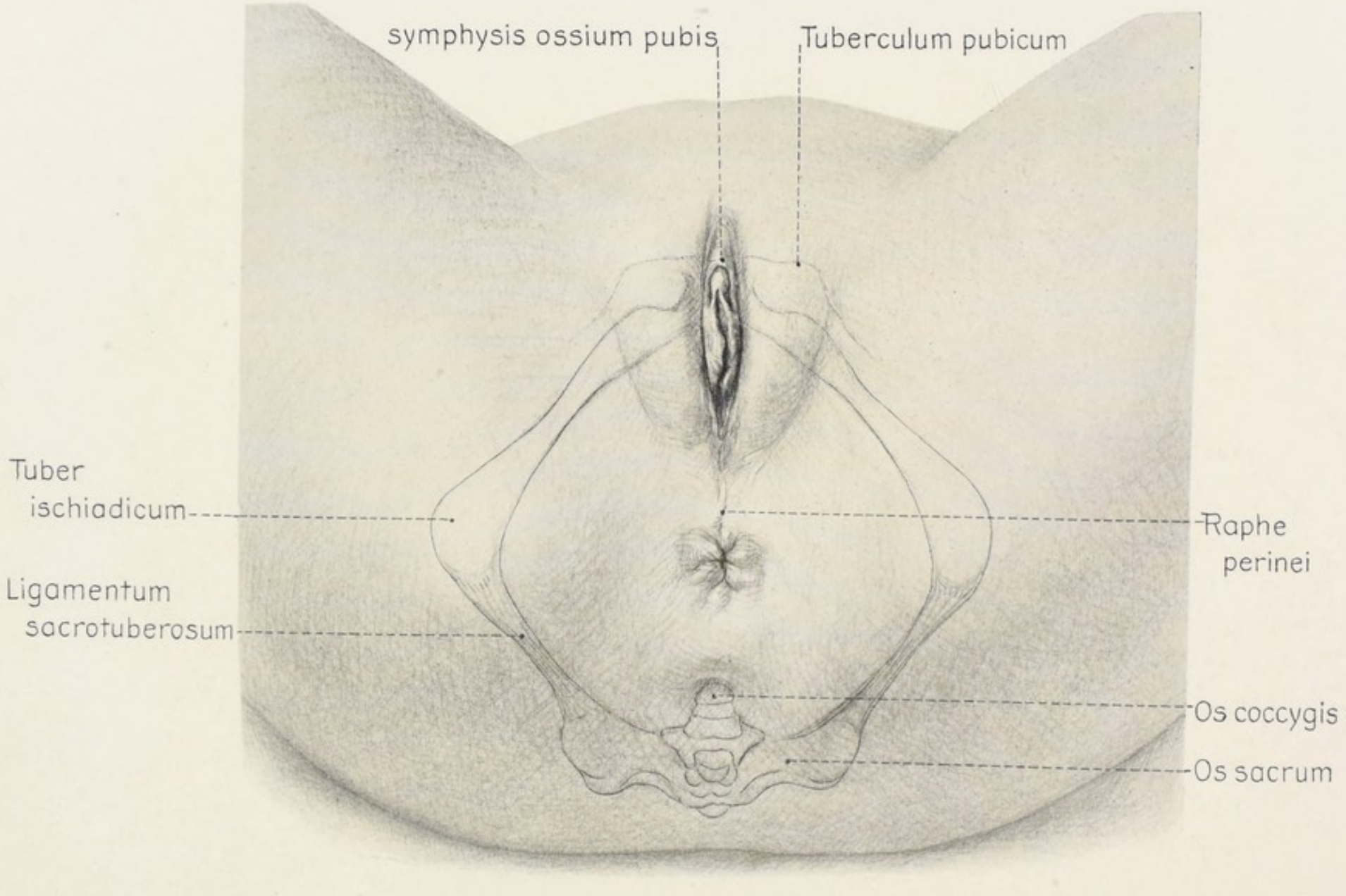
Superficial perineal fascia—43:45.
Perineal artery—51:19.
  Posterior labial arteries—51:21.
Perineal nerve—71:21.
  Posterior labial nerves—71:23.
Perineal rami of the posterior femoral cutaneous nerve—70:53.
Lymphatic vessels.
Superficial transverse perineal muscle—43:42. (Not constant in degree of development.)
Ischiocavernosus muscle—43:43.
Bulbocavernosus muscle—43:44.

The following structures are exposed by reflecting the bulbocavernosus and ischiocavernosus muscles.

Bulbus vestibuli—42:54.
Glandula vestibularis major—42:58.

Plate VIII

Female perineum showing relations and surface projection of the inferior pelvic aperture as seen in the lithotomy position.


symphysis ossium pubis
Tuberculum pubicum
Tuber ischiadicum
Ligamentum sacrotuberosum
Raphe perinei
Os coccygis
Os sacrum

Crura clitoridis—42:60.
Corpus clitoridis—42:61.
Corpora cavernosa clitoridis—42:66.
Septum corporum cavernosorum—42:67.
Fascia clitoridis—42:68.
Glans clitoridis—42:62.

3. UROGENITAL DIAPHRAGM.

a. Inferior fascia of the urogenital diaphragm—43:37.

May be exposed by detaching the ischiocavernosus muscle and the crus penis (the crus clitoridis in the case of the female) from the pubic arch on each side; guarding against injury to the inferior fascia of the urogenital diaphragm, branches of the internal pudendal artery and the dorsal nerve of the penis (or of the clitoris in the female).

The inferior fascia of the urogenital diaphragm is removed in exposing the following structures situated in the compartment between the inferior and the superior fascia of the urogenital diaphragm.

b. Structures in the urogenital diaphragm in the male.

Transverse perinei profundus muscle—43:34.
Sphincter urethrae membranaceae muscle—43:35.
Artery of the penis—51:22.
Artery of the bulb of urethra—51:24.
Urethral artery—51:23.
Deep artery of penis—51:26.
Dorsal artery of penis—51:27.
Dorsal vein of the penis—55:49.
Dorsal nerve of the penis—71:24.
Bulbourethral glands—40:62.
Body of gland—40:63.
Excretory duct—40:64.
Membranous part of urethra—41:24.
Superior fascia of urogenital diaphragm—43:36.

The following structures are in relationship to this fascia:

Arcuate ligament of the pubis—20:61.
Transverse ligament of the pelvis—43:38.

c. Structures in the urogenital diaphragm in the female.

Transverse perinei profundus muscle—43:34.
Sphincter urethrae membranaceae muscle—43:35.
Artery of clitoris—51:28.
Artery of bulb of vestibule—51:25.
Urethral artery—51:23.
Deep artery of clitoris—51:29.
Dorsal artery of clitoris—51:30.
Dorsal veins of the clitoris—55:51.
Dorsal nerve of the clitoris—71:25.
Glandula vestibularis major—42:58.
Urethra—42:70.
Superior fascia of the urogenital diaphragm—43:36.

The following structures are in relationship to this fascia:

Arcuate ligament of the pubis—20:61.
Transverse ligament of the pelvis—43:38.

4. ANAL REGION.

Superficial perineal fascia—43:45.
Sphincter ani externus muscle—43:24.
Anococcygeal ligament—43:25.
Inferior clunial nerve**—70:52.
Perineal branch of the posterior femoral cutaneous nerve**—70:53.
Ischiorectal fossa—43:41.

The fat in the ischiorectal fossa is removed in the demonstration of its contents.

Inferior haemorrhoidal nerve—71:20.
Inferior haemorrhoidal artery—51:18.

The following structures are in relationship to the walls of the fossa:

Inferior fascia of pelvic diaphragm—43:32.
Levator ani muscle—43:21.
Obturator fascia—43:40.

The following nerve and artery are in relation to the obturator fascia:

Pudendal nerve—71:19.
Internal pudendal artery—51:17.

Tendinous arch of the levator ani muscle—43:22.

Situated at the angle of junction between the obturator fascia and the inferior fascia of the pelvic diaphragm.

Obturator internus muscle—26:72.
Urogenital diaphragm—43:33. (Its posterior margin only.)
Glutaeus maximus muscle—26:67. (Its posterior or distal margin only.)
Sacrotuberous ligament—20:49.

III. Anterior Abdominal Wall.

1. FASCIA, CUTANEOUS NERVES AND BLOOD VESSELS.

For the surface anatomy of the abdomen, see I:2, and plates 3 and 4. Skin incisions: (*a*) longitudinally along the anterior median line from the xiphoid process to the mons pubis (encircling the umbilicus); (*b*) from the xiphoid process transversely around the thorax as far back as possible; (*c*) from the mons pubis laterally along the line of the inguinal ligament to the anterior superior iliac spine and then posteriorly along the iliac crest as far back as possible. In demonstrating the following structures the dissection should not extend distal to the inguinal ligament.

Superficial fascia—23:36.

Divided into two layers toward the inferior part of the abdomen.

Anterior cutaneous rami of intercostal nerves—70:8.
Anterior cutaneous ramus of iliohypogastric nerve—70:28.
Ilioinguinal nerve—70:29.
Lateral cutaneous rami of intercostal nerves—70:3.
Lateral cutaneous ramus of the iliohypogastric nerve—70:27.
Superficial epigastric artery—51:39.
Superficial circumflex iliac artery—51:40.
External pudendal arteries—51:41.
Parumbilical veins—55:36.
Thoracoepigastric veins—54:32.
Superficial epigastric vein—55:65.

2. DEEPER STRUCTURES OF THE ANTERIOR ABDOMINAL WALL.

a. Muscles and related structures.

Obliquus externus abdominis muscle—25 :38.

Exposed by the removal of the deep fascia, guarding at the same time against injury to its aponeurosis and the structures in relation to the subcutaneous inguinal ring.

The following structures are in relationship with the external oblique muscle:

Trigonum lumbale—25 :48.
Inguinal ligament—25 :41.
Lacunar ligament—25 :42.
Subcutaneous inguinal ring—25 :44.
Superior crus—25 :45.
Inferior crus—25 :46.
Intercrural fibers—25 :47.
Obliquus internus abdominis muscle—25 :29.

May be exposed by detaching the external oblique muscle at its origin, dividing the muscle, at its insertion into the iliac crest, from the superior iliac spine, carrying the incison medialward through the aponeurosis of the external oblique muscle to the lateral margin of the rectus abdominis muscle, and reflecting the external oblique muscle medialward.

Cremasteric muscle—25 :30.
Transversus abdominis muscle—25 :31.

May be exposed by detaching the internal oblique muscle at its origin and reflecting the muscle toward its insertion, at the same time guarding the subjacent nerves and vessels, and leaving intact the inguinal canal and its contents.

Linea semilunaris—25 :49.

The following nerves and vessels are in relationship throughout part of their course with the internal oblique and transversus abdominis muscles.

Anterior rami of thoracic nerves—70 :1.
Iliohypogastric nerve—70 :25.
Ilioinguinal nerve—70 :29.
Intercostal arteries—49 :59.
Lumbar arteries—50 :9.
Rectus abdominis muscle—25 :25.

May be exposed by making a longitudinal incision through the aponeurotic sheath of the rectus abdominis muscle at a distance of about 3 cm. from the linea alba, the inferior end of each incision curving toward the symphysis pubis.

Tendinous inscriptions—23 :37.
Sheath of the rectus abdominis muscle—25 :39.
Linea simicircularis—25 :40.

The following arteries are in relationship to the rectus sheath:

Inferior epigastric artery—51 :32.
Superior epigastric artery—48 :47.
Pyramidalis muscle—25 :27.
Linea alba—25 :34.
Fascia transversalis—25 :50.
Deep circumflex iliac artery—51 :37.
Peritoneum—43 :46.

May be exposed by the removal of a small portion of the fascia transversalis.

b. Internal surface of the anterior abdominal wall.

May be exposed by beginning at a point just above the umbilicus and making two incisions through the abdominal wall: (*a*) transversely from side to side; (*b*) longitudinally just to the left of the linea alba and extending to the superior ramus of the pubic bone.

Urachus—39:34.
Plica umbilicalis media—44:22.
Plica umbilicalis lateralis—44:23.
Plica epigastrica—44:24.
Fovea supravesicalis—25:57.
Fovea inguinalis media—25:56.
Fovea inguinalis lateralis—25:55.
Abdominal inguinal ring—25:52.

3. INGUINAL CANAL, SCROTUM, SPERMATIC CORD, AND TESTIS.

a. Inguinal canal—25:51.

A demonstration of its boundaries involves the removal of the peritoneum from the anterior abdominal wall in the region of the inguinal canal.

Falx inguinalis—25:26.
Reflex inguinal ligament—25:43.

b. Scrotum and spermatic cord.

For the pudendal region see Section II:1*b*, *c*.

Scrotum—41:31.

The scrotal sac may be opened and its contents exposed by making a longitudinal incision through the anterior wall of the scrotum.

Raphe of the scrotum—41:32.
Septum of the scrotum—41:33.
Tunica dartos—41:34.

Spermatic cord—40:37.

Cremasteric fascia—40:47.
Cremasteric muscle—40:46.
(Vaginal peritoneal process)—40:38.
Tunica vaginalis communis—40:45.
Ductus deferens—40:21.
Internal spermatic artery—50:52.
External spermatic artery—51:35.
Deferential artery—51:11.
Pampiniform plexus of veins—55:14.
Spermatic vein—55:11.
External spermatic nerve—70:35.
Deferential plexus—72:42.
Lymphatics.

c. Testis—39:66.

Tunica vaginalis propria testis—40:39.

Lamina parietalis—40:40.
Lamina visceralis—40:41.
Sinus epididymidis—40:44.

The testis may be exposed by making an incision through the anterior part of the lamina parietalis of the tunica vaginalis propria.

Superior and inferior extremities of the testis—39:67, 68.
Lateral and medial surfaces—39:69, 70.

Anterior and posterior margins—39:71, 72.
Epididymis—40:9.
Head, body and tail of epididymis—40:10–12.
Appendix testis—40:18.
The following structures may be identified in cross-section of the testis:
Tunica albuginea—39:73.
Mediastinum testis—39:74.
Septula testis—39:75.
Lobules—40:1.
Parenchyma—40:2.
For the structures of the penis, see II:1*b*, 2*a* and VI:3*a*.

IV. Abdominal Cavity, Peritoneum, and Viscera.

1. ABDOMINAL CAVITY AND THE PERITONEUM.

a. General characteristics of the abdominal cavity, viscera and peritoneum.

In completing the opening of the abdominal cavity and demonstrating the abdominal and peritoneal relations of the following structures, the incision already made through the lower part of the anterior abdominal wall (Section III:2*b*) is extended upward from the umbilicus to the xiphoid process, passing just to the left of the mid-sagittal plane.

Liver—34:43.
Gall bladder—35:6.
Stomach—32:78.
Greater omentum—43:70.
Small intestine—33:29.
Large intestine—33:61.
Lesser omentum—43:64.
Peritoneum—43:46.
Parietal peritoneum—43:49.
Visceral peritoneum—43:50.
Peritoneal cavity—43:51.

b. Peritoneal folds and fossa in relation to the small and large intestine.

Mesentery—43:53.
Root of mesentery—43:54.
Duodenojejunal recess—44:9.
Duodenojejunal fold—44:10.
Greater omentum—43:70.
Gastrocolic ligament—43:69.
Mesocolon—43:56.
Transverse mesocolon—43:57.
Ascending mesocolon—43:58.
Descending mesocolon—43:59.
Sigmoid mesocolon—43:60.
Mesorectum—43:61.
Mesentery of the vermiform process—43:62.
Ileocaecal fold—44:15.
Superior ileocaecal recess—44:13.

Inferior ileocaecal recess—44:14.
Caecal fold—44:18.
Caecal fossa—44:16.
Retrocaecal recess—44:17.
Paracolic recess—44:19.
Phrenicocolic ligament—44:1.

c. Peritoneal ligaments in relation to the liver, stomach, and spleen.

Faliciform ligament of liver—44:3.
Ligamentum teres of the liver—34:56.
Coronary ligament of the liver—44:4.
Right and left triangular ligaments—44:5, 6.
Lesser omentum—43:64.
Hepatogastric ligament—43:65.
Hepatoduodenal ligament—43:66.
Gastrosplenic ligament—43:68.
Phrenicosplenic ligament—44:2.
Gastrocolic ligament—43:69.

d. Omental bursa—43:71.

Foramen epiploicum—43:77.

The extent and following subdivisions of the omental bursa may be determined by inserting the finger through the foramen epiploicum:

Vestibule of bursa—43:72.
Superior omental recess—43:73.
Inferior omental recess—43:74.
Splenic recess—43:75.

e. Relations of the pelvic peritoneum.

Rectovesical excavation or pouch—44:38.
Pubovesical fold**—44:25.
Transverse vesical fold—44:26.

The following structures relate to the female pelvis only:

Broad ligament of the uterus—44:29.
Rectouterine excavation or pouch—44:36.
Vesicouterine excavation or pouch—44:37.

f. Peritoneal relations in general.

The relations of the peritoneum in general may be traced in transverse and sagittal planes of the abdomen. Some of the peritoneal relations of such retroperitoneal organs as the kidney, duodenum, and pancreas may be determined by palpation.

2. MESENTERIC BLOOD VESSELS, NERVES, AND LYMPHATICS.

Superior mesenteric artery—50:36. (Not including its origin.)

Exposed by removing the right layer of peritoneum of the mesentery, the inferior layer of the transverse mesocolon, and the peritoneum of the posterior abdominal wall between the root of the mesentery and the ascending colon.

Intestinal arteries—50:37.
Jejunal arteries—50:39.
Ileal arteries—50:40.

Inferior pancreaticoduodenal artery—50 :38.
Ileocolic artery—50 :41.
Appendicular artery—50 :42.
Right colic artery—50 :43.
Middle colic artery—50 :44.
Superior mesenteric vein—55 :17.
The tributaries of the superior mesenteric vein—55 :18 :25, consist of vessels corresponding to the branches of the superior mesenteric artery, together with veins from the stomach and pancreas.
Superior mesenteric sympathetic plexus—72 :32.
Mesenteric lymph glands—56 :64.
Mesocolic lymph glands—56 :65.
Inferior mesenteric artery—50 :45.
May be demonstrated by removing the peritoneum from the posterior abdominal wall between the root of the mesentery and the descending and iliac colon.
Left colic artery—50 :46.
Sigmoid arteries—50 :47.
Superior haemorrhoidal artery—50 :48. (Exclusive of its termination.)
Inferior mesenteric vein—55 :26.
Left colic vein—55 :27.
Sigmoid veins—55 :28.
Superior haemorrhoidal vein—55 :29.
Participates in an important anastomosis between the systematic and portal circulation.
Inferior mesenteric sympathetic plexus—72 :35.

3. MESENTERIAL SMALL INTESTINE AND THE LARGE INTESTINE.

a. Mesenterial small intestine—33 :58.
Jejenum—33 :59.
Ileum—33 :60.
Meckel's diverticulum.
The following structures can best be demonstrated in the intestine which has been removed from the abdomen, opened along its mesenteric border, and its contents washed out. For its removal, the small interstine may be divided between ligatures about 5 cm. below the duodenojejunal flexure and about 10 cm. above the ileocaecal junction, and its connections severed with the mesentery and mesenterial blood vessels.
Tunica serosa—33 :30.
Tunica muscularis—33 :31.
Longitudinal layer—33 :32.
Circular layer—33 :33.
Tela submucosa—33 :34.
Tunica mucosa—33 :35, 36.
Plicae circulares—33 :37.
Intestinal villi—33 :38. (Demonstrated with a hand lens.)
Intestinal glands—33 :40. (Demonstrated with a hand lens.)
Aggregated lymph nodules—33 :41.
Solitary lymph nodules—33 :40.
Chyme—33 :42.
Chyle—33 :43.
Intestinal juice—33 :44.

b. Large intestine—33 :61.

Caecum—33 :62.
Vermiform process—33 :67.
Colon—33 :70.
Ascending colon—33 :71.
Right colic flexure—33 :72.
Transverse colon—33 :73.
Left colon flexure—33 :74.
Descending colon—33 :75.
Sigmoid colon—33 :76.
Taeniae coli—33 :82.
Taenia mesocolica—34 :1.
Taenia omentalis—34 :2.
Taenia libera—34 :3.
Haustra coli—33 :78.
Appendices epiploicae—33 :80.

The following structures can be demonstrated to best advantage after the large intestine has been divided between ligatures at the junction of the sigmoid colon with the rectum, removed from the abdomen and its contents washed out.

Valvula coli—33 :63.
Inferior and superior lips—33 :64, 65.
Frenula of the valve of the colon—33 :66.
(Valve of the vermiform process)—33 :68.
Aggregated nodules of the vermiform process—33 :69.
Tunica serosa—33 :79.
Tunica muscularis—33 :81.
Tunica submucosa—34 :4.
Tunica mucosa—34 :5, 6.
Intestinal glands—34 :7.
Solitary lymphatic nodules—34 :8.

4. STRUCTURES IN RELATION TO THE WALLS OF THE OMENTAL BURSA.

a. Biliary ducts and vessels in the lesser omentum.

The exposure of the structures in the lesser omentum may be facilitated by the removal of the greater part of the left lobe of the liver. To this end an incision may be made through the left lobe in an anterior-posterior direction, beginning just at the left of the falciform ligament and terminating near the left margin of the fossa for the ductus venosus (keeping the detached part of the liver wrapped in a damp cloth for later reference).

Common bile duct—35 :16.
Hepatic duct—35 :3.
Cystic duct—35 :10.
Portal vein—55 :15.
Hepatic artery—50 :19.
Right gastric artery—50 :20.
Proper hepatic artery—50 :21.
Right ramus—50 :22.
Cystic artery—50 :23.
Left ramus—50 :24.
Left gastric artery—50 :17.

b. Remaining vessels in relation to the walls of the omental bursa.

Gastroduodenal artery—50 :25.

Right gastroepiploic artery—50 :29.

In exposing the following structures any remaining parts of the lesser omentuma are removed, the right gastric artery, right gastro-epiploic artery, and stomach are divided just to the left of the pylorus, the stomach displaced toward the left side, and the posterior wall of the lesser omental bursa carefully removed, guarding against undue displacement of the pancreas.

Superior pancreaticoduodenal artery—50 :26.

Coeliac artery—50 :16.

Left gastric artery—50 :17.

Hepatic artery—50 :19. (For its branches see the preceding section, 4*a*.)

Splenic artery—50 :31.

Pancreatic rami—50 :32.

Left gastroepiploic artery—50 :33.

Short gastric arteries—50 :34.

Splenic rami—50 :35.

Portal vein—55 :15.

Coronary vein of the stomach—55 :16.

Superior mesenteric vein—55 :17.

Inferior mesenteric vein—55 :26.

Splenic vein—55 :30.

Left gastroepiploic vein—55 :32.

Cystic vein—55 :33.

Parumbilical veins—55 :36.

The portal vein also participates in important oesophageal, rectal, peritoneal, and umbilical anastomoses.

5. DUODENUM AND PANCREAS.

a. Duodenum—33 :45.

Pars superior—33 :46.

Pars descendens—33 :47.

Pars horizontalis—33 :49.

Pars ascendens—33 :50.

Suspensory muscle of the duodenum—33 :54.

Duodenal papilla—33 :56.

Exposed by making a longitudinal incision through the anterior wall of the duodenum.

Longitudinal fold of duodenum—33 :55.

b. Pancreas—34 :26.

Head of pancreas—34 :27.

Uncinate process—34 :28.

Notch of the pancreas—34 :29.

Body of pancreas—34 :30.

Anterior, posterior and inferior surfaces—34 :31–33.

Superior, anterior and posterior margins—34 :34–36.

Omental tuber—34 :37.

Tail of pancreas—34 :38.

Pancreatic duct—34 :39.

Accessory pancreatic duct—34 :40.

(Accessory pancreas—34 :41.

6. STOMACH AND SPLEEN.

a. Stomach—32:78.

Vagus nerve—68:22. (In its relation to the stomach and adjacent organs.)

Anterior and posterior gastric plexuses—68:51, 52.

Hepatic rami—68:53.

Coeliac rami—68:54.

Stomach—32:78.

Anterior and posterior walls of stomach—32:79, 80.

Greater and lesser curvatures of stomach—32:1, 2.

Cardia—33:3.

Fundus of stomach—38:4.

Body of stomach—33:5.

Pylorus—33:6.

Cardiac part—33:7.

Pyloric part—33:8.

(Cardiac antrum)—33:9.

Pyloric antrum—33:10.

The exposure of the following structures is facilitated by dividing the abdominal part of the oesophagus, removing the stomach, and opening the stomach by an incision along its greater curvature.

Serous coat—33:11.

Muscular coat—33:12.

Longitudinal layer—33:13.

Circular layer—33:15.

Oblique fibers—33:17.

Sphincter muscle of pylorus—33:16.

Pyloric valve—33:18.

Tela submucosa—33:19.

Tunica mucosa—33:20.

Gastric pits—33:24.

b. Spleen—35:18.

Diaphragmatic surface—35:19.

Renal surface—35:20.

Gastric surface—35:21.

Superior and inferior extremities—35:22, 23.

Posterior and anterior margins—35:34, 25.

Tunica serosa—35:27.

Tunica albuginea—35:28.

Splenic pulp—35:30.

Splenic rami of splenic artery—35:31.

(Accessory spleen)—35:34.

7. SYMPATHETIC PLEXUSES IN RELATION TO THE COELIAC GANGLION AND COELAIC PLEXUS.

Coeliac plexus—72:19.

Coeliac ganglion—72:20.

If the thorax has been previously dissected, these ganglia may be conveniently located by tracing the great splanchnic nerves down to their junction with the ganglia.

Superior gastric plexus—72:26.

Hepatic plexus—72:24.

Inferior gastric plexus—72:27.

Splenic plexus—72:25.
Renal plexus—72:29.
Suprarenal plexus—72:28.
Phrenic plexus—72:22.
Superior mesenteric plexus—72:32.
Abdominal aortic plexus—72:18.

8. LIVER—34:43.

For the ligaments and peritoneal relation of the liver, see IV:1*c*. The removal of the liver involves the following incisions: (*a*) division of the portal vein at the level of the foramen epiploicum; (*b*) raising the liver as much as possible, cutting through the inferior vena cava vein at the point where it comes in contact with the inferior aspect of the liver, and to the right of the inferior vena cava cutting through the inferior layer of the coronary ligament; (*c*) in connection with the superior and posterior aspects of the liver dividing the ligamentum teres and the falciform ligament, the right and left triangular ligaments and superior layer of the coronary ligament; (*d*) separating the posterior surface of the liver from the diaphragm, making a second cut through the inferior vena cava just below the diaphragm and completing the detachment of the organ.

Right lobe of liver—34:59.
Quadrate lobe of liver—34:60.
Caudate lobe of liver—34:61.
  Papillary process—34:62.
  Caudate process—34:63.
Left lobe of liver—34:64.
Right sagittal fossa—34:49.
  Fossa for the gall bladder—34:50.
  Fossa for vena cava—34:51.
Left sagittal fossa—34:52.
  Fossa for umbilical vein—34:53.
  Fossa for ductus venosus—34:54.
Anterior margin—34:47.
  Incisura umbilicalis—34:48.
Superior surface—34:44.
Posterior surface—34:45.
  Oesophageal impression—34:68.
  Suprarenal impression—34:73.
Inferior surface—34:45.
  Porta hepatis—34:58.
  Omental tuber—34:67.
  Gastric impression—34:69.
  Duodenal impression—34:70.
  Colic impression—34:71.
  Renal impression—34:72.

The following hepatic structures may be demonstrated in cut surfaces of the liver, some of them requiring a hand lens or microscope for their identification.

Hepatic lobules—34:74.
Fibrous capsule—34:75.
Interlobular arteries—34:76.
Interlobular veins—34:77.
Central veins—34:78.
Bile ducts—35:1.

Interlobular ducts—35 :2.
Vasa aberrantia hepatis—35 :3.
Bile—35 :5.
Gall bladder—35 :6.
Fundus of gall bladder—35 :7.
Body of gall bladder—35 :8.
Neck of gall bladder—35 :9.
Cystic duct—35 :10.
Spiral valve—35 :15.

The following structures require a hand lens or a microscope for their adequate demonstration:

Tunica serosa of gall bladder—35 :11.
Tunica muscularis of gall bladder—35 :12.
Tunica mucosa of gall bladder—35 :13.
Plicae tunicae mucosae of gall bladder—35 :14.
Glandulae mucosae biliosae—35 :17.

9. SUPRARENAL GLAND, KIDNEY, AND URETER.

a. Suprarenal gland—39 :52.
Hilus of suprarenal gland—39 :55.
Anterior and posterior surfaces—39 :56, 57.
Base—39 :58.
Apex—39 :59.
Superior and medial margins—39 :60, 61.
(Accessory suprarenal glands)—39 :63.
Cortical substance—39 :53
Medullary substance—39 :54.
Central vein—39 :62.

b. Vascular supply of the kidney and suprarenal glands.
Renal artery—50 :50. (Cf. also—39 :4.)
Inferior suprarenal artery—50 :51.
Middle suprarenal artery—50 :49.
Renal veins—55 :9.
Suprarenal veins—55 :10.

c. Kidney—38 :37.
Adipose capsule—38 :49.
Lateral margin—38 :38.
Medial margin—38 :39.
Renal hilus—38 :40.
Renal sinus—38 :41.
Anterior and posterior surfaces—38 :42, 43.
Superior and inferior extremities—38 :44, 45.
(Hepatic impression)—38 :46.
Gastric impression)—38 :47.

The following structures may be demonstrated to best advantage by cutting through the kidney along its lateral margin and dividing the organ into symmetrical halves:

Tunica fibrosa—38 :50.
Cortical substance—38 :55.
Medullary substance—38 :56.
Renal pyramids—38 :58.

Renal papillae—38:60.
Renal columns—38:63.
Renal pelvis—38:70.
Renal calyces—38:71.

d. Ureter—39:19.

Abdominal part—39:20.

10. DIAPHRAGM.

Diaphragm—25:9.
Lumbar part—25:10.
Medial crus—25:11.
Intermediate crus—25:12.
Lateral crus—25:13.
Costal part—25:14.
Sternal part—25:15.
Aortic opening—25:16.
Oesophageal opening—25:17.
Central tendon—25:18.
Opening for vena cava—25:19.
Medial lumbocostal arch—25:20.
Lateral lumbocostal arch—25:21.

V. Structures in Relation to the Posterior Abdominal Wall.

1. BLOOD VESSELS AND LYMPHATICS.

a. Arteries.

Abdominal aorta—50:5.
Parietal branches—50:6.
Inferior phrenic artery—50:7.
Superior suprarenal rami—50:8.
Lumbar arteries—50:9–11.

These arteries pass posterior to the sympathetic trunk which together with other nerves of the abdominal wall should be guarded from injury.

Middle sacral artery—50:12. (Origin only.)
Visceral branches—50:15.

For the rami of the first five of the following arteries see IV:2, 4*b* and 9*b*.

Coeliac artery—50:16.
Superior mesenteric artery—50:36.
Inferior mesenteric artery—50:45.
Middle suprarenal artery—50:49.
Renal arteries—50:50.
Internal spermatic arteries—50:52.
Testicular artery—50:53.
Ovarian artery—50:54.
Common iliac arteries—50:55.
Hypogastric artery—50:56. (Origin only.)
External iliac artery—51:31.
Inferior epigastric artery—51:32.
Deep circumflex iliac artery—51:37.

b. Veins and lymphatics.

Inferior vena cava—55 :3.
Parietal roots—55 :4.
Inferior phrenic vein—55 :5.
Lumbar veins—55 :6.
Visceral roots—55 :7.
Hepatic veins—55 :8.
Renal veins—55 :9.
Suprarenal veins—55 :10.
Spermatic vein—55 :11.
Testicular vein—55 :12.
Ovarian vein—55 :13.
Common iliac veins—55 :37.
Middle sacral vein—55 :38.
Hypogastric vein—55 :39. (Termination only.)
External iliac veins—55 :58.
Inferior epigastric veins—55 :59.
Deep circumflex iliac vein—55 :50.
Cisterna chyli—56 :28.
Intestinal lymphatic trunk—56 :27.
Lumbar lymphatic trunks—56 :26.
Iliac lymph glands—56 :57.
Lumbar lymph glands—56 :58.
Coeliac lymph glands—56 :59.
Azygos vein—56 :53.
Hemiazygos vein—56 :54.

2. FASCIA AND MUSCLES OF POSTERIOR ABDOMINAL WALL.

Iliac fascia—27 :55.
Quadratus lumborum muscle—25 :32.
Iliopsoas muscle—26 :63.
Iliac muscle—26 :64.
Psoas major muscle—26 :65.

In the demonstration of this muscle the following nerves are encountered and should be guarded from injury: the sympathetic trunk, medial to it, the genitofemoral nerve in relation to its anterior surface, the ilioinguinal and lateral femoral cutaneous nerves in relation to its lateral margin, and the femoral nerve, situated between the psoas major and iliacus muscles.

Psoas minor muscle—26 :66.

3. NERVES OF THE POSTERIOR ABDOMINAL WALL.

Abdominal part of the sympathetic trunk—72 :15.
Lumbar ganglion—72 :16.
Rami communicantes—68 :72.
Twelfth intercostal nerve—70 :1.
Lumbar nerves—70 :11.

In demonstrating the lumbar nerves and lumbar plexus the psoas major muscle is removed by blunt dissection.

Lumbar plexus—70 :23.
Muscular rami—70 :24.
Iliohypogastric nerve—70 :25.

Ilioinguinal nerve—70 :29.
Genitofemoral nerve—70 :33.
Lumboinguinal nerve—70 :34.
External spermatic nerve—70 :35.
Lateral femoral cutaneous nerve—70 :36.
Femoral nerve—70 :41.
Obturator nerve—70 :37.
Lumbosacral trunk—70 :22. (Origin only.)

VI. Pelvis.

1. OSTEOLOGY.

Coxal bone—15 :7.
Obturator foramen—15 :8.
Iliac bone—15 :14.
Iliac crest—15 :18.
Iliac fossa—15 :31.
Ischial bone—15 :32.
Superior ramus of the ischial bone—15 :34.
Inferior ramus of the ischial bone—15 :35.
Pubic bone—15 :40.
Obturator sulcus—15 :46.
Inferior and superior rami of the pubic bone—15 :49, 50.
Sacrum—7 :5.
Pelvic surface—7 :7.
Promontory—7 :10.
Anterior sacral foramina—7 :15.
Apex of sacral bone—7 :24.
Coccyx—7 :25.
Pelvis—15 :52.
Symphysis of pubic bone—15 :53.
Pubic arch—15 :54.
Major pelvis—15 :56.
Minor pelvis—15 :57.
Linea terminalis—15 :58.
Superior aperture of the pelvis—15 :62.
Inferior aperture of the pelvis—15 :63.
Pelvic axis—15 :64.
Conjugate, transverse and oblique diameters—15 :65–67.
Pelvic inclination—15 :68.

2. PERITONEUM AND FASCIA IN RELATION TO THE PELVIS.[5]

a. Peritoneal folds in the male pelvis.

Transverse vesical fold—44 :26.
Pubovesical fold**—44 :25.
Mesorectum—43 :61.
Rectovesical excavation—44 :38.

[5] An alternative procedure as noted in Section II is to introduce here a study of the perineal region, the body being either placed in the lithotomy position or else divided transversely at the level of the articulation of one of the lower lumbar vertebrae and the pelvis carefully divided in the median sagittal plane (the latter method, however, is not to be especially recommended).

b. Peritoneum of the female pelvis.

Rectouterine folds—44 :35.
Rectouterine excavation—44 :36.
Vesicouterine excavation—44 :37.
Fossa ovarica—44 :33.
Broad ligament of uterus—44 :29.
Mesometrium—44 :30.
Mesosalpinx—44 :31.
Mesovarium—44 :32.
Suspensory ligament of the ovary—44 :34.

c. Fascia.

Pelvic fascia—43 :26.

May be demonstrated by removing the pelvic peritoneum by blunt dissection, guarding at the same time against injury to nerves and vessels.

Superior fascia of pelvic diaphragm—43 :28.
Tendinous arch of pelvic fascia—43 :29.
Endopelvic fascia—43 :27.
Middle puboprostatic ligament—43 :30. (In the male.)
Middle pubovesical ligament—43 :30. (In the female.)
Lateral puboprostatic ligament—43 :31. (In the male.)
Lateral pubovesical ligament—43 :31. (In the female.)

The demonstration of the anterior relations of the pelvic fascia may be completed and the subsequent exposure of pelvic viscera facilitated (i.e. if the pelvis has not already been previously divided in the median sagittal plane) by making the following dissections: (*a*) detaching the suspensory ligament of the penis from the front of the symphysis, guarding at the same time against injury to the dorsal vein of the penis; (*b*) detaching all muscles and fascia from the anterior surface of each pubic bone over a region extending about 2.5 cm. laterally from the symphysis pubis; (*c*) sawing through the pubic bones by an incision on each side of the symphysis pubis extending from the pubic tubercle to a point just below the attachment of the arcuate ligament of the pubis; and (*d*) detaching the pelvic fascia from the posterior surface of this isolated segment of bone and carefully removing the bone, retaining the latter for later reference.

Inferior fascia of the pelvic diaphragm—43 :32.
Obturator fascia—43 :40.
Tendinous arch of the levator ani muscle—43 :22.
Superior fascia of the urogenital diaphragm—43 :36.

3. PELVIC VISCERA.

a. In the male pelvis.

Urinary bladder—39 :29.
Vertex of bladder—39 :30.
Body of bladder—39 :31.
Fundus of bladder—39 :32.
Urachus*—39 :34.

The following structures may be exposed by an incision beginning at the vertex of the bladder and extending through its wall in an anterior-posterior direction in the line of its median plane.

Tunica serosa—39 :35.
Tunica muscularis—39 :36–39.

Tela submucosa—39 :42.
Tunica mucosa—39 :43.
Trigone of the bladder—39 :46.
Uvula of the bladder—39 :47.
Urethral fold—39 :48.
Orifice of ureter—39 :49.
Internal urethral orifice—39 :50.
Urethral ring—39 :51.

Male urethra—41 :19.

Its internal structure may be exposed by introducing blunt pointed scissors into the internal urethral orifice and dividing the dorsal wall of the urethral canal throughout its entire extent.

Prostatic part—41 :20.
Urethral crest—41 :21.
Seminal hillock—41 :22.
Prostatic utricle—41 :23.
Ejaculatory ducts—40 :30. (Their openings only.)
Prostatic ducts—40 :59. (Their openings only.)
Membranous part—41 :24.
Cavernous part—41 :25.
Excretory ducts of bulbourethral glands—40 :64.
Navicular fossa of urethra—41 :26.
(Valvulva fossae navicularis)—41 :27.
External urethral orifice—41 :28.
Urethral lacunae—41 :29.

Penis—40 :66.

The following structures may be demonstrated in cross-sections of the penis. For other structures of penis see II :1*b* and 2*a*.

Corpus cavernosum penis—41 :4.
Corpus cavernosum urethrae—41 :5.
Tunica albuginea—41 :5.
Septum penis—41 :10.
Trabeculae corporum cavernosorum—41 :11.
Cavernae corporum cavernosorum—41 :12.

The demonstration of the remaining pelvic structures may be facilitated (if the possible alternative indicated in the footnote to the preceding section has not been followed) by detaching the fifth lumbar vertebra from the sacrum, dividing the sacrum, coccyx, and any remaining soft structures in the median sagittal plane, and separating the two halves of the pelvis.

Rectum—34 :9.
Sacral flexure—34 :10.
Perineal flexure—34 :11.
Rectal ampulla—34 :12.
Mucous membrane—34 :17.
Transverse rectal folds—34 :21.
Rectococcygeal muscle—34 :15.
Anal part of rectum—34 :22.
Rectal columns—34 :23.
Rectal sinuses—34 :24.
Hemorrhoidal ring—34 :25.
Sphincter ani internus muscle—34 :14.

Pelvic part of ureter—39 :21.
Prostate—40 :50.
Base—40 :51.
Apex—40 :52.
Anterior and posterior surfaces—40 :53, 54.
Right and left lobes—40 :55.
Isthmus—40 :56.
(Middle lobe)—40 :57.
Seminal vesicles—40 :31.
Body of seminal vesicle—40 :32.
Excretory duct—40 :36.
Ductus deferens—40 :21.
Ampulla of ductus deferens—40 :22.
Diverticula of ampulla—40 :23.
Ejaculatory duct—40 :30.

b. In the female pelvis.

The demonstration of the following structures may be facilitated (i.e., if the possible alternative indicated in the footnote to the preceding section has not been followed) by detaching the fifth lumbar vertebra from the sacrum, dividing the sacrum, coccyx, symphysis pubic, and any remaining soft structures in the median sagittal plane and separating the two halves of the pelvis.

Peritoneum—43 :46.

For structures relative to the peritoneum in the female pelvis, see VI :2*b*.

Pelvic fascia—43 :26. (Cf. VI :2*c*.)
Urinary bladder—39 :29.

For structures relative to the urinary bladder, see VI :3*a*.

Female urethra—42 :70.
External urethral orifice—42 :71.
Crista urethralis—43 :2.
Pelvic part of ureter—39 :21.
Ovary—41 :36.
Hilus—41 :37.
Medial and lateral surfaces—41 :38, 39.
Free margin—41 :40.
Mesovarian margin—41 :41.
Tubal extremity—41 :42.
Uterine extremity—41 :43.
Ovarian ligament—41 :56.
Corpus luteum—41 :54.
Corpus albicans—41 :55.
Paroophoron—42 :43.
Epoophoron—42 :39.
Uterine tube—41 :57.
Ostium abdominale—41 :58.
Infundibulum—41 :59.
Fimbriae—41 :60.
Fimbria ovarica—41 :61.
Ampulla—41 :62.
Isthmus—41 :63.

Uterus—41:76.
Body of uterus—41:77.
Fundus—42:1.
Lateral margin—42:2.
Vesical surface—43:3.
Intestinal surface—42:4.
Uterine cavity—42:5.
Cervix—42:7.
Supravaginal part—42:8.
Vaginal part—42:9.
External orifice of uterus—42:10.
Anterior lip—42:11.
Posterior lip—42:12.
Canal of the cervix—42:13.
Internal orifice of the uterus—42:6.
Ligamentum teres—42:23.
Vagina—42:25.
Fornix of vagina—42:26.
Anterior and posterior walls—42:27, 28.
Hymen—42:29.
Hymeneal caruncles—42:30.
Rectum—34:9.
For its structural characteristics, see VI:3*a*.

4. PELVIC BLOOD VESSELS (MALE AND FEMALE).

In the following tabulation vessels which are either male or female only are so indicated. All other vessels are common to both sexes.

a. Arteries.

Hypogastric artery—50:56.
Parietal rami of the hypogastric artery—50:57.
Iliolumbar artery—50:58.
Lumbar ramus**—50:59.
Spinal ramus**—50:60.
Iliac ramus**—50:61.
Lateral sacral artery—50:62.
Spinal rami**—50:63.
Obturator artery—50:64.
Pubic ramus—50:65.
Superior gluteal artery—51:1.
Inferior gluteal artery—51:4.
Visceral rami of the hypogastric artery—51:6.
Umbilical artery—51:7.
Superior vesical arteries**—51:8.
[Lateral umbilical ligament]**—51:9.
Inferior vesical artery—51:10.
Deferential artery**—51:11. (In the male only.)
Uterine artery—51:12. (In the female only.)
Vaginal artery—51:13.
Ovarian ramus—51:14.
Tubal ramus—51:15.
Ovarian artery—50:54. (In the female only.)

Middle hemorrhoidal artery—51:16.
Internal pudendal artery—51:17.
For its perineal rami in both male and female, see II:2–4.
Superior hemorrhoidal artery—50:48.
Middle sacral artery—50:12.
Lowest lumbar artery**—50:13.
Glomus coccygeum**—50:14.

b. Veins of the pelvis.

Hypogastric vein—55:39.
The tributaries of the hypogastric vein—55:40, 49:53, 49:55–57, correspond to a large degree with the branches of the hypogastric artery.
Hemorrhoidal plexus—55:46.
Vesical plexus**—55:47.
Pudendal plexus**—55:48.
Uterovaginal plexus**—55:54. (In the female only.)
Middle sacral vein**—55:38.

5. PELVIC MUSCLES AND NERVES.

May be exposed by displacing the viscera from the lateral pelvic walls and removing any remains of the superior fascia of the pelvic diaphragm—43:28, guarding at the same time against injury to the fifth sacral and the coccygeal nerves.

Pelvic diaphragm—43:20.
Levator ani muscle—43:21.
Tendinous arch of the levator ani muscle—43:22.
Coccygeus muscle—43:23, 25:59.
Sacral plexus—70:47.
Lumbosacral trunk—70:48.
Superior gluteal nerve—70:49.
Inferior gluteal nerve—70:50.
Posterior femoral cutaneous nerve—70:51.
Sciatic nerve—70:54.
Pudendal plexus—71:15.
Middle hemorrhoidal nerves**—71:16.
Inferior vesical nerves**—71:17.
Vaginal nerves**—71:18. (In the female.)
Pudendal nerve—71:19.
Coccygeal nerve**—71:26.
Pelvic part of the sympathetic system—72:15.
Sacral ganglia—72:17.
Obturator fascia—43:40.
Obturator internus muscle—26:72.
Piriformis muscle—26:71.

6. PELVIC ARTICULATIONS.

Ligaments of the pelvic girdle—20:45.
Obturator membrane—20:46.
Obturator canal—20:47.
Iliolumbar ligament—20:48.
Sacrotuberous ligament—20:49.
Falciform process—20:50.

Sacrospinous ligament—20 :51.
Greater sciatic foramen—20 :52.
Lesser sciatic foramen—20 :53.
Sacro-iliac articulation—20 :54.
Anterior sacro-iliac ligaments—20 :55.
Interosseous sacro-iliac ligaments—20 :56.
Long and short posterior sacro-iliac ligaments—20 :57, 58.
Synovial cavity.
Symphysis pubis—20 :59.
Superior pubic ligaments—20 :60.
Arcuate ligament of pubis—20 :61.
Interpubic fibro-cartilage—20 :62.

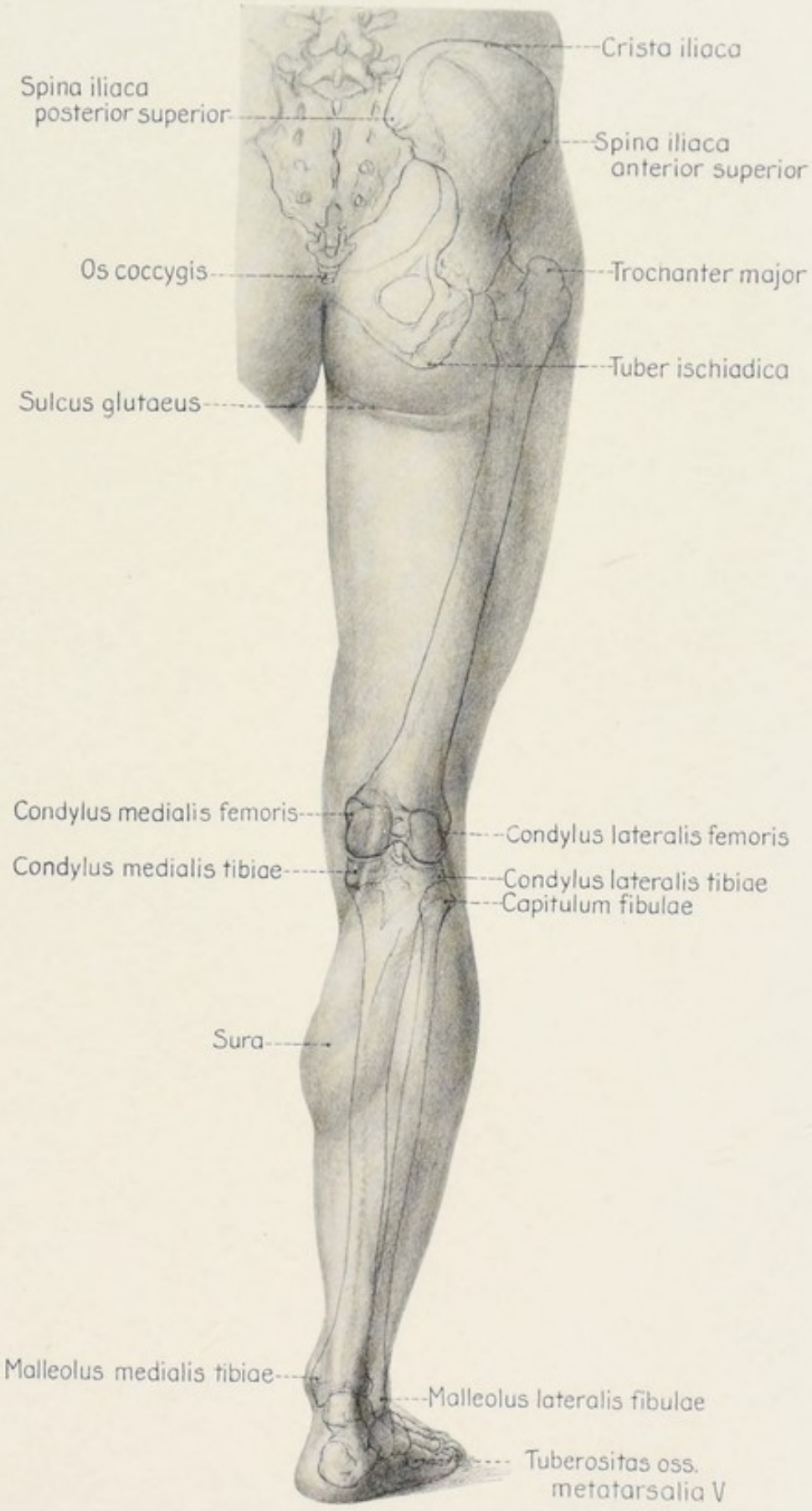
Demonstrated by removing a slice of bone from the front of the symphysis pubis.

Sacro-coccygeal symphysis—18 :48.
Superficial posterior sacro-coccygeal ligament—18 :49.
Deep posterior sacro-coccygeal ligament—18 :50.
Anterior sacro-coccygeal ligament—18 :51.
Lateral sacro-coccygeal ligament—18 :52.

INFERIOR EXTREMITY

Plate IX

Posterior aspect of the inferior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.


Crista iliaca
Spina iliaca posterior superior
Spina iliaca anterior superior
Os coccygis
Trochanter major
Tuber ischiadica
Sulcus glutaeus
Condylus medialis femoris
Condylus lateralis femoris
Condylus medialis tibiae
Condylus lateralis tibiae
Capitulum fibulae
Sura
Malleolus medialis tibiae
Malleolus lateralis fibulae
Tuberositas oss. metatarsalia V

INFERIOR EXTREMITY

I. General Characteristics of the Inferior Extremity.

1. SUBDIVISIONS.

Thigh—5 :45.
Anterior and posterior surface—5 :46, 47.
Lateral and medial surface—5 :48, 49.
Gluteal furrow—5 :50.
Knee—5 :51.
Posterior surface of knee—5 :52.
Patella—5 :53.
Leg—5 :54.
Foot—5 :60.

For the remaining subdivisions of the leg and foot, see VII :1*a*.

For the osteology of the inferior extremity see 15 :5 to 17 :45.

2. REGIONS. (Pls. 11, 12.)

Regions of the inferior extremity—84 :15.
Anterior femoral region—84 :16.
Subinguinal fossa—84 :17.
Lateral femoral region—84 :18.
Trochanteric region—84 :19.
Posterior femoral region—84 :20.
Medial femoral region—84 :21.
Anterior region of the knee—84 :22.
Patellar region—84 :23.
Posterior region of the knee—84 :24.
Popliteal fossa—84 :25.

For the remaining regions of the inferior extremity, see VIII :1*c*.

Regions of the back—83 :23.

Only those regions of the back are listed here which are in direct relation to the regions of the inferior extremity.

Region of the hip—83 :30.
Sacral region—83 :31.
Gluteal region—83 :32.
Perineal region—83 :33.

II. Gluteal Region.

1. SURFACE ANATOMY. (Pls. 9, 10, 3, 4.)

Nates—5 :5.
Anal cleft—5 :7.
Coccyx—7 :25.
Sacrum—7 :5.
Crest of the ilium—15 :18.
Anterior superior iliac spine—15 :22.
Posterior superior iliac spine—15 :24.
Gluteal sulcus—5 :50.
Tuberosity of ischium—15 :36.
Greater trochanter—16 :2.

2. FASCIA AND CUTANEOUS NERVES.

Skin incisions: (*a*) from the posterior superior iliac spine along the iliac crest as far forward as possible; (*b*) from the posterior extremity of (*a*) obliquely distally and medially to the middle line of the sacral region, thence distally to the tip of the coccyx; (*c*) from the tip of the coccyx distally and laterally, crossing the middle point of the gluteal sulcus, to the junction of the middle and proximal thirds of the thigh.

Superficial fascia—23:36.
Superior clunial nerves—70:15.
Middle clunial nerves—70:21.
Lateral cutaneous ramus of the iliohypogastric nerve—70:27.
Lateral cutaneous ramus of the twelfth thoracic nerve—69:76.
Inferior clunial nerves—70:52.
Perineal rami of the posterior femoral cutaneous nerve**—70:53.
Deep fascia—43:32.

3. GLUTAEUS MAXIMUS MUSCLE.

Glutaeus maximus muscle—26:67.

4. STRUCTURES EXPOSED BY THE REFLECTION OF THE GLUTAEUS MAXIMUS MUSCLE.

Demonstrated by separating the glutaeus maximus muscle from the underlying structures, detaching it at its origin and reflecting it toward its insertion; at the same time exposing and cutting its nerve and vascular supply, but leaving intact the posterior femoral cutaneous nerve, sacrotuberous ligament, and perineal region.

a. Bursae in relation to the glutaeus maximus muscle.

Trochanteric bursa of the glutaeus maximus muscle—28:53.
Glutaeofemoral bursae—29:5.
Sciatic bursa of the glutaeus maximus muscle—29:6.

b. Structures distal to the piriformis muscle.

Inferior gluteal nerve—70:50.
Inferior gluteal artery—51:4.
Posterior femoral cutaneous nerve—70:51.
Sciatic nerve—70:54.
Internal pudendal artery—51:17.
Pudendal nerve—71:19.
Nerve to the obturator internus muscle.
Piriformis muscle—26:71.
Obturator internus muscle—26:72.
Superior and inferior gemelli muscles—26:73, 74.
Quadratus femoris muscle—26:75.
Nerve to the quadratus femoris muscle.

May be exposed by detaching the two gemelli muscles at their origins, cutting the tendon of the obturator internus at its exit from the lesser sciatic foramen and reflecting these structures toward their insertions.

The following structures may be demonstrated by detaching the quadratus femoris muscle at its origin and reflecting it toward its insertion.

Obturator externus muscle—27:10.
Medial femoral circumflex artery—51:46. (Terminal branches only.)

c. Structures proximal and lateral to the piriformis muscle.

Glutaeus medius muscle—26 :68.
Nerve to the tensor fasciae latae muscle.
Ascending branch of the lateral femoral circumflex artery —51 :51.

The following structures may be exposed by separating the glutaeus medius muscle from the glutaeus minimus muscle, dividing the gluteaus medius muscle about 5 cm. proximal to the greater trochanter and reflecting the two parts toward their origin and insertion, respectively.

Superior gluteal artery—51 :1.
Superior gluteal nerve—70 :49.
Glutaeus minimus muscle—26 :69.

5. STRUCTURES EXPOSED BY THE REFLECTION OF THE GLUTAEUS MINIMUS MUSCLE.

May be demonstrated by detaching the glutaeus minimus muscle at its origin and reflecting it toward its insertion.

Articular capsule of hip—20 :64.
Trochanteric bursa of glutaeus minimus muscle—29 :2.
Reflected tendon of the rectus femoris muscle.

III. Popliteal Space.

1. SURFACE ANATOMY. (Pls. 9, 10.)

Tendon of the bisceps femoris muscle—27 :11.
Tendons of the semitendinous and semimembranosus muscles—27 :14, 15.
Tendon of adductor magnus muscle—27 :8.
Epicondyles of femur—16 :19, 20.
Head of fibula—16 :54.
Common peroneal nerve—70 :56.

2. FASCIA, SUPERFICIAL NERVES, AND VESSELS.

Skin incisions: (*a*) longitudinally for about 20 cm. along the middle line of the posterior region of the knee, extending about 10 cm. distal and proximal to the line of the articulation of the knee; (*b*) transversely at each end of the preceding incision.

Superficial fascia—23 :36.
Posterior femoral cutaneous nerve—70 :51. Terminal branches only.
Small saphenous vein—56 :1.
Femoropopliteal vein—56 :2.
Deep fascia—27 :70.

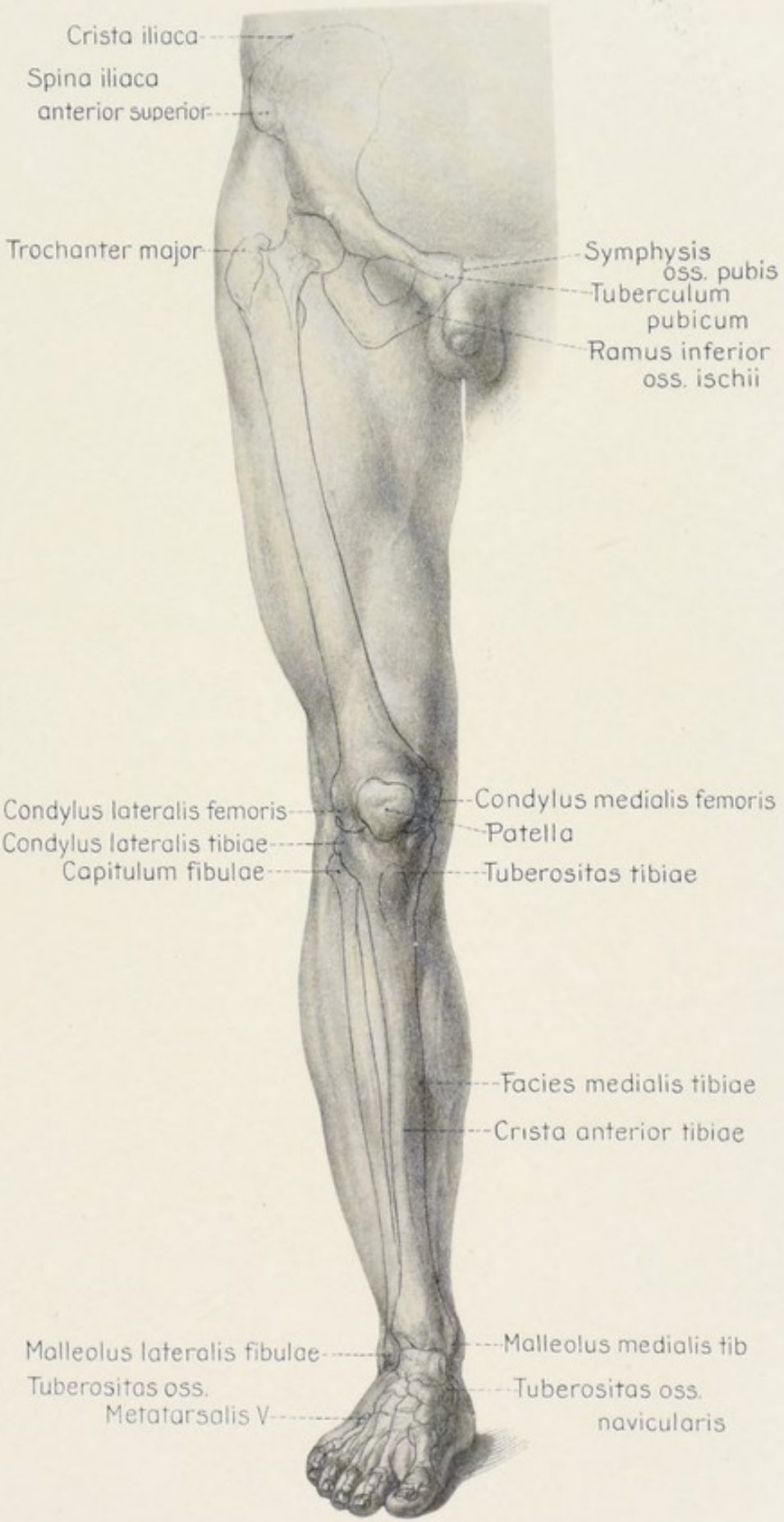
3. POPLITEAL SPACE; LARGE NERVES AND VESSELS.

May be exposed by making a longitudinal incision through the deep fascia in the middle line of the popliteal space, reflecting the fascia and demonstrating the structures with a minimum of dissection.

Tibial nerve—70 :68.
Common peroneal nerve—70 :56.
Posterior femoral cutaneous nerve—70 :51.
Popliteal artery—51 :63.
Popliteal veins—56 :4.

PLATE X

Anterior aspect of the inferior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.


Crista iliaca
Spina iliaca anterior superior
Trochanter major
Symphysis oss. pubis
Tuberculum pubicum
Ramus inferior oss. ischii
Condylus lateralis femoris
Condylus lateralis tibiae
Capitulum fibulae
Condylus medialis femoris
Patella
Tuberositas tibiae
Facies medialis tibiae
Crista anterior tibiae
Malleolus lateralis fibulae
Tuberositas oss. Metatarsalis V
Malleolus medialis tib
Tuberositas oss. navicularis

4. POPLITEAL SPACE: MEDIAL AND LATERAL BOUNDARIES.

Biceps muscle—27 :11.
Semitendinosus muscle—27 :14.
Semimembranosus muscle—27 :15.
Lateral head of gastrocnemius muscle—27 :24.
Medial head of gastrocnemius muscle—27 :25.
Plantaris muscle—27 :29.

5. CONTENTS OF THE POPLITEAL SPACE.

a. Nerves.

Posterior femoral cutaneous nerve—70 :51.
Tibial nerve—70 :68.
Muscular rami—70 :69.
Medial sural cutaneous nerve—71 :2.
Interosseous crural nerve**—71 :1.
Articular rami to knee joint.
Common peroneal nerve—70 :56.
Lateral sural cutaneous nerve—70 :58.
Peroneal anastomotic ramus—70 :59.
Articular rami to knee joint.

A genicular ramus of the obtruator nerve may be present.

b. Blood vessels and lymphatics.

Popliteal artery—51 :63.
Superior lateral genicular artery—51 :64.
Superior medial genicular artery—51 :65.
Middle genicular artery—51 :66.
Inferior lateral genicular artery—51 :68.
Sural arteries—51 :67.
Popliteal veins—56 :4.
Popliteal lymph glands—57 :5.

6. FLOOR OF THE POPLITEAL SPACE.

Popliteal surface of femur—16 :15.
Oblique popliteal ligament—21 :15.

Associated with it is the fascia of popliteus muscle.

IV. Posterior Part of the Thigh.

1. FASCIA AND CUTANEOUS NERVES.

Skin incision: longitudinally through the skin remaining on the back of the thigh.

Superficial fascia—23 :36.
Posterior femoral cutaneous nerve—70 :51. (Terminal rami.)
Anterior femoral cutaneous nerve—70 :42. (Medial terminal rami only.)
Cutaneous ramus of the obturator nerve—70 :39.
Deep fascia—27 :49.

2. MUSCLES.

Biceps femoris muscle—27 :11.
Long head—27 :12.
Short head—27 :13.
Semimembranosus muscle—27 :15.
Bursa of semimembranosus muscle—29 :26.

3. NERVES AND BLOOD VESSELS.

Posterior femoral cutaneous nerve—70:51.
Ischiadic nerve—70:54.
Muscular rami—70:55.
First perforating artery—51:53.
Second perforating artery—51:55.
Third perforating artery—51:56.
Perforating veins—55:73.
Femoropopliteal vein—56:2.

V. Anterior Part of the Thigh.

1. SURFACE ANATOMY. (Pls. 3, 10.)

Anterior superior iliac spine—15:22.
Symphysis pubis—20:59.
Inguinal ligament—25:41.
Pubic tubercle—15:44.
Pubic arch—15:54.
Inferior ramus of the pubis—15:49.
Inferior ramus of the ischium—15:35.
Tuberosity of the ischium—15:36.
Greater trochanter of the femur—16:2.
Patella—15:69.
Medial condyle of the femur—16:16.
Lateral condyle of the femur—16:17.

2. REGIONS IN RELATION TO THE ANTERIOR ASPECT OF THE THIGH. (Pl. 11.)

Anterior femoral region—84:16.
Subinguinal fossa—84:17.
Lateral femoral region—84:18.
Trochanteric region—84:19.
Medial femoral region—84:21.

3. FASCIA, SUPERFICIAL VESSELS, LYMPHATICS, AND CUTANEOUS NERVES.

a. Superficial fascia, blood vessels, and lymphatics.

Skin incisions: (*a*) from the anterior superior iliac spine along the line of the inguinal ligament to the symphysis pubis; (*b*) from the median end of (*a*) distally, just lateral to the scrotum and along the medial aspect of the thigh for a distance of 10 cm.; (*c*) from the distal end of (*b*) anteriorly and transversely to the lateral aspect of the thigh; (*d*) from the end of incision (*b*) distally to the medial condyle of the tibia; (*e*) from the latter point anteriorly and transversely to the lateral condyle of the tibia.

Superficial fascia—23:36.
Great saphenous vein—55:66.
Superficial epigastric vein—55:65.
Superficial circumflex iliac vein—55:68.
External pudendal veins—55:64.
Superficial epigastric artery—51:39.
Superficial circumflex iliac artery—51:40.
External pudendal arteries—51:41.
Superficial subinguinal lymph glands—57:3.

b. Fossa ovalis.

Fossa ovalis—27 :65.
Falciform margin—27 :66.
Superior cornu—27 :67.
Inferior cornu—27 :68.
Fascia cribrosa—27 :69.

Some of the deep subinguinal lymph glands—57 :4, may be in relation to the fossa ovalis.

c. Cutaneous nerves, superficial praepatellar bursae.

Ilioinguinal nerve—70 :29.
Lumboinguinal nerve—70 :34.
Lateral femoral cutaneous nerve—70 :36.
Anterior femoral cutaneous nerves—70 :42.
Infrapatellar ramus of the saphenous nerve—70 :45.
Cutaneous rami of the obturator nerve—70 :39.
Bursa praepatellaris subcutanea—29 :12.
Bursa praepatellaris subfascialis—29 :15.

d. Deep fascia.

Fascia lata—27 :49.
Iliotibial tract—27 :50.
Lateral intermuscular septum—27 :51.
Medial intermuscular septum—27 :52.

4. FEMORAL SHEATH.

May be demonstrated by making an incision through the fascia lata beginning at the superior cornu of the falciform margin of the fossa ovalis and extending laterally to within about 2 cm. of the anterior superior iliac spine, reflecting the fascial flap laterally and removing the subjacent fat and deep subinguinal lymph glands; contents may be exposed by a longitudinal incision through the anterior wall of each of the three subdivisions or compartments of the sheath.

Femoral artery—51 :38.
Lumboinguinal nerve—70 :34.
Femoral vein—55 :61.
Femoral canal—27 :62.

The following structures may be palpated by introducing the little finger into the femoral canal.

Femoral ring—27 :63.
Femoral septum—27 :64.
Lacunar ligament—25 :42.
Inguinal ligament—25 :41.
Femoral vein—55 :61.
Pubic bone—15 :40.

Femoral hernia.

5. FEMORAL TRIGONE AND ITS CONTENTS.

Exposed by removing the fascia lata from the anterior aspect of the proximal third of the thigh.

Femoral trigone—27 :59.
Fascia iliopectinea—27 :56.
Lacuna musculorum—27 :57.
Lacuna vasorum—27 :58.
Femoral artery—51 :38.

Superficial epigastric artery—51:39.
Superficial circumflex iliac artery—51:40.
External pudendal arteries—51:41.
Inguinal rami**—51:44.
Deep femoral artery—51:45.
Medial circumflex femoral artery—51:46.
Lateral circumflex femoral artery—51:50.
Femoral vein—55:61.
Superficial epigastric vein—55:65.
Superficial circumflex iliac vein—55:68.
External pudendal veins—55:64.
Great saphenous vein—55:66.
Accessory saphenous vein—55:67.
Deep femoral veins—55:72.
Medial circumflex femoral veins—55:69.
Lateral circumflex femoral veins—55:70.
Lumboinguinal nerve—70:34.
Lateral femoral cutaneous nerve—70:36.
Femoral nerve—70:41.

The following muscles are in relation to the floor and medial and lateral boundaries of the trigone:

Adductor longus muscle—27:5.
Pectineus muscle—27:4.
Iliopsoas muscle—26:63.
Sartorius muscle—26:76.
Fascia iliopectinea—27:60.

6. ADDUCTOR CANAL AND ITS CONTENTS.

Adductor canal—27:53.

May be exposed by making a longitudinal incision through the fascia lata remaining on the distal two-thirds of the anterior aspect of the thigh and reflecting the fascial flaps laterally and medially, but leaving intact the iliotibial tract; contents may be demonstrated by a longitudinal incision through the fibrous anterior wall of the canal.

Femoral artery—51:38.
Arteria genu suprema—51:59.
Saphenous ramus—51:61.
Muscular rami—51:60.
Articular rami—51:62.
Femoral vein—55:611.
Saphenous nerve—70:44.
Tendinous [adductor] opening—27:54.

7. MUSCLES OF THE FRONT OF THE THIGH.

Sartorius muscle—26:76.
Tensor fasciae latae muscle—26:70.
Iliotibial tract—27:50.
Lateral intermuscular septum of the thigh—27:51.
Medial intermuscular septum of the thigh—27:52.
Quadriceps femoris muscle—26:77.
Rectus femoris muscle—26:78.
Bursa of rectus femoris muscle**—29:7.
Vastus lateralis muscle—26:79.

Vastus medialis muscle—27 :2.
Vastus intermedius muscle—27 :1.

May be exposed by making a transverse incision through the middle of the rectus femoris muscle and reflecting the distal end.

Articularis genu muscle—27 :3.

May be exposed by making a longitudinal incision through the vastus intermedius muscle.

Common tendon of the quadriceps femoris muscle—26 :77.
Medial patellar retinaculum—21 :19.
Lateral patellar retinaculum—21 :20.

VI. Medial Side of the Thigh.

1. MUSCLES, NERVES, AND VESSELS.

Adductor longus muscle—27 :5.
Deep femoral artery—51 :45.

Exposed by detaching the pectineus muscle at its origin and reflecting it toward its insertion, guarding, at the same time, the anterior ramus of the obturator nerve.

First perforating artery—51 :53.
Superior nutrient femoral artery—51 :54.
Second perforating artery—51 :55.
Third perforating artery—51 :56.
Inferior nutrient femoral artery—51 :57.

Pectineus muscle—27 :4.
Pectineal fascia—27 :61.
Bursa of pectineus muscle**—29 :10.
Medial circumflex femoral artery—51 :46.

May be exposed by detaching the adductor longus muscle at its origin and reflecting it toward its insertion.

Superficial ramus—51 :47.
Deep ramus—51 :48.
Acetabular ramus—51 :49.

Adductor brevis muscle—27 :7.
Obturator nerve—70 :37.
Posterior ramus—70 :40.

May be exposed by detaching the adductor brevis muscle at its origin and reflecting it toward its insertion.

Anterior ramus—70 :38.
Cutaneous ramus—70 :39.

Gracilis muscle—27 :6.
Proper bursa of sartorius muscle—29 :19.
Bursa anserina—29 :20.

Adductor minimus muscle—27 :9.
Adductor magnus muscle—27 :8.
Tendinous [adductor] opening—27 :54.

The following structures may be demonstrated by detaching the adductor minimus and magnus muscles at their origins and reflecting them toward their insertions.

Obturator externus muscle—27 :10.
Psoas major muscle—26 :65.

Iliac muscle—26 :64.
Obturator artery—50 :64.

Demonstrated by the removal of the obturator externus muscle bit by bit.

Anterior ramus—50 :66.
Posterior ramus—50 :67.
Artery of the acetabulum—50 :68.

VII. Hip Joint.

1. STRUCTURES IN RELATION TO THE HIP JOINT.

May be demonstrated by severing the femoral artery, vein, and nerve, detaching the iliopsoas muscle at its insertion, dividing the sartorius muscle near its origin and reflecting these structures together with the tensor fasciae latae muscle and exposing the capsule of the hip joint.

Iliopectineal bursa—29 :8.
Bursa of rectus femoris muscle**—29 :7.
Subtendinous iliac bursa—29 :9.
Articular capsule—20 :64.
Iliofemoral ligament—20 :69.
Ischiocapsular ligament—21 :1.
Pubocapsular ligament—21 :2.
Zona orbicularis—20 :68.
Glenoid lip—20 :65.
Transverse ligament of acetabulum—20 :66.
Ligamentum teres femoris—20 :67.
Synovial membrane—18 :32.

VIII. Leg and Foot.

1. GENERAL CHARACTERISTICS.

a. Subdivisions of leg and foot.

Leg—5 :54.
Anterior and posterior surfaces—5 :55, 56.
Calf—5 :57.
Medial and lateral malleoli—5 :58, 59.
Foot—5 :60.
Tarsus—5 :61.
Metatarsus—5 :62.
Dorsum and sole of foot—5 :63, 64.
Medial and lateral margins—5 :65, 66.
Heel—5 :67.
Digits of foot—5 :68.
Hallux—5 :69.
Digits II–IV—5 :70.
Smallest digit—5 :71.
Dorsal and plantar surfaces—5 :72, 73.
Medial and lateral margins—5 :74, 75.

b. Surface anatomy. (Pls. 9, 10.)

Tuberosity of the tibia—16 :32.
Anterior crest of the tibia—16 :37.
Medial margin of the tibia—16 :36.

Medial surface of the tibia—16 :33.
Lateral malleolus—16 :57.
Medial malleolus—16 :40.
Tuberosity of the navicular bone—17 :23.
Tuberosity of the fifth metatarsal bone—17 :36.

c. Regions. (Pls. 11, 12.)

Anterior crural region—84 :26.
Posterior crural region—84 :27.
Sural region—84 :28.
Lateral and medial crural regions—84 :29, 30.
Lateral malleolar region—84 :31.
Medial malleolar region—84 :32.
Lateral and medial retromalleolar regions—84 :33, 34.
Calcaneal region—84 :35.
Dorsal and plantar regions of foot—84 :36, 37.
Digital regions of foot—84 :38.
Dorsal digital regions—84 :39.
Unguicular regions—84 :40.
Plantar digital regions of foot—84 :41.

2. ANTERIOR REGION OF LEG AND DORSUM OF FOOT.

a. Superficial fascia, cutaneous nerves and veins.

Skin incisions: (*a*) longitudinally along the medial line of the leg and dorsum of the foot to the base of the middle toe; (*b*) transversely across the ankle; (*c*) transversely across the dorsum of the foot at the bases of the toes; (*d*) a medial longitudinal incision along the dorsal surface of each digit.

Superficial fascia—23 :36.
Dorsal digital veins of foot—56 :15.
Intercapitular veins—56 :11.
Common digital veins of foot—56 :9.
Dorsal venous arch of foot—56 :8.
Dorsal cutaneous venous network of foot—56 :7.
Small saphenous vein—56 :1. (Origin only.)
Great saphenous vein—55 :66. (Origin only.)
Saphenous nerve—70 :44.
Medial cutaneous rami of leg—70 :46.
Lateral sural cutaneous nerve—70 :58. (Terminal rami only.)
Superficial peroneal nerve—70 :60.
Dorsal digital nerves—70 :64.
Deep peroneal nerve—70 :65. (Terminal rami only.)
Lateral dorsal cutaneous nerve—71 :5.

b. Deep fascia.

Deep fascia of the leg—27 :70.
Transverse crural ligament—27 :73.
Dorsal fascia of foot—28 :1.
Cruciate ligament of the leg—27 :75.
Superior peroneal retinaculum—27 :76.
Inferior peroneal retinaculum—27 :77.
Anterior fibular septum—27 :71.
Posterior fibular septum—27 :72.

c. Muscles in the anterior region of leg.

Exposed by making a longitudinal incision through the deep fascia on the front of the leg, extending from the knee to the transverse crural ligament and reflecting the deep fascia, but retaining intact the transverse and cruciate crural ligaments.

Tibialis anterior muscle—27:16.
Extensor digitorum longus muscle—27:17.
Extensor hallucis longus muscle—27:19.
Peroneus tertius muscle—27:18.
Vagina tendinis musculi tibialis anterioris—29:29.
Vagina tendinis musculi extensoris hallucis longus—29:30.
Vagina tendinis musculi extensoris digitorum pedis longi—29:31.

d. Arteries.

Anterior tibial artery—52:1.

Exposed by separating the extensor digitorum longus from the tibialis anterior muscle.

Anterior tibial recurrent artery—52:3. (Origin only.)
Lateral anterior malleolar artery—52:4.
Medial anterior malleolar artery—52:5.
Medial malleolar network—52:6.
Lateral malleolar network—52:7.

Perforating ramus of the peroneal artery—52:20. (Termination only.)

Dorsal artery of foot—52:8.
Lateral tarsal artery—52:9.
Medial tarsal arteries—52:10.
Arcuate artery—52:11.
Dorsal network of foot—52:12.
Dorsal metatarsal arteries—52:13.
Dorsal digital arteries—52:14.
Deep plantar ramus—52:15.

e. Nerves.

Deep peroneal nerve—70:65.
Muscular rami—70:66.
Dorsal digital nerves to lateral surface of hallux and to medial surface of digit II—70:67.

Superficial peroneal nerve—70:60.
Muscular rami—70:61.
Medial dorsal cutaneous nerve—70:62.
Intermediate dorsal cutaneous nerve—70:63.
Dorsal digital nerves of the foot—70:64.

f. Muscles of the dorsum of the foot.

Extensor hallucis brevis muscle—27:34.
Extensor digitorum brevis muscle—27:35.

May be exposed by dividing the tendons of the muscles on the front of the leg at the level of the transverse cruciate ligament and reflecting the tendons toward their insertion.

Dorsal interosseous muscles—27:47.

May be demonstrated by dividing the tendons of the extensor digitorum brevis muscle and reflecting the muscle toward its origin; completing, at the same time, the exposure of the lateral tarsal artery, arcuate artery, and terminal rami of the deep peroneal artery.

3. LATERAL OR PERONEAL REGION OF LEG.

a. Deep fascia and muscles.

Anterior fibular intermuscular septum—27 :71.

May be demonstrated by making a longitudinal incision through the deep fascia of this region and reflecting the fascia, retaining intact, however, the peroneal retinacula.

Posterior fibular intermuscular septum—27 :72.
Peroneus longus muscle—27 :20.
Peroneus brevis muscle—27 :21.
Superior retinaculum of the peroneal muscles—27 :76.
Inferior retinaculum of the peroneal muscles—27 :77.
Common sheath of tendons of the peroneal muscles—29 :35.
Subcutaneous bursa of the lateral malleolus—29 :27.

b. Nerves.

Common peroneal nerve—70 :56.
Superficial peroneal nerve—70 :60.
Muscular rami—70 :61.
Deep peroneal nerve—70 :65.

4. MEDIAL REGION OF LEG.

Great saphenous vein—55 :66.
Saphenous nerve—70 :44.
Infrapatellar ramus—70 :45.
Medial cutaneous rami of leg—71 :46.
Tendons of insertion of the sartorius, gracilis and semitendinosus muscles.
Tibial collateral ligament of knee joint—21 :14.
Medial inferior genicular artery—51 :69.

5. POSTERIOR REGION OF LEG AND HEEL.

a. Fascia, superficial veins, and cutaneous nerves.

Skin incisions: (*a*) longitudinally in the middle line of the leg from the popliteal space to the heel; (*b*) transversely at the distal end (*a*) and extending 5 cm. along the medial and lateral margins of the foot.

Small saphenous vein—56 :1.
Great saphenous vein—55 :66.
Sural nerve—71 :3.
Medial sural cutaneous nerve—71 :2.
Peroneal anastomotic ramus—70 :59.
Lateral sural cutaneous nerve—70 :58.
Posterior femoral cutaneous nerve—70 :51.
Medial crural cutaneous rami of the saphenous nerve—70 :46.
Anterior femoral cutaneous nerves—70 :43. (Medial terminal rami only.)
Deep fascia—27 :74.
Laciniate ligament—27 :74.

b. Muscles; superficial group.

May be exposed by dividing the deep fascia in the median line from the popliteal fossa to the heel and reflecting the fascia, but retaining intact the lacinate ligament.

Triceps muscle of the calf—27 :22.
- Gastrocnemius muscle—27 :23.
  - Lateral head—27 :24.
  - Medial head—27 :25.
  - Lateral bursa of gastrocnemius muscle—29 :24.
  - Medial bursa of gastrocnemius muscle—29 :25.
- Soleus muscle—27 :26.

  May be exposed by detaching the gastrocnemius at its attachment to the calcaneal tendon and reflecting it proximally.
  - Tendinous arch of the soleus muscle—27 :27.

Plantaris muscle—27 :29.

Calcaneal tendon (of Achilles)—27 :28.
- Subcutaneous calcaneal bursa—29 :29.
- Bursa of calcaneal tendon—29 :40.

  May be demonstrated by dividing the calcaneal tendon a few centimeters from its insertion and reflecting the tendon.

c. Muscles; deep group.

Structures exposed by detaching the soleus muscle at its origin from the tibia, separating it from the tendinous arch, reflecting the muscle laterally, and making a longitudinal incision through the deep transverse fascia or septum between the superficial and deep group of muscles of the back of the leg.

Popliteus muscle—27 :30.
- Bursa of popliteus muscle—29 :22.

Flexor digitorum longus muscle—27 :32.
- Sheath of tendons of flexor digitorum longus muscle—29 :32.

Tibialis posterior muscle—27 :31.
- Sheath of tendon of tibialis posterior muscle—29 :33.

Flexor hallucis longus muscle—27 :33.
- Sheath of tendon of flexor hallucis longus muscle—29 :34.

d. Arteries.

Popliteal artery—51 :63. (Termination only.)

Anterior tibial artery—52 :1. (Origin only.)
- Posterior tibial recurrent artery—52 :2.

Anterior tibial lymph gland—57 :6.

Posterior tibial artery—52 :16.
- Fibular ramus—52 :17.
- Peroneal artery—52 :18.
  - Nutrient artery of the fibula—52 :19.
  - Perforating ramus—52 :20.
  - Communicating ramus—52 :21.
  - Lateral posterior malleolar artery—52 :22.
  - Lateral calcaneal rami—52 :23.
- Nutrient artery of the tibia—52 :24.
- Medial posterior malleolar artery—52 :25.
- Medial calcaneal rami—52 :26.
- Network of heel—52 :27.

e. Nerves.

Tibial nerve—70 :68.
Muscular rami—70 :69.
Interosseous nerve of leg—71 :1.
Medial sural cutaneous nerve—71 :2.
Sural nerve—71 :3.

f. Laciniate ligament—27 :74.

6. PLANTAR REGION OF THE FOOT.

a. Fascia and superficial veins.

Skin incisions: (*a*) longitudinally along the middle line of the sole; (*b*) transversely across the sole at the clefts of the toes; (*c*) longitudinally along the middle line of each toe.

Superficial fascia—23 :36.
Digital plantar veins—56 :16.
Plantar venous arch—56 :13.
Intercapitular veins—56 :11.
Plantar venous network—56 :12.
Medial calcaneal rami of the tibial nerve—71 :6.
Plantar aponeurosis—28 :2.
Transverse fasiculi—28 :3.

b. Muscles; superficial layer.

Abductor hallucis muscle—27 :36.
Flexor digitorum brevis muscle—27 :44.
Vaginal ligament—28 :6.
Annular ligament—28 :5.
Cruciate ligament—28 :7.
Digital sheaths of tendons of foot—29 :44.
Abductor digiti quinti muscle—27 :41.

c. Plantar arteries.

May be exposed by detaching the preceding muscles at their origins and reflecting them toward their insertions (noting at the same time their nerve supply).

Medial plantar artery—52 :28.
Superficial ramus—52 :30.
Deep ramus—52 :29.
Lateral plantar artery—52 :31.

d. Plantar nerves.

Medial plantar nerve—71 :7.
Common digital plantar nerves—71 :8.
Proper digital plantar nerves—71 :9.
Lateral plantar nerve—71 :10.
Superficial ramus—71 :11.
Common digital plantar nerves—71 :12.
Proper digital plantar nerves—71 :13.

e. Muscles; second layer of muscles and tendons.

Tendons of the flexor digitorum longus muscle—27 :32.
Quadratus plantae muscle—27 :45.
Lumbricales muscles—27 :46.
Bursae of lumbricales muscles—29 :43.
Tendon of the flexor hallucis longus muscle—27 :33.

f. Muscles; third layer.

May be exposed by dividing the tendons of the flexor digitorum longus and flexor hallucis longus muscles, the heads of the quadratus plantae muscle, and the plantar vessels and nerves near the os calcaneum and reflecting these structures distally (noting at the same time the nerve supply to the lumbricales muscles).

Flexor hallucis brevis muscle—27 :37.
Adductor hallucis muscle—27 :38.
Oblique head—27 :39.
Transverse head—27 :40.
Flexor digiti quinti brevis muscle—27 :42.
Opponens digiti quinti muscle—27 :43.

g. Plantar arch and deep division of the lateral plantar nerve.

May be demonstrated by detaching the flexor hallucis brevis muscle and the oblique head of the adductor hallucis muscle at their origins and reflecting them distally (identifying at the same time the nerve supply of the latter muscle).

Plantar arch—52 :32.
Plantar metatarsal arteries—52 :33.
Perforating rami—52 :34.
Digital plantar arteries—52 :35.
Deep branch of lateral plantar nerve—71 :14.

h. Interosseous muscles and deep tendons.

Transverse ligament of the heads of the metatarsal bones —22 :21.
Plantar interosseous muscles—27 :48.
Dorsal interosseous muscles—27 :47.
Tendon of tibialis posterior muscle—27 :31.
Tendon of peroneus longus muscle—27 :20.
Plantar sheath of tendon of peroneus longus muscle—29 :41.

7. ARTICULATIONS OF THE LEG AND FOOT.

a. Knee joint—21 :3.

Articular capsule—21 :4.
Fibular collateral ligament—21 :13.
Tibial collateral ligament—21 :14.
Oblique popliteal ligament—21 :15.
Arcuate popliteal ligament—21 :16.
Ligament of the patella—21 :18.
Medial patellar retinaculum—21 :19.
Lateral patellar retinaculum—21 :20.

The following structures may be exposed by making a longitudinal incision on either side of the patella and patellar ligament, dividing the quadriceps extensor muscle about 8 cm. above the patella, and reflecting the patella and common extensor tendon distally.

Patellar synovial fold—21 :11.
Deep infrapatellar bursa—29 :17.
Lateral meniscus—21 :5.
Medial meniscus—21 :6.
Transverse ligament of the knee—21 :7.
Cruciate ligaments of the knee—21 :8.
Anterior cruciate ligament—21 :9.
Posterior cruciate ligament—21 :10.
Synovial membrane—18 :32.

b. Ankle joint—21:29.
Articular capsule—21:30.
Deltoid ligament—21:31.
Tibionavicular ligament—21:32.
Calcaneotibial ligament—21:33.
Anterior talotibial ligament—21:34.
Posterior talotibial ligament—21:35.
Anterior talofibular ligament—21:36.
Posterior talofibular ligament—21:37.
Calcaneofibular ligament—21:38.
Synovial membrane—18:32.

c. Tibia fibular joints.
Tibiofibular articulation—21:21.
Articular capsule—21:22.
Ligaments of the head of the fibula—21:23.
Interosseous membrane—21:24.
Tibiofibular syndesmosis—21:25.
Anterior ligament of the lateral malleolus—21:26.
Posterior ligament of the lateral malleolus—21:27.

d. Intertarsal articulations—21:39.
Talocalcaneal articulation—21:41.
Articular capsule—21:42.
Lateral talocalcaneal ligament—21:43.
Medial talocalcaneal ligament—21:44.
Anterior talocalcaneal ligament—21:45.
Posterior talocalcaneal ligament—21:46.
Talocalcaneonavicular articulation—21:40.
Dorsal talonavicular ligament—21:58.
Articular capsule of the talonavicular part of the joint—21:49.
The examination of the articulation may be completed by severing the ligaments holding the talus in place and removing the talus.
Interosseous talocalcaneal ligament—21:54.
Plantar calcaneonavicular ligament—21:70.
Calcaneonavicular part of the bifurcate ligament—21:62.
Dorsal calcaneonavicular ligament—21:64.
Chopart's transverse articulation of the tarsus—21:47.
Talonavicular articulation—21:48.
Note that this is a part of the talocalcaneonavicular articulation; attention has already been directed to its articular capsule in connection with the talocalcaneonavicular articulation.
Calcaneocuboid articulation—21:50.
Articular capsule—21:51.
Plantar calcaneocuboid ligament—21:69.
Long plantar ligament—21:67.
Not confined entirely to this articulation.
Cuneonavicular articulation—21:52.
Dorsal navicular cuneiform ligaments—21:65.
Plantar navicular cuneiform ligaments—22:2.

The following ligaments connect the cuboid, navicular and cuneiform bones:

Dorsal cuboideonavicular ligament—21:60.
Dorsal cuneocuboid ligament—21:59.
Plantar cuboideonavicular ligament—22:3.
Plantar cuneocuboid ligament—22:5.
Plantar intercuneiform ligaments—22:4.
Interosseous cuneocuboid ligament—21:55.
Interosseous intercuneiform ligaments—21:56.

e. Tarsometatarsal articulations—22:6.

Articular capsules—22:7.
Dorsal tarsametatarsal ligaments—22:8.
Plantar tarsometatarsal ligaments—22:9.
Interosseous cuneometatarsal ligaments—22:10.

f. Intermetatarsal articulations—22:11.

Articular capsules—22:12.
Dorsal ligaments of the bases of the metatarsal bones—22:14.
Plantar ligaments of the bases of the metatarsal bones—22:15.
Interosseous ligaments of the bases of the metatarsal bones—22:13.
Interosseous spaces of metatarsus—22:16.

g. Metatarsophalangeal articulations—22:17.

Articular capsules—22:18.
Collatéral ligaments—22:19.
Plantar accessory ligaments—22:20.
Transverse ligaments of the heads of the metatarsal bones—22:21.

h. Articulations of the toes—22:22.

Articular capsules—22:23.
Collateral ligaments—22:24.

PART II

SYSTEMATIC ANATOMY

PART II. SYSTEMATIC ANATOMY[1]

1 NOMINA ANATOMICA

2 Termini, Situum et Directionem Partium Corporis Indicantes

3 termini generales

4 Verticalis
5 Horizontalis
6 Medianus
7 Sagittalis
8 Frontalis
9 Transversalis
10 Medialis
11 Intermedius
12 Lateralis
13 Anterior
14 Medius
15 Posterior
16 Ventralis
17 Dorsalis
18 Internus
19 Externus
20 Dexter
21 Sinister
22 Longitudinalis
23 Transversus
24 Cranialis
25 Rostralis*
26 Caudalis
27 Superior
28 Inferior
29 Superficialis [sub-
30 Profundus limis]

31 termini ad extremitates spectantes

32 Proximalis
33 Distalis
34 Radialis
35 Ulnaris
36 Tibialis
37 Fibularis

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[1] The following arrangement of terms is based on that of the B N A system as published by His in the *Archiv für Anatomie und Entwicklungsgeschichte, Supplemental Band*, 1895.

All the terms have been left in their original Latin form. Certain obvious errors in the original lists (cf. also Eycleshymer's *Anatomical Names*, p. 2, 1917) have been corrected as follows:

P. 20, Nos. 34, 35 corrected to read Ligg. instead of Lig.
P. 23, Nos. 55, 56, 57 corrected to read MM. instead of M.
P. 25, No. 49, corrected to read [Spegeli] instead of [Spige].
P. 29, No. 4, corrected to read obturatoris instead of obturatorii.
P. 34, No. 65, corrected to read fibrosa instead of fibrosus.
P. 53, Nos. 74, 75, 76 corrected to read Vv. instead of V.
P. 55, No. 71, corrected to read V. instead of Vv.
P. 68, No. 65. corrected to read Nn. instead of N.

For the significance of brackets and asterisks see footnote, Part I, page 1. The prefixed numerals in Part II merely indicate the serial position of each term for cross-reference purposes.

1 TERMINI GENERALES

2 Accessorius
3 Acinus
4 Aditus
5 Ala
6 Alveolus
7 Ampulla
8 Angulus
9 Ansa
10 Antrum
11 Apertura
12 Apex
13 Appendix
14 Arcus
15 Area
16 Basis
17 Brachium
18 Canaliculus
19 Canalis
20 Capsula
21 Caput
22 Capitulum
23 Cartilago
24 Caruncula
25 Cauda
26 Caverna
27 Cavum
28 Cellula
29 Circulus
30 Cisterna
31 Collum
32 Columna
33 Commissura
34 Cornu
35 Corona
36 Corpus
37 Corpusculum
38 Crista
39 Crus
40 Decuissatio
41 Dorsum
42 Ductulus
43 Ductus
44 Eminentia
45 Endothelium
46 Epithelium
47 Extremitas
48 Facies
49 Fascia
50 Fasciculus
51 Fibra
52 Fibrocartilago
53 Filum
54 Fissura
55 Flexura
56 Folium
57 Folliculus
58 Foramen
59 Formatio
60 Fornix
61 Fossa
62 Fossula
63 Fovea
64 Foveola
65 Frenulum
66 Fundus
67 Funiculus
68 Geniculum
69 Genu
70 Glandula
71 Glomerulus
72 Glomus
73 Hilus
74 Humor
75 Junctura
76 Impressio
77 Incisura
78 Infundibulum
79 Intestinum
80 Isthmus
81 Labium
82 Lacuna
83 Lamina
84 Latus
85 Ligamentum
86 Limbus
87 Limen
88 Linea
89 Liquor
90 Lobulus
91 Lobus
92 Macula
93 Margo
94 Massa
95 Meatus
96 Medulla
97 Membrana
98 Membrum
99 Mucus
100 Musculus

1 Nervus
2 Nodulus
3 Nucleus
4 Organon
5 Orificium
6 Os [oris]
7 Os [ossis]
8 Ostium
9 Papilla
10 Parenchyma
11 Paries
12 Perichondrium
13 Periosteum
14 Plexus
15 Plica
16 Polus
17 Processus
18 Prominentia
19 Punctum
20 Radix
21 Ramulus
22 Ramus
23 Raphe
24 Recessus
25 Regio
26 Rete
27 Rima
28 Rundimentum
29 Septulum
30 Septum
31 Sinus
32 Spatium
33 Spina
34 Stratum
35 Stria
36 Stroma
37 Substantia
38 Succus
39 Sulcus
40 Taenia
41 Tegmen
42 Tela
43 Tela conjunctiva
44 Tela elastica
45 Torus
46 Trabecula
47 Tractus
48 Trigonum
49 Trochlea
50 Truncus
51 Tuber
52 Tuberculum
53 Tubulus
54 Tunica
55 Tunica propria
56 Umbo
57 Uvula
58 Vagina
59 Vallecula
60 Vallum
61 Valvula
62 Vas
63 Velum
64 Vertex
65 Vesica
66 Vesicula
67 Vestibulum
68 Villus
69 Viscus [viscera]
70 Vortex
71 Zona

1 PARTES CORPORIS HUMANI

2 Caput
3 Collum
4 Truncus
5 Extremitates

6 CAPUT

7 CRANIUM

8 Vertex
9 Sinciput
10 Frons
11 Occiput
12 Tempora
13 Auris
14 Auricula

15 FACIES

16 Oculus
17 Palpebra superior
18 Palpebra inferior
19 Rima palpebrarum
20 Bulbus oculi
21 Supercilium
22 Sulcus infrapalpebralis
23 Nasus
24 Dorsum nasi
25 Apex nasi
26 Ala nasi
27 Os
28 Sulcus nasolabialis
29 Philtrum
30 Labium superius
31 Labium inferius
32 Rima oris
33 Cavum oris
34 Lingua
35 Fauces
36 Bucca [mala]
37 Sulcus mentolabialis
38 Mentum

39 COLLUM

40 Cervix
41 Larynx
42 Prominentia laryngea
43 Pharynx
44 Trachea
45 Oesophagus

46 TRUNCUS

47 THORAX
48 Cavum thoracis
49 Pectus
50 Mamma
51 Papilla mammae
52 DORSUM
53 Columna vertebralis
54 Canalis spinalis

55 ABDOMEN

56 Cavum abdominis
57 Scrobiculus cordis
58 Umbilicus
59 Latus
60 Lumbus
61 Inguen

1 PELVIS

2 Cavum pelvis
3 Mons pubis
4 Coxa
5 Nates [Clunes]
6 Anus
7 Crena ani
8 Perineum

9 EXTREMITAS SUPERIOR

10 Axilla
11 Plica axillaris anterior
12 Plica axillaris posterior
13 Acromion
14 Brachium
15 Facies anterior
16 Facies posterior
17 Facies lateralis
18 Facies medialis
19 Sulcus bicipitalis lateralis
20 Sulcus bicipitalis medialis
21 Cubitus
22 Antibrachium
23 Facies dorsalis
24 Facies volaris
25 Margo radialis
26 Margo ulnaris
27 Manus
28 Carpus
29 Metacarpus
30 Dorsum manus
31 Vola manus [Palma]
32 Thenar
33 Hypothenar
34 Digiti manus
35 Pollex [Digitus I]
36 Index [Digitus II]
37 Digitus medius [D. III]
38 Digitus annularis [D. IV]
39 Digitus minimus [D. V]
40 Facies dorsales
41 Facies volares
42 Margines radiales
43 Margines ulnares

44 EXTREMITAS INFERIOR

45 Femur
46 Facies anterior
47 Facies posterior
48 Facies lateralis
49 Facies medialis
50 Sulcus glutaeus
51 Genu
52 Poples
53 Patella
54 Crus
55 Facies anterior
56 Facies posterior
57 Sura
58 Malleolus lateralis
59 Malleolus medialis
60 Pes
61 Tarsus
62 Metatarsus
63 Dorsum pedis
64 Planta
65 Margo pedis lateralis
66 Margo pedis medialis
67 Calx
68 Digiti pedis
69 Hallux [Digitus I]
70 Digiti II-IV
71 Digitus minimus [D. V]
72 Facies dorsales
73 Facies plantares
74 Margines laterales
75 Margines mediales

1 OSTEOLOGIA

2 Os longum
3 Os breve
4 Os planum
5 Os pneumaticum
6 Epiphysis
7 Diaphysis
8 Synchondrosis epiphyseos*
9 Apophysis
10 Facies articularis
11 Substantia compacta
12 Substantia corticalis
13 Substantia spongiosa
14 Cavum medullare
15 Medulla ossium
16 Medulla ossium flava
17 Medulla ossium rubra
18 Foramen nutricium
19 Canalis nutricius

20 Columna vertebralis

21 Vertebrae cervicales
22 Vertebrae thoracales
23 Vertebrae lumbales
24 Vertebrae sacrales
25 Vertebrae coccygeae
26 Corpus vertebrae
27 Fovea costalis superior
28 Fovea costalis inferior
29 Canalis vertebralis
30 Foramen vertebrale
31 Arcus vertebrae
32 Radix arcus vertebrae
33 Incisura vertebralis superior
34 Incisura vertebralis inferior
35 Foramen intervertebrale
36 Sulcus n. spinalis
37 Processus spinosus
38 Vertebra prominens
39 Processus transversus
40 Fovea costalis transversalis
41 Tuberculum anterius [vertebrarum cervicalium]
42 Tuberculum caroticum [vertebrae cervicalis VI]
43 Foramen transversarium
44 Tuberculum posterius [vertebrarum cervicalium]
45 Processus articulares superiores
46 Facies articulares superiores
47 Processus articulares inferiores
48 Facies articulares inferiores
49 Processus costarius
50 Processus accessorius [vertebrarum lumbalium]
51 Processus mamillaris

52 atlas

53 Massa lateralis
54 Arcus anterior
55 Tuberculum anterius
56 Foveae articulares superiores
57 Facies articulares inferiores
58 Fovea dentis
59 Fovea posterior
60 Sulcus arteriae vertebralis
61 Tuberculum posterius

1 EPISTROPHEUS
2 Dens
3 Facies articularis anterior
4 Facies articularis posterior

5 OS SACRUM
6 Facies dorsalis
7 Facies pelvina
8 Basis oss. sacri
9 Processus articularis superior
10 Promontorium
11 Pars lateralis
12 Facies auricularis
13 Tuberositas sacralis
14 Foramina intervertebralia
15 Foramina sacralia anteriora
16 Lineae transversae
17 Foramina sacralia posteriora
18 Crista sacralis media
19 Cristae sacrales laterales
20 Cristae sacrales articulares
21 Cornua sacralia
22 Canalis sacralis
23 Hiatus sacralis
24 Apex oss. sacri

25 OS COCCYGIS
26 Cornua coccygea

27 THORAX
28 COSTAE
29 Costae verae
30 Costae spuriae
31 Os costale
32 Cartilago costalis
33 Capitulum costae
34 Facies articularis capituli costae
35 Crista capituli
36 Corpus costae
37 Tuberculum costae
38 Facies articularis tuberculi costae
39 Collum costae
40 Crista colli costae
41 Angulus costae
42 Tuberculum scaleni [Lisfranci]
43 Sulcus subclaviae
44 Tuberositas costae II
45 Sulcus costae

46 STERNUM
47 Manubrium sterni
48 Angulus sterni
49 Synchondrosis sternalis
50 Corpus sterni
51 Planum sternale
52 Processus xiphoideus
53 Incisura clavicularis
54 Incisura jugularis
55 Incisurae costales
56 (Ossa suprasternalis)

57 T h o r a x
58 Cavum thoracis
59 Apertura thoracis superior
60 Apertura thoracis inferior
61 Arcus costarum
62 Spatia intercostalia
63 Angulus infrasternalis
64 Sulcus pulmonalis

65 OSSA CRANII
66 OS BASILARE
67 OS OCCIPITALE
68 Foramen occipitale magnum
69 Pars basilaris
70 Sulcus petrosus inferior
71 Pars lateralis
72 Squama occipitalis
73 Margo mastoideus
74 Margo lambdoideus
75 (Os interparietale)

1 Clivus
2 Tuberculum pharyngeum
3 Condylus occipitalis
4 Canalis condyloideus
5 Canalis hypoglossi
6 Tuberculum jugulare
7 Incisura jugularis
8 Processus jugularis
9 Fossa condyloidea
10 Processus intrajugularis
11 Planum occipitale
12 Planum nuchale
13 Protuberantia occipitalis externa
14 (Torus occipitalis)
15 Crista occipitalis externa
16 Linea nuchae suprema
17 Linea nuchae superior
18 Linea nuchae inferior
19 Eminentia cruciata
20 Protuberantia occipitalis interna
21 Sulcus sagittalis
22 Sulcus transversus
23 (Processus paramastoideus)

24 OS SPHENOIDALE

25 Corpus
26 Sella turcica
27 Fossa hypophyseos
28 Dorsum sellae
29 Tuberculum sellae
30 Processus clinoideus medius
31 Processus clinoideus posterior
32 Sulcus caroticus
33 Lingula sphenoidalis
34 Crista sphenoidalis
35 Rostrum sphenoidale
36 Sinus sphenoidalis
37 Septum sinuum sphenoidalium
38 Apertura sinus sphenoidalis
39 Conchae sphenoidales
40 Clivus
41 Ala parva
42 Sulcus chiasmatis
43 Foramen opticum
44 Processus clinoideus anterior
45 Fissura orbitalis superior
46 Ala magna
47 Facies cerebralis
48 Facies temporalis
49 Facies sphenomaxillaris
50 Facies orbitalis
51 Margo zygomaticus
52 Margo frontalis
53 Angulus parietalis
54 Margo squamosus
55 Crista infratemporalis
56 Foramen rotundum
57 Foramen ovale
58 Foramen spinosum
59 Spina angularis
60 Processus pterygoideus
61 Lamina lateralis processus pterygoidei
62 Lamina medialis processus pterygoidei
63 Fissura pterygoidea
64 Fossa scaphoidea
65 Processus vaginalis
66 Hamulus pterygoideus
67 Sulcus hamuli pterygoidei
68 Fossa pterygoidea
69 Canalis pterygoideus [Vidii]
70 Canalis pharyngeus
71 Canalis basipharyngeus
72 Sulcus tubae auditivae
73 Sulcus pterygopalatinus
74 (Processus pterygospinosus [Civinini])

75 OS TEMPORALE

76 Pars mastoidea
77 Margo occipitalis
78 Processus mastoideus
79 Incisura mastoidea
80 Sulcus sigmoideus

1 Sulcus a. occipitalis
2 Foramen mastoideum
3 P a r s p e t r o s a [Pyramis]
4 Facies anterior pyramidis
5 Facies posterior pyramidis
6 Facies inferior pyramidis
7 Apex pyramidis
8 Angulus superior pyramidis
9 Angulus anterior pyramidis
10 Angulus posterior pyramidis
11 Sulcus petrosus superior
12 Tegmen tympani
13 Eminentia arcuata
14 Canalis facialis [Falloppii]
15 Hiatus canalis facialis
16 Geniculum canalis facialis
17 Sulcus n. petrosi superficialis majoris
18 Sulcus n. petrosi superficialis minoris
19 Impressio trigemini
20 Porus acusticus internus
21 Meatus acusticus internus
22 Fossa subarcuata
23 Aquaeductus vestibuli
24 Apertura externa aquaeductus vestibuli
25 Sulcus petrosus inferior
26 Incisura jugularis
27 Processus intrajugularis
28 Fossa jugularis
29 Canaliculus mastoideus
30 Sulcus canaliculi mastoidei
31 Processus styloideus
32 Vagina processus styloidei
33 Foramen stylomastoideum
34 Fossula petrosa
35 Canaliculus tympanicus
36 Sulcus tympanicus
37 Apertura inferior canaliculi tympanici
38 Apertura superior canaliculi tympanici
39 Canaliculus cochleae
40 Apertura externa canaliculi cochleae
41 Canalis caroticus
42 Canaliculi caroticotympanici
43 Canalis musculotubarius
44 Semicanalis m. tensoris tympani
45 Semicanalis tubae auditivae
46 Septum canalis musculotubarii
47 Cavum tympani (v. Organon auditus)
48 Canaliculus chordae tympani
49 Fissura petrotympanica [Glaseri]
50 Fissura petrosquamosa
51 P a r s t y m p a n i c a
52 Annulus tympanicus*
53 Meatus acusticus externus
54 (Spina supra meatum)
55 Fissura tympanomastoidea
56 Spina tympanica major
57 Spina tympanica minor
58 Porus acusticus externus
59 S q u a m a t e m p o r a l i s
60 Margo parietalis
61 Incisura parietalis
62 Margo sphenoidalis
63 Facies temporalis
64 Processus zygomaticus
65 Fossa mandibularis
66 Facies articularis
67 Tuberculum articulare
68 Facies cerebralis
69 Sulcus a. temporalis mediae

70 OS PARIETALE

71 Facies cerebralis
72 Facies parietalis
73 Margo occipitalis
74 Margo squamosus
75 Margo frontalis
76 Margo sagittalis
77 Angulus frontalis
78 Angulus occipitalis
79 Angulus sphenoidalis
80 Angulus mastoideus
81 Foramen parietale

1 Tuber parietale
2 Linea temporalis inferior
3 Linea temporalis superior
4 Sulcus sagittalis
5 Sulcus transversus

6 OS FRONTALE

7 Squama frontalis
8 Facies frontalis
9 Margo supraorbitalis
10 Pars orbitalis
11 Incisura ethmoidalis
12 Pars nasalis
13 Spina frontalis
14 Margo nasalis
15 Margo parietalis
16 Processus zygomaticus
17 Facies temporalis
18 Linea temporalis
19 Tuber frontale
20 Arcus superciliaris
21 Glabella
22 Foramen sive Incisura supra-orbitalis
23 Incisura sive Foramen frontale
24 Facies orbitalis
25 (Spina trochlearis)
26 Fovea trochlearis
27 Foramen ethmoidale anterius
28 Foramen ethmoidale posterius
29 Fossa glandulae lacrimalis
30 Facies cerebralis
31 Crista frontalis
32 Sulcus sagittalis
33 Foramen caecum
34 Sinus frontalis
35 Septum sinuum frontalium

36 OS ETHMOIDALE

37 Lamina cribrosa
38 Crista galli
39 Processus alaris
40 Lamina perpendicularis
41 Labyrinthus ethmoidalis
42 Cellulae ethmoidales
43 Infundibulum ethmoidale
44 Hiatus semilunaris
45 Bulla ethmoidalis
46 Lamina papyracea
47 Foramina ethmoidalia
48 (Concha nasalis suprema)
49 Concha nasalis superior
50 Concha nasalis media
51 Processus uncinatus

52 CONCHA NASALIS INFERIOR

53 Processus lacrimalis
54 Processus maxillaris
55 Processus ethmoidalis

56 OS LACRIMALE

57 Crista lacrimalis posterior
58 Sulcus lacrimalis
59 Hamulus lacrimalis
60 Fossa sacci lacrimalis

61 OS NASALE

62 Foramina nasalia
63 Sulcus ethmoidalis

64 VOMER

65 Ala vomeris

66 OSSA FACIEI
67 MAXILLA

68 Corpus maxillae
69 Facies anterior
70 Facies nasalis
71 Facies orbitalis
72 Facies infratemporalis
73 Sinus maxillaris
74 Margo infraorbitalis
75 Canalis infraorbitalis
76 Sulcus infraorbitalis
77 Foramen infraorbitale
78 Sutura infraorbitalis
79 Fossa canina

1 (Fossa praenasalis)
2 Incisura nasalis
3 Tuber maxillare
4 Foramina alveolaria
5 Canales alveolares
6 Planum orbitale
7 Margo lacrimalis
8 Sulcus lacrimalis
9 Canalis nasolacrimalis
10 Crista conchalis
11 Processus frontalis
12 Crista lacrimalis anterior
13 Incisura lacrimalis
14 Crista ethmoidalis
15 Processus zygomaticus
16 Processus palatinus
17 Crista nasalis
18 Spina nasalis anterior
19 Os incisivum*
20 Canalis incisivus
21 Sutura incisiva
22 Spinae palatinae
23 Sulci palatini
24 Processus alveolaris
25 Limbus alveolaris
26 Alveoli dentales
27 Septa interalveolaria
28 Juga alveolaria
29 Hiatus maxillaris
30 Foramen incisivum

31 OS PALATINUM

32 Pars perpendicularis
33 Facies nasalis
34 Facies maxillaris
35 Incisura sphenopalatina
36 Sulcus pterygopalatinus
37 Processus pyramidalis
38 Foramen palatinum majus
39 Foramina palatina minora
40 Canales palatini
41 Crista conchalis
42 Crista ethmoidalis
43 Processus orbitalis
44 Processus sphenoidalis
45 Pars horizontalis
46 Facies nasalis
47 Facies palatina
48 Spina nasalis posterior
49 Crista nasalis

50 OS ZYGOMATICUM

51 Facies malaris
52 Facies temporalis
53 Facies orbitalis
54 Processus temporalis
55 Processus frontosphenoidalis
56 (Processus marginalis)
57 Foramen zygomaticoorbitale
58 Foramen zygomaticofaciale
59 Foramen zygomaticotemporale

60 MANDIBULA

61 Corpus mandibulae
62 Basis mandibulae
63 Protuberantia mentalis
64 Tuberculum mentale
65 Spina mentalis
66 Foramen mentale
67 Linea obliqua
68 Fossa digastrica
69 Linea mylohyoidea
70 Sulcus mylohyoideus
71 Juga alveolaria
72 Ramus mandibulae
73 Angulus mandibulae
74 (Tuberositas masseterica)
75 (Tuberositas pterygoidea)
76 (Crista buccinatoria)
77 Incisura mandibulae
78 Processus condyloideus
79 Capitulum [proc. condyl.] mandibulae
80 Collum [proc. condyloidei] mandibulae
81 Fovea pterygoidea proc. condyloidei
82 Processus coronoideus

1 Foramen mandibulare
2 Lingula mandibulae
3 Canalis mandibulae
4 Fovea sublingualis
5 (Fovea submaxillaris)
6 Pars alveolaris
7 Limbus alveolaris
8 Alveoli dentales
9 Septa interalveolaria

10 OS HYOIDEUM

11 Corpus oss. hyoidei
12 Cornu minus
13 Cornu majus

14 CRANIUM

15 Calvaria
16 Pericranium
17 Lamina externa
18 Diploe
19 Canales diploici [Brescheti]
20 Lamina interna
21 Facies [ossea]
22 Cranium cerebrale
23 Cranium viscerale
24 Vertex
25 Frons
26 Occiput
27 Basis cranii interna
28 Basis cranii externa
29 Fossa cranii anterior
30 Fossa cranii media
31 Fossa cranii posterior
32 Juga cerebralia
33 Impressiones digitatae
34 Sulci venosi
35 Sulci arteriosi
36 (Foveolae granulares [Pacchioni])
37 (Ossa sututarum)
38 Planum temporale
39 Fossa temporalis
40 Arcus zygomaticus
41 Fossa infratemporalis
42 Fossa pterygopalatina
43 Canalis pterygopalatinus
44 Foramen sphenopalatinum
45 Apertura piriformis
46 Cavum nasi
47 Septum nasi osseum
48 Meatus nasi communis
49 Meatus nasi superior
50 Meatus nasi medius
51 Meatus nasi inferior
52 Meatus nasopharyngeus
53 Choanae
54 Recessus sphenoethmoidalis
55 Foramen jugulare
56 Fissura sphenopetrosa
57 Fissura petrooccipitalis
58 Fissura sphenooccipitalis
59 Foramen lacerum
60 Fibrocartilago basalis
61 Palatum durum
62 (Torus palatinus)
63 Orbita
64 Aditus orbitae
65 Margo supraorbitalis
66 Margo infraorbitalis
67 Paries superior
68 Paries inferior
69 Paries lateralis
70 Paries medialis
71 Fissura orbitalis superior
72 Fissura orbitalis inferior

73 SUTURAE CRANII

74 Sutura coronalis
75 Sutura sagittalis
76 Sutura lambdoidea
77 Sutura occipitomastoidea
78 Sutura sphenofrontalis
79 Sutura sphenoorbitalis
80 Sutura sphenoethmoidalis
81 Sutura sphenosquamosa
82 Sutura sphenoparietalis

1 Sutura squamosa
2 (Sutura frontalis)
3 Sutura parietomastoidea
4 (Sutura squamosomastoidea)
5 Sutura nasofrontalis
6 Sutura frontoethmoidalis
7 Sutura frontomaxillaris
8 Sutura frontolacrimalis
9 Sutura zygomaticofrontalis
10 Sutura zygomaticomaxillaris
11 Sutura ethmoideomaxillaris
12 Sutura sphenozygomatica
13 (Sutura sphenomaxillaris)
14 Sutura zygomaticotemporalis
15 Sutura internasalis
16 Sutura nasomaxillaris
17 Sutura lacrimomaxillaris
18 Sutura lacrimoconchalis
19 Sutura intermaxillaris
20 Sutura palatomaxillaris
21 Sutura palatoethmoidalis
22 Sutura palatina mediana
23 Sutura palatina transversa

24 SYNCHONDROSES CRANII

25 Synchondrosis sphenooccipitalis
26 Synchondrosis sphenopetrosa
27 Synchondrosis sphenopetrosa
28 Synchondrosis intraoccipitalis posterior*
29 Synchondrosis intraoccipitalis anterior*
30 Synchondrosis intersphenoidalis*
31 Fonticulus frontalis major*
32 Fonticulus occipitalis minor*
33 Fonticulus mastoideus*
34 Fonticulus sphenoidalis*

35 OSSA EXTREMITATIS SUPERIORIS

36 Cingulum extremitatis superioris

37 SCAPULA

38 Facies costalis
39 Lineae musculares
40 Fossa subscapularis
41 Facies dorsalis
42 Spina scapulae
43 Fossa supraspinata
44 Fossa infraspinata
45 Acromion
46 Facies articularis acromii
47 Margo vertebralis
48 Margo axillaris
49 Margo superior
50 Angulus inferior
51 Angulus lateralis
52 Angulus medialis
53 Cavitas glenoidalis
54 Collum scapulae
55 Tuberositas infraglenoidalis
56 Tuberositas supraglenoidalis
57 Incisura scapulae
58 Processus coracoideus

59 CLAVICULA

60 Extremitas sternalis
61 Facies articularis sternalis
62 Tuberositas costalis
63 Extremitas acromialis
64 Facies articularis acromialis
65 Tuberositas coracoidea
66 Skeleton extremitatis perioris liberae

67 HUMERUS

68 Caput humeri
69 Collum anatomicum
70 Collum chirurgicum
71 Tuberculum majus
72 Tuberculum minus
73 Sulcus intertubercularis
74 Crista tuberculi majoris
75 Crista tuberculi minoris
76 Corpus humeri

1 Facies anterior medialis
2 Facies anterior lateralis
3 Facies posterior
4 Margo medialis
5 Margo lateralis
6 Tuberositas deltoidea
7 Sulcus n. radialis
8 Sulcus n. ulnaris
9 Capitulum humeri
10 Trochlea humeri
11 Epicondylus medialis
12 Epicondylus lateralis
13 Fossa olecrani
14 Fossa coronoidea
15 Fossa radialis
16 (Processus supracondyloideus)

17 RADIUS

18 Corpus radii
19 Capitulum radii
20 Fovea capituli radii
21 Collum radii
22 Circumferentia articularis
23 Tuberositas radii
24 Crista interossea
25 Facies dorsalis
26 Facies volaris
27 Facies lateralis
28 Margo dorsalis
29 Margo volaris
30 Processus styloideus
31 Incisura ulnaris
32 Facies articularis carpea

33 ULNA

34 Corpus ulnea
35 Olecranon
36 Processus coronoideus
37 Tuberositas ulnae
38 Incisura semilunaris
39 Incisura radialis
40 Crista interossea
41 Facies dorsalis
42 Facies volaris
43 Facies medialis
44 Margo dorsalis
45 Margo volaris
46 Crista m. supinatoris
47 Capitulum ulnae
48 Circumferentia articularis
49 Processus styloideus

50 CARPUS

51 Ossa carpi
52 (Os centrale)
53 Os naviculare manus
54 Tuberculum oss. navicularis
55 Os lunatum
56 Os triquetrum
57 Os pisiforme
58 Os multangulum majus
59 Tuberculum oss. multang. majoris
60 Os multangulum minus
61 Os capitatum
62 Os hamatum
63 Hamulus oss. hamati
64 Eminentia carpi radialis
65 Eminentia carpi ulnaris
66 Sulcus carpi

67 METACARPUS

68 Ossa metacarpalia I-V
69 Basis
70 Corpus
71 Capitulum
72 Os metacarpale III
73 Processus styloideus

74 PHALANGES DIGITORUM MANUS

75 Phalanx prima
76 Phalanx secunda
77 Phalanx tertia
78 Basis phalangis

1 Corpus phalangis
2 Trochlea phalangis
3 Tuberositas unguicularis
4 Ossa sesamoidea

5 Ossa extremitatis inferioris

6 Cingulum extremitatis inferioris

7 os coxae

8 Foramen obturatum
9 Acetabulum
10 Fossa acetabuli
11 Incisura acetabuli
12 Facies lunata
13 Sulci paraglenoidales

14 os ilium

15 Corpus oss. illum
16 Ala oss. ilium
17 Linea arcuata
18 Crista iliaca
19 Labium externum
20 Linea intermedia
21 Labium internum
22 Spina iliaca anterior superior
23 Spina iliac anterior inferior
24 Spina iliaca posterior superior
25 Spina iliaca posterior inferior
26 Linea glutaea anterior
27 Linea glutaea posterior
28 Linea glutaea inferior
29 Facies auricularis
30 Tuberositas iliaca
31 Fossa iliaca

32 os ischii

33 Corpus oss. ischii
34 Ramus superior oss. ischii
35 Ramus inferior oss. ischii
36 Tuber ischiadicum
37 Spina ischiadica
38 Incisura ischiadica major
39 Incisura ischiadica minor

40 os pubis

41 Corpus oss. pubis
42 Pecten oss. pubis
43 Eminentia iliopectinea
44 Tuberculum pubicum
45 Crista obturatoria
46 Sulcus obturatorius
47 Tuberculum obturatorium anterius
48 (Tuberculum obturatorium posterius)
49 Ramus inferior oss. pubis
50 Ramus superior oss. pubis
51 Facies symphyseos

52 pelvis

53 Symphysis ossium pubis
54 Arcus pubis
55 Angulus pubis
56 Pelvis major
57 Pelvis minor
58 Linea terminalis
59 Pars sacralis
60 Pars iliaca
61 Pars pubica
62 Apertura pelvis [minoris] superior
63 Apertura pelvis [minoris] inferior
64 Axis pelvis
65 Conjugata
66 Diameter transversa
67 Diameter obliqua
68 Inclinatio pelvis

69 Skeleton extremitatis inferioris liberae

70 femur

71 Caput femoris
72 Fovea capitas femoris
73 Collum femoris

1 Corpus femoris
2 Trochanter major
3 Fossa trochanterica
4 Trochanter minor
5 (Trochanter tertius)
6 Linea intertrochanterica
7 Crista intertrochanterica
8 Linea aspera
9 Labium laterale
10 Labium mediale
11 Linea pectinea
12 Tuberositas glutaea
13 Fossa intercondyloidea
14 Linea intercondyloidea
15 Planum popliteum
16 Condylus medialis
17 Condylus lateralis
18 Facies patellaris
19 Epicondylus lateralis
20 Epicondylus medialis

21 TIBIA

22 Facies articularis superior
23 Corpus tibiae
24 Condylus medialis
25 Condylus lateralis
26 Fossa intercondyloidea anterior
27 Fossa intercondyloidea posterior
28 Eminentia intercondyloidea
29 Tuberculum intercondyloideum mediale
30 Tuberculum intercondyloideum laterale
31 Margo infraglenoidalis
32 Tuberositas tibiae
33 Facies medialis
34 Facies posterior
35 Facies lateralis
36 Margo medialis
37 Crista anterior
38 Crista interossea
39 Linea poplitea
40 Malleolus medialis
41 Incisura fibularis
42 Sulcus malleolaris
43 Facies articularis inferior
44 Facies articularis malleolaris

45 FIBULA

46 Corpus fibulae
47 Crista interossea
48 Crista anterior
49 Crista lateralis
50 Crista medialis
51 Facies medialis
52 Facies lateralis
53 Facies posterior
54 Capitulum fibulae
55 Facies articularis capituli
56 Apex capituli fibulae
57 Malleolus lateralis
58 Facies articularis malleoli

59 PATELLA

60 Basis patellae
61 Apex patellae
62 Facies articularis

63 TARSUS

64 Ossa tarsi

65 TALUS

66 Caput tali
67 Corpus tali
68 Collum tali
69 Trochlea tali
70 Facies superior
71 Facies malleolaris medialis
72 Facies malleolaris lateralis
73 Sulcus tali
74 Processus lateralis tali
75 Facies articularis calcanea posterior

1 Facies articularis calcanea media
2 Sulcus m. flexoris hallucis longi
3 Facies articularis navicularis
4 Facies articularis calcanea anterior
5 Processus posterior tali
6 (Os trigonum)

7 CALCANEUS

8 Corpus calcanei
9 Tuber calcanei
10 Processus medialis tuberis calcanei
11 Processus lateralis tuberis calcanei
12 Sustentaculum tali
13 Sulcus m. flexoris hallucis longi
14 Sulcus calcanei
15 Sinus tarsi
16 Facies articularis anterior
17 Facies articularis media
18 Facies articularis posterior
19 Sulcus m. peronaei
20 (Processus trochlearis)
21 Facies articularis cuboidea

22 OS NAVICULARE PEDIS

23 Tuberositas oss. navicularis

24 OS CUNEIFORME PRIMUM
25 OS CUNEIFORME SECUNDUM
26 OS CUNEIFORME TERTIUM
27 OS CUBOIDEUM
28 Sulcus m. peronaei
29 Tuberositas oss. cuboidei

30 METATARSUS

31 Ossa metatarsalis I-V
32 Basis
33 Corpus
34 Capitulum
35 Tuberositas oss. metatarsalis I
36 Tuberositas oss. metatarsalis V

37 PHALANGES DIGITORUM PEDIS

38 Phalanx prima
39 Phalanx secunda
40 Phalanx tertia
41 Tuberositas unguicularis
42 Basis phalangis
43 Corpus phalangis
44 Trochlea phalangis
45 Ossa sesamoidea

1 SYNDESMOLOGIA

2 Junctura ossium
3 Synarthrosis
4 Sutura
5 Sutura serrata
6 Sutura squamosa
7 Harmonia
8 Gomphosis
9 Synchondrosis
10 Symphysis
11 Diarthrosis
12 Articulatio
13 Articulatio simplex
14 Articulatio composita
15 Arthrodia
16 Articulatio sphaeroidea
17 Enarthrosis
18 Ginglymus
19 Articulatio cochlearis
20 Articulatio ellipsoidea
21 Articulatio trochoidea
22 Articulatio sellaris
23 Amphiarthrosis
24 Syndesmosis
25 Cartilago articularis
26 Cavum articulare
27 Discus articulare
28 Labrum glenoidale
29 Meniscus articularis
30 Capsula articularis
31 Stratum fibrosum
32 Stratum synoviale
33 Plica synovialis
34 Villi synoviales
35 Synovia

36 LIGAMENTA COLUMNAE VERTEBRALIS ET CRANII
37 Fibrocartilagines interverte- [brales
38 Annulus fibrosus
39 Nucleus pulposus
40 Ligg. flava
41 Capsulae articulares
42 Ligg. intertransversaria
43 Ligg. interspinalia
44 Lig. supraspinale
45 Lig. nuchae
46 Lig. longitudinale anterius
47 Lig. longitudinale posterius
48 Symphysis sacrococcygea
49 Lig. sacrococcygeum posterius superficiale
50 Lig. sacrococcygeum posterius profundum
51 Lig. sacrococcygeum anterius
52 Lig. sacrococcygeum laterale
53 Lig. pterygospinosum
54 Lig. stylohyoideum

1 Articulatio atlantooccipitalis
2 Capsulae articulares
3 Membrana atlantooccipitalis anterior
4 Membrana atlantooccipitalis posterior

5 Articulatio atlantoepistrophica
6 Capsulae articulares
7 Ligg. alaria
8 Lig. apicis dentis
9 Lig. transversum atlantis
10 Lig. cruciatum atlantis
11 Membrana tectoria

12 Articulationes costovertebrales

13 Articulationes capitulorum
14 Capsulae articulares
15 Lig. capituli costae radiatum
16 Lig. capituli costae interarticulare

17 Articulationes costotransversariae
18 Capsulae articulares
19 Lig. tuberculi costae
20 Lig. colli costae
21 Lig. costotransversarium anterius
22 Lig. costotransversarium posterius
23 Lig. lumbocostale
24 Foramen costotransversarium

25 Articulationes sternocostales
26 Capsulae articulares
27 Lig. sternocostale interarticulare
28 Ligg. sternocostalis radiata
29 Membrana sterni
30 Ligg. costoxiphoidea
31 Ligg. intercostalia
32 Ligg. intercostalia externa
33 Ligg. intercostalia interna
34 Articulationes interchondrales

35 Articulatio mandibularis
36 Capsula articularis
37 Discus articularis
38 Lig. temporomandibulare
39 Lig. sphenomandibulare
40 Lig. stylomandibulare

41 Ligg. cinguli extremitatis superioris
42 Lig. coracoacromiale
43 Lig. transversum scapulae superius
44 Lig. transversum scapulae inferius

45 Articulatio acromioclavicularis
46 Capsula articularis
47 Lig. acromioclaviculare
48 (Discus articularis)
49 Lig. coracoclaviculare
50 Lig. trapezoideum
51 Lig. conoideum

52 Articulatio sternoclavicularis
53 Capsula articularis
54 Discus articularis
55 Lig. sternoclaviculare
56 Lig. costoclaviculare
57 Lig. interclaviculare

58 Articulatio humeri
59 Capsula articularis
60 Labrum glenoidale
61 Lig. coracohumerale

62 Articulatio cubiti
63 Articulatio humeroulnaris
64 Articulatio humeroradialis
65 Articulatio radioulnaris proximalis
66 Capsula articularis
67 Lig. collaterale ulnare
68 Lig. collaterale radiale
69 Lig. annulare radii

1 Recessus sacciformis
2 Membrana interossea antibrachii
3 Chorda obliqua

4 Articulatio radioulnaris distalis

5 Capsula articularis
6 Discus articularis
7 Recessus sacciformis

8 Articulatio manus

9 Articulatio radiocarpea
10 Articulatio intercarpea
11 Capsula articularis
12 Lig. radiocarpeum dorsale
13 Lig. radiocarpeum volare
14 Lig. carpi radiatum
15 Lig. collaterale carpi ulnare
16 Lig. collaterale carpi radiale
17 Ligg. intercarpea dorsalia
18 Ligg. intercarpea volaria
19 Ligg. intercarpea interossea

20 Articulatio ossis pisiformis

21 Capsula articularis
22 Lig. pisohamatum
23 Lig. pisometacarpeum
24 Canalis carpi

25 Articulationes carpometacarpeae

26 Capsulae articulares
27 Ligg. carpometacarpea dorsalia
28 Ligg. carpometacarpea volaria

29 Articulatio carpometacarpea pollicis

30 Capsula articularis

31 Articulationes intermetacarpeae

32 Capsulae articulares
33 Ligg. basium [oss. metacarp.] dorsalia
34 Ligg. basium [oss. metacarp.] volaria
35 Ligg. basium [oss. metacarp.] interossea
36 Spatia interossea metacarpi

37 Articulationes metacarpophalangeae

38 Capsulae articulares
39 Ligg. collateralia
40 Ligg. accessoria volaria
41 Ligg. capitulorum [oss. metacarpalium] transversa

42 Articulationes digitorum manus

43 Capsulae articulares
44 Ligg. collateralia

45 Ligg. cinguli extremitatis inferioris

46 Membrana obturatoria
47 Canalis obturatorius
48 Lig. iliolumbale
49 Lig. sacrotuberosum
50 Processus falciformis
51 Lig. sacrospinosum
52 Foramen ischiadicum majus
53 Foramen ischiadicum minus

54 Articulatio sacroiliaca

55 Ligg. sacroiliaca anteriora
56 Ligg. sacroiliaca interossea
57 Lig. sacroiliacum posterior breve
58 Lig. sacroiliacum posterius longum

59 Symphysis ossium pubis

60 Lig. pubicum superius
61 Lig. arcuatum pubis
62 Lamina fibrocartilaginea interpubica

63 Articulatio coxae

64 Capsula articularis
65 Labrum glenoidale
66 Lig. transversum acetabuli
67 Lig. teres femoris
68 Zona orbicularis
69 Lig. iliofemorale

1 Lig. ischiocapsulare
2 Lig. pubocapsulare

3 Articulatio genu
4 Capsula articularis
5 Meniscus lateralis
6 Meniscus medialis
7 Lig. transversum genu
8 Ligg. cruciata genu
9 Lig. cruciatum anterius
10 Lig. cruciatum posterius
11 Plica synovialis patellaris
12 Plicae alares
13 Lig. collaterale fibulare
14 Lig. collaterale tibiale
15 Lig. popliteum obliquum
16 Lig. popliteum arcuatum
17 Retinaculum lig. arcuati
18 Lig. patellae
19 Retinaculum patellae mediale
20 Retinaculum patellae laterale

21 Articulatio tibiofibularis
22 Capsula articularis
23 Ligg. capituli fibulae
24 Membrana interossea cruris

25 Syndesmosis tibiofibularis
26 Lig. malleoli lateralis anterius
27 Lig. malleoli lateralis posterius

28 Articulationes pedis

29 Articulatio talocruralis
30 Capsula articularis
31 Lig. deltoideum
32 Lig. tibionaviculare
33 Lig. calcaneotibiale
34 Lig. talotibiale anterius
35 Lig. talotibiale posterius
36 Lig. talofibulare anterius
37 Lig. talofibulare posterius
38 Lig. calcaneofibulare

39 Articulationes intertarseae

40 Articulatio talocalcaneonavicularis

41 Articulatio talocalcanea
42 Capsula articularis
43 Lig. talocalcaneum laterale
44 Lig. talocalcaneum mediale
45 Lig. talocalcaneum anterius
46 Lig. talocalcaneum posterius

47 Articulatio tarsi transversa [Choparti]

48 Articulatio talonavicularis
49 Capsula articularis

50 Articulatio calcaneocuboidea
51 Capsula articularis

52 Articulatio cuneonavicularis
53 Ligg. tarsi interossea
54 Lig. talocalcaneum interosseum
55 Lig. cuneocuboideum interosseum
56 Ligg. intercuneiformia interossea

57 Ligg. tarsi dorsalia
58 Lig. talonaviculare [dorsale]
59 Lig. cuneocuboideum dorsale
60 Lig. cuboideonaviculare dorsale
61 Lig. bifurcatum
62 Pars calcaneonavicularis
63 Pars calcaneocuboidea
64 Lig. calcaneonaviculare dorsale
65 Ligg. navicularicuneiformia dorsalia

66 Ligg. tarsi plantaria
67 Lig. plantare longum
68 Ligg. tarsi profunda
69 Lig. calcaneocuboideum plantare
70 Lig. calcaneonaviculare plantare

1 Fibrocartilago navicularis
2 Ligg. naviculariformia plantaria
3 Lig. cuboideonaviculare plantaria
4 Ligg. intercuneiformia plantaria
5 Lig. cuneocuboideum plantare

6 Articulationes tarsometatarseae
7 Capsulae articulares
8 Ligg. tarsometatarsea dorsalis
9 Ligg. tarsometatarsea plantaria
10 Ligg. cuneometatarsea interossea

11 Articulationes intermetatarseae
12 Capsulae articulares
13 Ligg. basium [oss. metatars.] interossea
14 Ligg. basium [oss. metatars.] dorsalia
15 Ligg. basium [oss. metatars.] plantaria
16 Spatia interossea metatarsi

17 Articulationes metatarsophalangeae
18 Capsulae articulares
19 Ligg. collateralia
20 Ligg. accessoria plantaria
21 Ligg. capitulorum [oss. metatars.] transversa

22 Articulationes digitorum pedis
23 Capsulae articulares
24 Ligg. collateralia

1 MYOLOGIA

2 Musculus
- 3 Caput
- 4 Venter

5 Musculus fusiformis
6 Musculus unipennatus
7 Musculus bipennatus
8 Musculus sphincter
9 Musculus orbicularis
10 Musculus articularis
11 Musculus skeleti
12 Musculus cutaneus
13 Tendo
33 Aponeurosis
34 Perimysium
35 Fascia
- 36 Fascia superficialis

37 Inscriptio tendinea
38 Arcus tendineus
39 Ligamentum vaginale
40 Vagina fibrosa tendinis
41 Vagina mucosa tendinis
42 Trochlea muscularis
43 Bursa mucosa

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14 Musculi dorsi
15 M. trapezius
16 (M. transversus nuchae)
17 M. latissimus dorsi
18 M. rhomboideus major
19 M. rhomboideus minor
20 M. levator scapulae
21 M. serratus posterior inferior
22 M. serratus posterior superior
23 M. splenius cervicis
24 M. splenius capitis
25 M. sacrospinalis
26 M. iliocostalis
- 27 M. iliocostalis lumborum
- 28 M. iliocostalis dorsi
- 29 M. iliocostalis cervicis

30 M. longissimus
- 31 M. longissimus dorsi
- 32 M. longissimus cervicis

44 M. longissimus capitis
45 M. spinalis
- 46 M. spinalis dorsi
- 47 M. spinalis cervicis
- 48 M. spinalis capitis

49 M. semispinalis
- 50 M. semispinalis dorsi
- 51 M. semispinalis cervicis
- 52 M. semispinalis capitis

53 M. multifidus
54 Mm. rotatores
- 55 Mm. rotatores longi
- 56 Mm. rotatores breves

57 Mm. interspinales
58 Mm. intertransversarii
- 59 Mm. intertransversarii laterales
- 60 Mm. intertransversarii mediales
- 61 Mm. intertransversarii anteriores
- 62 Mm. intertransversarii posteriores

63 M. rectus capitis posterior major

1 M. rectus capitis posterior minor
2 M. rectus capitis lateralis
3 M. obliquus capitis superior
4 M. obliquus capitis inferior
5 Fascia lumbodorsalis
6 Fascia nuchae

7 Musculi capitis

8 M. epicranius
9 M. frontalis
10 M. occipitalis
11 M. procerus
12 M. nasalis
13 Pars transversa
14 Pars alaris
15 M. depressor septi
16 M. orbicularis oculi
17 Pars palpebralis
18 Pars orbitalis
19 Pars lacrimalis [Horneri]
20 M. auricularis anterior
21 M. auricularis superior
22 M. auricularis posterior
23 M. orbicularis oris
24 M. triangularis
25 (M. transversus menti)
26 M. risorius
27 M. zygomaticus
28 M. quadratus labii superioris
29 Caput zygomaticum
30 Caput infraorbitale
31 Caput angulare
32 M. quadratus labii inferioris
33 M. caninus
34 M. buccinator
35 Mm. incisivi labii superioris
36 Mm. incisivi labii inferioris
37 M. mentalis
38 M. masseter
39 M. temporalis
40 M. pterygoideus externus
41 M. pterygoideus internus
42 Galea aponeurotica
43 Fascia buccopharyngea
44 Fascia parotideomasseterica
45 Fascia temporalis

46 Musculi oss. hyoidei

47 M. digastricus
48 Venter anterior
49 Venter posterior
50 M. stylohyoideus
51 M. mylohyoideus
52 M. genoihyoideus

53 Musculi colli

54 Platysma
55 M. sternocleidomastoideus
56 M. sternohyoideus
57 M. omohyoideus
58 Venter superior
59 Venter inferior
60 M. sternothyreoideus
61 M. thyreohyoideus
62 (M. levator glandulae thyreo-
63 M. longus colli ideae)
64 M. longus capitis
65 M. rectus capitis anterior
66 M. scalenus anterior
67 M. scalenus medius
68 M. scalenus posterior
69 (M. scalenus minimus)
70 Fascia colli
71 Fascia praevertebralis

72 Musculi thoracis

73 (M. sternalis)
74 M. pectoralis major
75 Pars clavicularis
76 Pars sternocostalis
77 Pars abdominalis
78 M. pectoralis minor
79 M. subclavius

1 M. serratus anterior
2 Mm. levatores costarum
3 Mm. levatores costarum longi
4 Mm. levatores costarum breves
5 Mm. intercostales externi
6 Mm. intercostales interni
7 Mm. subcostales
8 M. transversus thoracis
9 Diaphragma
10 Pars lumbalis
11 Crus mediale
12 Crus intermedium
13 Crus laterale
14 Pars costalis
15 Pars sternalis
16 Hiatus aorticus
17 Hiatus oesophageus
18 Centrum tendineum
19 Foramen venae cavae
20 Arcus lumbocostalis medialis [Halleri]
21 Arcus lumbocostalis lateralis [Halleri]
22 Fascia pectoralis
23 Fascia coracoclavicularis

24 Musculi abdominis

25 M. rectus abdominis
26 Falx [aponeurotica] inguinalis
27 M. pyramidalis
28 M. obliquus externus abdominis
29 M. obliquus internus abdominis
30 M. cremaster
31 M. transversus abdominis
32 M. quadratus lumborum
33 Annulus umbilicalis*
34 Linea alba
35 Adminiculum lineae albae
36 Inscriptiones tendineae
37 Lig. suspensorium penis s. clitoridis
38 Lig. fundiforme penis
39 Vagina m. recti abdominis
40 Linea semicircularis [Douglasi]
41 Lig. inguinale [Pouparti]
42 Lig. lacunare [Gimbernati]
43 Lig. inguinale reflexum [Collesi]
44 Annulus inguinalis subcutaneus
45 Crus superius
46 Crus inferius
47 Fibrae intercrurales
48 Trigonum lumbale [Petiti]
49 Linea semilunaris [Spigeli]
50 Fascia transversalis
51 Canalis inguinalis
52 Annulus inguinalis abdominalis
53 Lig. interfoveolare [Hesselbachi]
54 Plica epigastrica
55 Fovea inguinalis lateralis
56 Fovea inguinalis medialis
57 Fovea supravesicalis

58 Musculi coccygei

59 M. coccygeus
60 M. sacrococcygeus anterior
61 M. sacrococcygeus posterior

62 Musculi extremitatis superioris

63 M. deltoideus
64 M. supraspinatus
65 M. infraspinatus
66 M. teres minor
67 M. teres major
68 M. subscapularis
69 M. biceps brachii
70 Caput longum
71 Vagina mucosa intertubercularis
72 Caput breve
73 Lacertus fibrosus
74 M. coracobrachialis
75 M. brachialis
76 M. triceps brachii
77 Caput longum
78 Caput laterale
79 Caput mediale

1 M. anconaeus
2 (M. epitrochleoanconaeus)
3 M. pronator teres
4 Caput humerale
5 Caput ulnare
6 M. flexor carpi radialis
7 M. palmaris longus
8 M. flexor carpi ulnaris
9 Caput humerale
10 Caput ulnare
11 M. flexor digitorum sublimis
12 Caput humerale
13 Caput radiale
14 M. flexor digitorum profundus
15 M. flexor pollicis longus
16 M. pronator quadratus
17 M. branchioradialis
18 M. extensor carpi radialis longus
19 M. extensor carpi radialis brevis
20 M. extensor digitorum communis
21 Juncturae tendinum
22 M. extensor digiti quinti proprius
23 M. extensor carpi ulnaris
24 M. supinator
25 M. abductor pollicis longus
26 M. extensor pollicis brevis
27 M. extensor pollicis longus
28 M. extensor indicis proprius
29 M. palmaris brevis
30 M. abductor pollicis brevis
31 M. flexor pollicis brevis
32 M. opponens pollicis
33 M. adductor pollicis
34 M. abductor digiti quinti
35 M. flexor digiti quinti brevis
36 M. opponens digiti quinti
37 Mm. lumbricales
38 Mm. interossei dorsales
39 Mm. interossei volares
40 Fasc a axillaris
41 Fascia subscapularis
42 Fascia supraspinata
43 Fascia infraspinata
44 Fascia brachii
45 Septum intermusculare [humeri] mediale
46 Septum intermusculare [humeri] laterale
47 Sulcus bicipitalis medialis
48 Sulcus bicipitalis lateralis
49 Fascia antibrachii
50 Fascia dorsalis manus
51 Lig. carpi dorsale
52 Aponeurosis palmaris
53 Fasciculi transversi
54 Lig. carpi transversum
55 Lig. carpi volare
56 Chiasma tendinum
57 Vinculum tendinum
58 Vaginae mucosae
59 Ligg. vaginalia digitorum manus
60 Ligg. annularia digitorum manus
61 Ligg. cruciata digitorum manus

62 Musculi Extremitatis Inferioris
63 M. iliopoas
64 M. iliacus
65 M. psoas major
66 M. psoas minor
67 M. glutaeus maximus
68 M. glutaeus medius
69 M. glutaeus minimus
70 M. tensor fasciae latae
71 M. piriformis
72 M. obturator internus
73 M. gemellus superior
74 M. gemellus inferior
75 M. quadratus femoris
76 M. sartorius
77 M. quadriceps femoris
78 M. rectus femoris
79 M. vastus lateralis

1 M. vastus intermedius
2 M. vastus medialis
3 M. articularis genu
4 M. pectineus
5 M. adductor longus
6 M. gracilis
7 M. adductor brevis
8 M. adductor magnus
9 M. adductor minimus
10 M. obturator externus
11 M. biceps femoris
12 Caput longum
13 Caput breve
14 M. semitendinosus
15 M. semimembranosus
16 M. tibialis anterior
17 M. extensor digitorum longus
18 M. peronaeus tertius
19 M. extensor hallucis longus
20 M. peronaeus longus
21 M. peronaeus brevis
22 M. triceps surae
23 M. gastrocnemius
24 Caput laterale
25 Caput mediale
26 M. soleus
27 Arcus tendineus m. solei
28 Tendo calcaneus [Achillis]
29 M. plantaris
30 M. popliteus
31 M. tibialis posterior
32 M. flexor digitorum longus
33 M. flexor hallucis longus
34 M. extensor hallucis brevis
35 M. extensor digitorum brevis
36 M. abductor hallucis
37 M. flexor hallucis brevis
38 M. adductor hallucis
39 Caput obliquum
40 Caput transversum
41 M. abductor digiti quinti
42 M. flexor digiti quinti brevis
43 M. opponens digiti quinti
44 M. flexor digitorum brevis
45 M. quadratus plantae
46 Mm. lumbricales
47 Mm. interossei dorsales
48 Mm. interossei plantares
49 Fascia lata
50 Tractus iliotibialis [Maissiati]
51 Septum intermusculare [femoris] laterale
52 Septum intermusculare [femoris] mediale
53 Canalis adductorius [Hunteri]
54 Hiatus tendineus [adductorius]
55 Fascia iliaca
56 Fascia iliopectinea
57 Lacuna musculorum
58 Lacuna vasorum
59 Trigonum femorale [Fossa scarpae major]
60 Fossa iliopectinea
61 Fascia pectinea
62 Canalis femoralis
63 Annulus femoralis
64 Septum femorale [Cloqueti]
65 Fossa ovalis
66 Margo falciformis
67 Cornu superius
68 Cornu inferius
69 Fascia cribrosa
70 Fascia cruris
71 Septum intermusculare anterius [fibulare]
72 Septum intermusculare posterius [fibulare]
73 Lig. transversum cruris
74 Lig. laciniatum
75 Lig. cruciatum cruris
76 Retinaculum mm. peronaeorum sup.
77 Retinaculum mm. peronaeorum inferius

1 Fascia dorsalis pedis
2 Aponeurosis plantaris
3 Fasciculi transversi aponeurosis plantaris
4 Vaginae mucosae
5 Ligg. annularia
6 Ligg. vaginalia
7 Ligg. cruciata

8 BURSAE ET VAGINAE MUCOSAE

9 Bursa mucosa subcutanea
10 Bursa mucosa submuscularis
11 Bursa mucosa subfacialis
12 Bursa mucosa subtendinea
13 Vagina mucosa tendinis

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14 B. musculi trochlearis
15 B. m. tensoris veli palatini
16 B. subcutanea praementalis
17 B. subcutanea prominentiae laryngeae
18 B. m. sternohyoidei
19 B. m. thyreohyoidei
20 B. subcutanea sacralis
21 B. coccygea
22 B. subcutanea acromialis
23 B. subacromialis
24 B. subdeltoidea
25 B. m. coracobrachialis
26 B. m. infraspinati
27 B. m. subscapularis
28 B. m. teretis majoris
29 B. m. latissimi dorsi
30 B. subcutanea olecrani
31 B. intratendinea olecrani
32 B. subtendinea olecrani
33 B. subcutanea epicondyli [humeri] lateralis
34 B. subcutanea epicondyli [humeri] medialis
35 B. bicipitoradialis
36 B. cubitalis interossea
37 Vagina tendinum mm. abductoris longi et extensoris brevis pollicis
38 Vagina tendinum mm. extensorum carpi radialium
39 Vagina tendinis m. extensoris pollicis longi
40 Vagina tendinum mm. extensoris digitorum communis et extensoris indicis
41 Vagina tendinis m. extensoris digiti minimi
42 Vagina tendinis m. extensori carpi ulnaris
43 B. m. extensoris carpi radialis brevis
44 Bursae subcutaneae metacarpophalangeae dorsales
45 Bursae subcutaneae digitorum dorsales
46 B. m. flexoris carpi ulnaris
47 B. m. flexoris carpi radialis
48 Vagina tendinum mm. flexorum communium
49 Vag. tendinis m. flexoris pollicis longi
50 Bursae intermetacarpophalangeae
51 Vaginae tendinum digitales
52 B. trochanterica subcutanea
53 B. trochanterica m. glutaei maximi
54 B. troch. m. glutaei medii anterior

1 B. troch. m. glutaei medii posterior
2 B. troch. m. glutaei minimi
3 B. m. piriformis
4 B. m. obturatoris interni
5 Bursae glutaeofemorales
6 B. ischiadica m. glutaei maximi
7 B. m. recti femoris
8 B. iliopectinea
9 B. iliaca subtendinea
10 B. m. pectinei
11 B. m. bicipitis femoris superior
12 B. Praepatellaris subcutanea
13 B. praepatellaris subfascialis
14 B. praepatellaris subtendinea
15 B. suprapatellaris
16 B. infrapatellaris subcutanea
17 B. infrapatellaris profunda
18 B. subcutanea tuberositatis tibiae
19 B. m. sartorii propria
20 B. anserina
21 B. m. bicipitis femoris inferior
22 B. m. poplitei
23 B. bicipitogastrocnemialis
24 B. m. gastrocnemii lateralis
25 B. m. gastrocnemii medialis
26 B. m. semimembranosi
27 B. subcutanea malleoli lateralis
28 B. subcutanea malleoli medialis
29 Vag. tendinis m. tibialis anterioris
30 Vag. tendinis m. extensoris hallucis longi
31 Vaginae tendinum m. extensoris digitorum pedis longi
32 Vaginae tendinum m. flexoris digitorum pedis longi
33 Vag. tendinis m. tibialis posterioris
34 Vag. tendinis m. flexoris hallucis longi
35 Vag. tendinum mm. peronaeorum communis
36 Bursa sinus tarsi
37 B. subtendinea m. tibialis anterioris
38 B. subtendinea m. tibialis posterioris
39 B. subcutanea calcanea
40 B. tendinis calcanei [Achillis]
41 Vag. tendinis m. peronaei longi plantaris
42 Bursae intermetatarsophalangeae
43 Bursae mm. lumbricalium pedis
44 Vaginae tendinum digitales pedis

1 SPLANCHNOLOGIA

2 Tunica albuginea
3 Tunica fibrosa
4 Tunica adventitia
5 Tunica mucosa
6 Lamina propria mucosae
7 Lamina muscularis mucosae
8 Tela submucosa
9 Plica mucosa
10 Mucus
11 Tunica muscularis
12 Tunica serosa
13 Tela subserosa
14 Plica serosa
15 Ligamentum serosum
16 Serum
17 Epithelium
18 Endothelium
19 Organon parenchymatosum
20 Parenchyma
21 Stroma
22 Glandula
23 Lobus
24 Lobulus
25 Glandula mucosa
26 Musculus viscerum

27 APPARATUS DIGESTORIUS

28 Cavum oris
29 Bucca
30 Corpus adiposum buccae
31 Vestibulum oris
32 Cavum oris proprium
33 Rima oris
34 Labia oris
35 Labium superius
36 Labium inferius
37 Commissura labiorum
38 Angulus oris
39 Palatum
40 Palatum durum
41 Palatum molle
42 Raphe palati

43 TUNICA MUCOSA ORIS
44 Frenulum labii superioris
45 Frenulum labii inferioris
46 Gingiva
47 Caruncula sublingualis
48 Plica sublingualis
49 Plicae palatinae transversae
50 Papilla incisiva

1 GLANDULAE ORIS
2 Gl. labiales
3 Gl. buccales
4 Gl. molares
5 Gl. palatinae
6 Gl. linguales
7 Gl. lingualis anterior [Blandini
8 Gl. sublingualis Nuhni]
9 Ductus sublingualis major
10 Ductus sublinguales minores
11 Gl. submaxillaris
12 Ductus submaxillaris [Whartoni]
13 Gl. parotis
14 Processus retromandibularis
15 Gl. parotis accessori
16 Ductus parotideus [Stenonis]
17 Saliva

18 DENTES
19 Corona dentis
20 Tubercula [coronae] dentis
21 Collum dentis
22 Radix [Radices] dentis
23 Apex radicis dentis
24 Facies masticatoria
25 Facies labialis [buccalis]
26 Facies lingualis
27 Facies contactus
28 Facies medialis } dentium incisivorum et caninorum dentium praemolarium et molarium
29 Facies lateralis
30 Facies anterior
31 Facies posterior
32 Cavum dentis
33 Pulpa dentis
34 Papilla dentis*
35 Canalis radicis dentis
36 Foramen apicis dentis
37 Substantia eburnea
38 Substantia adamantina
39 Substantia ossea
40 Canaliculi dentales
41 Spatia interglobularia
42 Prismata adamantina
43 Cuticula dentis
44 Periosteum alveolare
45 Arcus dentalis superior
46 Arcus dentalis inferior
47 Dentes incisivi
48 Dentes canini
49 Dentes praemolares
50 Dentes molares
51 Dens serotinus
52 Dentes permanentes
53 Dentes decidui

54 LINGUA
55 Dorsum linguae
56 Radix linguae
57 Corpus linguae
58 Facies inferior [linguae]
59 Plica fimbriata
60 Margo lateralis [linguae]
61 Apex linguae
62 Tunica mucosa linguae
63 Frenulum linguae
64 Papillae linguales
65 Papillae filiformes
66 Papillae conicae
67 Papillae fungiformes
68 Papillae lenticulares
69 Papillae vallatae
70 Papillae foliatae
71 Sulcus medianus linguae
72 Sulcus terminalis
73 Foramen caecum linguae [Mor-
74 (Ductus lingualis) gagnii]
75 Ductus thyreoglossus*
76 Tonsilla lingualis
77 Folliculi linguales
78 Septum linguae

1 Musculi linguae
2 M. genioglossus
3 M. hyoglossus
4 M. chondroglossus
5 M. styloglossus
6 M. longitudinalis superior
7 M. longitudinalis inferior
8 M. transversus linguae
9 M. verticalis linguae

10 FAUCES
11 Isthmus faucium
12 Velum palatinum
13 Uvula [palatina]
14 Arcus palatini
15 Arcus glossopalatinus
16 Arcus pharyngopalatinus
17 Plica salpingopalatina
18 Tonsilla palatina
19 Fossulae tonsillares
20 Sinus tonsillaris
21 Plica triangularis
22 Fossa supratonsillaris

23 MUSCULI PALATI ET FAUCIUM
24 M. levator veli palatini
25 M. tensor veli palatini
26 M. uvulae
27 M. glossopalatinus
28 M. pharyngopalatinus

29 PHARYNX
30 Cavum pharyngis
31 Fornix pharyngis
32 Pars nasalis
33 Pars oralis
34 Pars laryngea
35 Ostium pharyngeum tubae
36 Labium anterius
37 Labium posterius
38 Torus tubarius
39 Plica salpingopharyngea
40 Recessus pharyngeus [Rosenmuelleri]
41 (Bursa pharyngea)
42 Recessus piriformis
43 M. stylopharyngeus
44 Fascia pharyngobasilaris
45 Tunica mucosa
46 Gl. pharyngeae
47 Tonsilla pharyngea
48 Fossulae tonsillares
49 Tela submucosa
50 Tunica muscularis pharyngis
51 Raphe pharyngis
52 Raphe pterygomandibularis
53 M. constrictor pharyngis superior
54 M. pterygopharyngeus
55 M. buccopharyngeus
56 M. mylopharyngeus
57 M. glossopharyngeus
58 M. salpingopharyngeus
59 M. constrictor pharyngis medius
60 M. chondropharyngeus
61 M. ceratopharyngeus
62 M. constrictor pharyngis inferior
63 M. thyreopharyngeus
64 M. cricopharyngeus

65 TUBUS DIGESTORIUS

66 OESOPHAGUS
67 Pars cervicalis
68 Pars thoracalis
69 Pars abdominalis
70 Tunica adventitia
71 Tunica muscularis
72 M. bronchooesophageus
73 M. pleurooesophageus
74 Tela submucosa
75 Tunica mucosa
76 Lam. muscularis mucosae
77 Gl. oesophageae

78 VENTRICULUS [Gaster]
79 Paries anterior
80 Paries posterior

1 Curvatura ventriculi major
2 Curvatura ventriculi minor
3 Cardia
4 Fundus ventriculi
5 Corpus ventriculi
6 Pylorus
7 Pars cardiaca
8 Pars pylorica
9 (Antrum cardiacum)
10 Antrum pyloricum
11 Tunica serosa
12 Tunica muscularis
13 Stratum longitudinale
14 Ligg. pylori
15 Stratum circulare
16 M. sphincter pylori
17 Fibrae obliquae
18 Valvula pylori
19 Tela submucosa
20 Tunica muscosa
21 Lam. muscularis mucosae
22 Areae gastricae
23 Plicae villosae
24 Foveolae gastricae
25 Glandulae gastricae [propriae]
26 Glandulae pyloricae
27 Noduli lymphatici gastrici
28 Succus gastricus

29 INTESTINUM TENUE
30 Tunica serosa
31 Tunica muscularis
32 Stratum longitudinale
33 Stratum circulare
34 Tela submucosa
35 Tunica mucosa
36 Lam. muscularis mucosae
37 Plicae circulares [Kerkringi]
38 Villi intestinales
39 Gl. intestinales [Lieberkuehni]
40 Noduli lymphatici solitarii
41 Noduli lymphatici aggregati [Peyeri]
42 Chymus
43 Chylus
44 Succus entericus
45 Duodenum
46 Pars superior
47 Pars descendens
48 Pars inferior
49 Pars horizontalis [inferior]
50 Pars ascendens
51 Flexura duodeni superior
52 Flexura duodeni inferior
53 Flexura duodenojejunalis
54 M. suspensorius duodeni
55 Plica longitudinalis duodeni
56 Papilla duodeni [Santorini]
57 Gl. duodenales [Brunneri]
58 Intestinum tenue mesenteriale
59 Intestinum jejunum
60 Intestinum ileum

61 INTESTINUM CRASSUM
62 Intestinum caecum
63 Valvula coli
64 Labium superius
65 Labium inferius
66 Frenula valvulae coli
67 Processus vermiformis
68 (Valvula processus vermiformis)
69 Noduli aggregati processus vermiformis
70 Colon
71 Colon ascendens
72 Flexura coli dextra
73 Colon transversum
74 Flexura coli sinistra
75 Colon descendens
76 Colon sigmoideum
77 Plicae semilunares coli
78 Haustra coli
79 Tunica serosa
80 Appendices epiploicae
81 Tunica muscularis
82 Taeniae coli

1 Taenia mesocolica
2 Taenia omentalis
3 Taenia libera
4 Tela submucosa
5 Tunica mucosa
6 Lam. muscularis mucosae
7 Gl. intestinales [Lieberkuehni]
8 Noduli lymphatici solitarii

9 INTESTINUM RECTUM

10 Flexura sacralis
11 Flexura perinealis
12 Ampulla recti
13 Tunica muscularis
14 M. sphincter ani internus
15 M. rectococcygeus
16 Tela submucosa
17 Tunica mucosa
18 Lam. m. mucosae
19 Gl. intestinales [Lieber-
20 Noduli lymphatici kuehni]
21 Plicae transversales recti
22 Pars analis recti
23 Columnae rectales [Morgagnii]
24 Sinus rectales
25 Annulus haemorrhoidalis

26 PANCREAS

27 Caput pancreatis
28 Processus uncinatus [Pancreas Winslowi]
29 Incisura pancreatis
30 Corpus pancreatis
31 Facies anterior
32 Facies posterior
33 Facies inferior
34 Margo superior
35 Margo anterior
36 Margo posterior
37 Tuber omentale
38 Cauda pancreatis
39 Ductus pancreaticus [Wirsungi]
40 Ductus pancreaticus accessorius [Santorini]
41 (Pancreas accessorium)
42 Succus pancreaticus

43 HEPAR

44 Facies superior
45 Facies posterior
46 Facies inferior
47 Margo anterior
48 Incisura umbilicalis
49 Fossae sagittales dextrae
50 Fossa vesicae felleae
51 Fossa venae cavae
52 Fossa sagittalis sinistra
53 Fossa venae umbilicalis
54 Fossa ductus venosi
55 Tunica serosa
56 Lig. teres hepatis
57 Lig. venosum [Arantii]
58 Porta hepatis
59 Lobus hepatis dexter
60 Lobus quadratus
61 Lobus caudatus [Spigelii]
62 Processus papillaris
63 Processus caudatus
64 Lobus hepatis sinister
65 (Appendix fibrosa hepatis)
66 Impressio cardiaca
67 Tuber omentale
68 Impressio oesophagea
69 Impressio gastrica
70 Impressio duodenalis
71 Impressio colica
72 Impressio renalis
73 Impressio suprarenalis
74 Lobuli hepatis
75 Capsula fibrosa [Glissoni]
76 Rami arteriosi interlobulares
77 Venae interlobulares
78 Venae centrales

1 Ductus biliferi
2 Ductus interlobulares
3 Ductus hepaticus
4 Vasa aberrantia hepatis
5 Fel [Bilis]
6 Vesica fellea
7 Fundus vesicae felleae
8 Corpus vesicae felleae
9 Collum vesicae felleae
10 Ductus cysticus
11 Tunica serosa vesicae felleae
12 Tunica muscularis vesicae felleae
13 Tunica mucosa vesicae felleae
14 Plicae tun. mucosae v. felleae
15 Valvula spiralis [Heisteri]
16 Ductus choledochus
17 Gl. mucosae biliosae

18 Lien
19 Facies diaphragmatica
20 Facies renalis
21 Facies gastrica
22 Extremitas superior
23 Extremitas inferior
24 Margo posterior
25 Margo anterior
26 Hilus lienis
27 Tunica serosa
28 Tunica albuginea
29 Trabeculae lienis
30 Pulpa lienis
31 Rami lienales [arteriae lienalis]
32 Penicilli
33 Noduli lumphatici lienales [Malpighii]
34 (Lien accessorius)

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35 apparatus respiratorius

36 Cavum nasi
37 Nares
38 Choanae
39 Septum nasi
40 Septum cartilagineum
41 Septum membranaceum
42 Vestibulum nasi
43 Limen nasi
44 Sulcus olfactorius
45 (Concha nasalis suprema [Santorini])
46 Concha nasalis superior
47 Concha nasalis media
48 Concha nasalis inferior
49 Membrana mucosa nasi
50 Plexus cavernosi concharum
51 Agger nasi
52 Recessus sphenoethmoidalis
53 Meatus nasi
54 Meatus nasi superior
55 Meatus nasi medius
56 Atrium meatus medii
57 Meatus nasi inferior
58 Meatus nasi communis
59 Meatus nasopharyngeus
60 Regio respiratoria
61 Regio olfactoria
62 Gl. olfactoriae
63 Sinus paranasales
64 Sinus maxillaris [Highmori]
65 Sinus sphenoidalis
66 Sinus frontalis
67 Cellulae ethmoidales
68 Bulla ethmoidalis
69 Infundibulum ethmoidale
70 Hiatus semilunaris
71 Gl. nasales

72 Nasus externus
73 Basis nasi
74 Radix nasi

1 Dorsum nasi
2 Margo nasi
3 Apex nasi
4 Ala nasi
5 Septum mobile nasi
6 Cartilagines nasi
7 Cartilago septi nasi
8 Processus sphenoidalis septi cartilaginei
9 Cartilago nasi lateralis
10 Cartilago alaris major
11 Crus mediale
12 Crus laterale
13 Cartilagines alares minores
14 Cartilagines sesamoideae nasi
15 Organon vomeronasale [Jacobsoni]
16 Cartilago vomeronasalis [Jacobsoni]
17 (Ductus incisivus)

18 Larynx

19 Prominentia laryngea
20 Cartilagines laryngis
21 Cartilago thyreoidea
22 Lamina [dextra et sinistra]
23 Incisura thyreoidea superior
24 Incisura thyreoidea inferior
25 Tuberculum thyreoideum superius
26 Tuberculum thyreoideum inferius
27 (Linea obliqua)
28 Cornu superius
29 Cornu inferius
30 (Foramen thyreoideum)
31 Lig. hyothyreoideum laterale
32 Cartilago triticea
33 Lig. hyothyreoideum medium
34 Membrana hyothyreoidea
35 Cartilago cricoidea
36 Arcus [cartilaginis cricoideae]
37 Lamina cartilaginis [cricoideae]
38 Facies articularis arytaenoidea
39 Facies articularis thyreoidea
40 Articulatio cricothyreoidea
41 Capsula articularis cricothyreoidea
42 Ligg. ceratocricoidea lateralia
43 Lig. ceratocricoideum anterius
44 Ligg. ceratocricoidea posteriora
45 Lig. cricothyreoideum [medium]
46 Lig. cricotracheale
47 Cartilago arytaenoidea
48 Facies articularis
49 Basis [cartilaginis arytaenoideae]
50 Crista arcuata
51 Colliculus
52 Fovea oblonga
53 Fovea triangularis
54 Apex [cartilaginis] arytaenoideae
55 Processus vocalis
56 Processus muscularis
57 Cartilago corniculata [Santorini]
58 Synchondrosis arycorniculata
59 Articulatio cricoarytaenoidea
60 Lig. cricopharyngeum
61 Lig. corniculopharyngeum
62 Lig. venticulare
63 Lig. vocale
64 (Cartilago sesamoidea)
65 Capsula articularis cricoarytaenoidea
66 Lig. cricoarytaenoideum posterius
67 Epiglottis
68 Petiolus epiglottidis
69 Tuberculum epiglotticum
70 Cartilago epiglottica
71 Lig. thyreoepiglotticum
72 Lig. hyoepiglotticum
73 Cartilago cuneiformis [Wrisbergi]
74 Tuberculum cuneiformis [Wrisbergi]
75 Tuberculum corniculatum [Santorini]

76 musculi laryngis

77 M. aryepiglotticus
78 M. cricothyreoideus
79 Pars recta

1 PARS OBLIQUA
2 M. cricoarytaenoideus posterior
3 (M. ceratocricoideus)
4 M. cricoarytaenoideus lateralis
5 M. ventricularis
6 M. vocalis
7 M. thyreoepiglotticus
8 M. thyreoarytaenoideus [externus]
9 M. arytaenoideus obliquus
10 M. arytaenoideus transversus

11 CAVUM LARYNGIS
12 Vallecula epiglottica
13 Aditus laryngis
14 Vestibulum laryngis
15 Rima vestibuli
16 Labium vocale
17 Glottis
18 Rima glottidis
19 Pars intermembranacea
20 Pars intercartilaginea
21 Ventriculus laryngis [Morgagnii]
22 Appendix ventriculi laryngis
23 Tunica mucosa laryngis
24 Membrana elastica laryngis
25 Conus elasticus
26 Plica glossoepiglottica mediana
27 Plica glossoepiglottica lateralis
28 Plica aryepiglottica
29 Plica nervi laryngei
30 Plica ventricularis
31 Plica vocalis
32 Macula flava
33 Aditus glottidis inferior
34 Aditus glottidis superior
35 Incisura interarytaenoidea
36 Gl. laryngeae
37 Gl. laryngeae anteriores
38 Gl. laryngeae mediae
39 Gl. laryngeae posteriores
40 Noduli lymphatici laryngei

41 TRACHEA ET BRONCHI
42 Cartilagines tracheales
43 Ligg. annularia [trachealia]
44 Paries membranacea
45 Gl. tracheales
46 Bifurcatio tracheae
47 Bronchus [dexter et sinister]
48 Rami bronchiales
49 Ramus bronchialis eparterialis
50 Rami bronchiales hyparteriales
51 Tunica muscularis
52 Tela submucosa
53 Tunica mucosa
54 Gl. tracheales
55 Gl. bronchiales

56 PULMO
57 Basis pulmonis
58 Apex pulmonis
59 Sulcus subclavius
60 Facies costalis
61 Facies mediastinalis
62 Facies diaphragmatica
63 Margo anterior
64 Margo inferior
65 Hilus pulmonis
66 Radix pulmonis
67 Incisura cardiaca
68 Lobus superior
69 Lobus medius
70 Lobus inferior
71 Incisura interlobaris
72 Lobuli pulmonum
73 Rami bronchiales
74 Bronchioli
75 Bronchioli respiratorii
76 Ductuli alveolares
77 Alveoli pulmonum
78 Lymphoglandulae bronchiales
79 Noduli lymphatici bronchiales
80 Lymphoglandulae pulmonales

1 CAVUM THORACIS
2 Fascia endothoracica
3 Cavum pleurae
4 Pleura
5 Cupula pleurae
6 Pleura pulmonalis
7 Pleura parietalis
8 Pleura mediastinales
9 Laminae mediastinales
10 Pleura pericardiaca
11 Pleura costalis
12 Pleura diaphragmatica
13 Sinus pleurae
14 Sinus phrenicocostalis
15 Sinus costomediastinalis
16 Lig. pulmonale
17 Plicae adiposae
18 Villi pleurales
19 Septum mediastinale
20 Cavum mediastinale anterius
21 Cavum mediastinale posterius

22 GL. THYREOIDEA
23 Isthmus gl. thyreoideae
24 (Lobus pyramidalis)
25 Lobus [dexter et sinister]
26 Lobuli gl. thyreoideae
27 Stroma gl. thyreoideae
28 (Gl. thyreoideae accessoriae)
29 (Gl. thyreoidea accessoria suprahyoidea)

30 GLOMUS CAROTICUM

31 THYMUS
32 Lobus [dexter et sinister]
33 Tractus centralis
34 Lobuli thymi

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35 APPARATUS UROGENITALIS

36 ORGANA UROPOETICA

37 REN
38 Margo lateralis
39 Margo medialis
40 Hilus renalis
41 Sinus renalis
42 Facies anterior
43 Facies posterior
44 Extremitas superior
45 Extremitas inferior
46 (Impressio muscularis)
47 (Impressio hepatica)
48 (Impressio gastrica)
49 Capsula adiposa
50 Tunica fibrosa
51 Tunica muscularis
52 Tubuli renales
53 Tubuli renales contorti
54 Tubuli renales recti
55 Substantia corticalis
56 Substantia medullaris
57 Lobi renales
58 Pyramides renales [Malpighii]
59 Basis pyramidis
60 Papillae renales
61 Area cribrosa
62 Foramina papillaria
63 Columnae renales [Bertini]
64 Lobuli corticales
65 Pars radiata [Processus Ferreini]
66 Pars convoluta
67 Corpuscula renis [Malpighii]
68 Glomerula
69 Capsula glomeruli
70 Pelvis renalis
71 Calyces renales

1 Calyces renales majores
2 Calyces renales minores
3 Gl. pelvis renalis

4 ARTERIAE RENIS

5 Aa. interlobares renis
6 Arteriae arciformes
7 Arteriae interlobulares
8 Vas afferens
9 Vas efferens
10 Rami capsulares
11 Arteriolae rectae
12 Aa. nutriciae pelvis renalis

13 VENAE RENIS

14 Vv. interlobares
15 Venae arciformes
16 Venae interlobulares
17 Venae interlobulares
18 Venae stellatae

19 URETER

20 Pars abdominalis
21 Pars pelvina
22 Tunica adventitia
23 Tunica muscularis
24 Stratum externum
25 Stratum medium
26 Stratum internum
27 Tunica mucosa
28 Gl. mucosae ureteris

29 VESICA URINARIA

30 Vertex vesicae
31 Corpus vesicae
32 Fundus vesicae
33 Lig. umbilicale medium
34 Urachus*
35 Tunica serosa
36 Tunica muscularis
37 Stratum externum
38 Stratum medium
39 Stratum internum
40 M. pubovesicalis
41 M. rectovesicalis
42 Tela submucosa
43 Tunica mucosa
44 Gl. vesicales
45 Noduli lymphatici vesicales
46 Trigonum vesicae [Lieutaudi]
47 Uvula vesicae
48 Plica ureterica
49 Orificium ureteris
50 Orificium urethrae internum
51 Annulus urethralis

52 GLANDULA SUPRARENALIS

53 Substantia corticalis
54 Substantia medullaris
55 Hilus gl. suprarenalis
56 Facies anterior
57 Facies posterior
58 Basis gl. suprarenalis
59 Apex suprarenalis [gl. dextrae]
60 Margo superior
61 Margo medialis
62 Vena centralis
63 (Gl. suprarenalis accessoriae)

64 ORGANA GENITALIA

65 ORGANA GENITALIA VIRILIA

66 TESTIS

67 Extremitas superior
68 Extremitas inferior
69 Facies lateralis
70 Facies medialis
71 Margo anterior
72 Margo posterior
73 Tunica albuginea
74 Mediastinum testi [Corpus Highmori]
75 Septula testis

1 Lobuli testis
2 Parenchyma testis
3 Tubuli seminiferi contorti
4 Tubuli seminiferi recti
5 Tunica propria
6 Rete testis [Halleri]
7 Ductuli efferentes testis
8 Sperma [Semen]
9 Epididymis
10 Caput epididymidis
11 Corpus epididymidis
12 Cauda epididymidis
13 Lobuli epididymidis
14 Ductus epididymidis
15 Ductuli aberrantes
16 (Ductulus aberrans superior)
17 Appendices testis
18 Appendix testis [Morgagnii]
19 (Appendix epididymis)
20 Paradidymis
21 Ductus deferens
22 Ampulla ductus deferentis
23 Diverticula ampullae
24 Tunica adventitia
25 Tunica muscularis
26 Stratum externum
27 Stratum medium
28 Stratum internum
29 Tunica mucosa
30 Ductus ejaculatorius

31 VESICULA SEMINALIS

32 Corpus vesiculae seminalis
33 Tunica adventitia
34 Tunica muscularis
35 Tunica mucosa
36 Ductus excretorius

37 FUNICULUS SPERMATICUS ET TUNICAE TESTIS ET FUNICULI SPERMATICI

38 (Rudimentum processus vaginalis)
39 Tunica vaginalis propria testis
40 Lamina parietalis
41 Lamina visceralis
42 Lig. epididymidis superius
43 Lig. epididymidis inferius
44 Sinus epididymidis
45 Tunica vaginalis communis [testis et funiculi spermatici]
46 M. cremaster
47 Fascia cremasterica [Cooperi]
48 Descensus testis*
49 Gubernaculum testis [Hunteri]*

50 PROSTATA

51 Basis prostatae
52 Apex prostatae
53 Facies anterior
54 Facies posterior
55 Lobus [dexter et sinister]
56 Isthmus prostatae
57 (Lobus medius)
58 Corpus glandulare
60 Succus prostaticus
61 M. prostaticus

62 GLANDULA BULBOURETHRALIS [Cowperi]

63 Corpus gl. bulbourethralis
64 Ductus excretorius

65 PARTES GENITALES EXTERNAE

66 PENIS

67 Radix penis
68 Corpus penis
69 Crus penis
70 Dorsum penis
71 Facies urethralis
72 Glans penis
73 Corona glandis
74 Septum glandis
75 Collum glandis

1 Praeputium
2 Frenulum praeputii
3 Raphe penis
4 Corpus cavernosum penis
5 Corpus cavernosum urethrae
6 Bulbus urethrae
7 Hemisphaeria bulbi urethrae
8 Septum bulbi urethrae
9 Tunica albuginea corporum cavernosorum
10 Septum penis
11 Trabeculae corporum cavernosorum
12 Cavernae corporum cavernosorum
13 Arteriae helicinae
14 Venae cavernosae
15 Lig. suspensorium penis
16 Fascia penis
17 Gl. praeputiales
18 Smegma praeputii

19 URETHRA VIRILIS
20 Pars prostatica
21 Crista urethralis
22 Colliculus seminalis
23 Utriculus prostaticus
24 Pars membranacea
25 Pars cavernosa
26 Fossa navicularis urethrae [Morgagnii]
27 (Valvula fossae navicularis)
28 Orificium urethrae externum
29 Lacunae urethrales [Morgagnii]
30 Gl. urethrales [Littrei]

31 SCROTUM
32 Raphe scroti
33 Septum scroti
34 Tunica dartos

35 ORGANA GENITALIA MULIEBRIA

36 OVARIUM
37 Hilus ovarii
38 Facies medialis
39 Facies lateralis
40 Margo liber
41 Margo mesovaricus
42 Extremitas tubaria
43 Extremitas uterina
44 Stroma ovarii
45 Folliculi oophori primarii
46 Folliculi oophori vesiculosi [Graafi]
47 Theca folliculi
48 Tunica externa
49 Tunica interna
50 Liquor folliculi
51 Stratum granulosum
52 Cumulus oophorus
53 Ovulum
54 Corpus luteum
55 Corpus albicans
56 Lig. ovarii proprium

57 TUBA UTERINA [FALLOPPII]
58 Ostium abdominale tubae uterinae
59 Infundibulum tubae uterinae
60 Fimbriae tubae
61 Fimbria ovarica
62 Ampulla tubae uterinae
63 Isthmus tubae uterinae
64 Pars uterina
65 Ostium uterinum tubae
66 Tunica serosa
67 Tunica adventitia
68 Tunica muscularis
69 Stratum longitudinale
70 Stratum circulare
71 Tela submucosa
72 Tunica mucosa
73 Plicae tubariae
74 Plicae ampullares
75 Plicae isthmicae

76 UTERUS
77 Corpus uteri

1 Fundus uteri
2 Margo lateralis
3 Facies vesicalis
4 Facies intestinalis
5 Cavum uteri
6 Orificium internum uteri
7 Cervix [uteri]
8 Portio supravaginalis [cervicis]
9 Portio vaginalis [cervicis]
10 Orificium externum uteri
11 Labium anterius
12 Labium posterius
13 Canalis cervicis uteri
14 Plicae palmatae
15 Gl. cervicales [uteri]
16 Parametrium
17 Tunica serosa [Perimetrium]
18 Tunica muscularis
19 Tunica muscularis cervicis
20 Tunica mucosa
21 Gl. uterinae
22 M. rectouterinus
23 Lig. teres uteri
24 (Processus vaginalis peritonaei)

25 VAGINA

26 Fornix vaginae
27 Paries anterior
28 Paries posterior
29 Hymen [femininus]
30 Carunculae hymenales
31 Tunica muscularis
32 Tunica mucosa
33 Noduli lymphatici vaginales
34 Rugae vaginales
35 Columnae rugarum
36 Columna rugarum posterior
37 Columna rugarum anterior
38 Carina urethralis [vaginae]

39 EPOOPHORON

40 Ductus epoophori longitudinalis [Gartneri]
41 Ductuli transversi
42 Appendices vesiculosi [Morgagnii]

43 PAROOPHORON

44 PARTES GENITALES EXTERNAE

45 Pudendum muliebre
46 Labium majus pudendi
47 Commissura labiorum anterior
48 Commissura labiorum posterior
49 Frenulum labiorum pudendi
50 Rima pudendi
51 Fossa navicularis [vestibuli vaginae]
52 Labium minus pudendi
53 Vestibulum vaginae
54 Bulbus vestibuli
55 Gl. sebaceae
56 Gl. vestibulares minores
57 Orificium vaginae

58 GL. VESTIBULARIS MAJOR [BARTHOLINI]

59 CLITORIS

60 Crus clitoridis
61 Cornus clitoridis
62 Glans clitoridis
63 Frenulum clitoridis
64 Praeputium clitoridis
65 Smegma clitoridis
66 Corpus cavernosum clitoridis
67 Septum corporum cavernosorum
68 Fascia clitoridis
69 Lig. suspensorium clitoridis

70 URETHRA MULIEBRIS

71 Orificium urethrae externum
72 Corpus spongiosum urethrae
73 Tunica muscularis
74 Stratum circulare
75 Stratum longitudinale
76 Tunica submucosa
77 Tunica mucosa

1 Gl. urethrales
2 Crista urethralis
3 (Ductus paraurethrales)
4 Termini ontogenetici
5 Membranae deciduae*
6 Decidua vera*
7 Decidua capsularis*
8 Decidua basalis*
9 Placenta*
10 Placenta uterina*
11 Placenta foetalis*
12 Funiculus umbilicalis*
13 Corpus Wolffi*
14 Ductus Wolffi*
15 Ductus Muelleri*
16 Sinus urogenitalis*

17 Perineum

18 Raphe perinei
19 Musculi perinei
20 Diaphragma pelvis
21 M. levator ani
22 Arcus tendineus m. levatoris ani
23 M. coccygeus [vide p. 163]
24 M. sphincter ani externus
25 Lig. anococcygeum
26 Fascia pelvis
27 Fascia endopelvina
28 Fascia diaphragmatis pelvis superior
29 Arcus tendineus fasciae pelvis
30 Lig. puboprostaticum [pubovesicale] medium
31 Lig. puboprostaticum [pubovesicale] laterale
32 Fascia diaphragmatis pelvis interior
33 Diaphragma urogenitale
34 M. transversus perinei profundus
35 M. sphincter urethrae membranaceae
36 Fascia diaphragmatis urogenitalis superior
37 Fascia diaphragmatis urogenitalis inferior
38 Lig. transversum pelvis
39 Fascia prostatae
40 Fascia obturatoria
41 Fossa ischiorectalis
42 M. transversus perinei superficialis
43 M. ischiocavernosus
44 M. bulbocavernosus
45 Fascia superficialis perinei

46 Peritonaeum

47 Tunica serosa
48 Tela subserosa
49 Peritonaeum parietale
50 Peritonaeum viscerale
51 Cavum peritonaei
52 Mesenterium commune*
53 Mesenterium
54 Radix mesenterii
55 Lamina mesenterii propria
56 Mesocolon
57 Mesocolon transversum
58 Mesocolon ascendens
59 Mesocolon descendens
60 Mesocolon sigmoideum
61 Mesorectum
62 Mesenteriolum processus vermiformis
63 Mesogastrium*
64 Omentum minus
65 Lig. hepatogastricum
66 Lig. hepatoduodenale
67 (Lig. hepatocolicum)
68 Lig. gastrolienale
69 Lig. gastrocolicum
70 Omentum majus
71 Bursa omentalis
72 Vestibulum bursae omentalis
73 Recessus superior omentalis
74 Recessus inferior omentalis
75 Recessus lienalis
76 Plica gastropancreatica
77 Foramen epiploicum [Winslowi]

1 Lig. phrenicocolicum
2 Lig. phrenicolienale
3 Lig. falciforme hepatis
4 Lig. coronarium hepatis
5 Lig. triangulare dextrum
6 Lig. triangulare sinistrum
7 Lig. hepatorenale
8 (Lig. duodenorenale)
9 Recessus duodenojejunalis
10 Plica duodenojejunalis
11 (Plica duodenomesocolica)
12 Recessus intersigmoideus
13 Recessus iliocaecalis superior
14 Recessus iliocaecalis inferior
15 Plica iliocaecalis
16 Fossa caecalis
17 Recessus retrocaecalis
18 Plica caecalis
19 Recessus paracolici
20 (Fossa iliacosubfascialis)
21 (Recessus phrenicohepatici)
22 Plica umbilicalis media
23 Plica umbilicalis lateralis
24 Plica epigastrica
25 Plica pubovesicalis
26 Plica vesicalis transversa
27 Mesorchium*
28 Processus vaginalis peritonaei*
29 Lig. latum uteri
30 Mesometrium
31 Mesosalpinx
32 Mesovarium
33 Bursa ovarica
34 Lig. suspensorium ovarii
35 Plica rectouterina [Douglasi]
36 Excavatio rectouterina [Cavum Douglasi]
37 Excavatio vesicouterina
38 Excavatio rectovesicalis
39 Spatium retroperitonaeale

1 ANGIOLOGIA

2 Vas collaterale
3 Vas anastomoticum
4 Ramus communicans
5 Plexus vasculosus
6 Rete vasculosum
7 Rete mirabile
8 Arteria
9 Arteriola
10 Vena
11 Vena cutanea
12 Vena comitans
13 Venula
14 Plexus venosus
15 Rete venosum
16 Sinus [venosus]
17 Emissarium
18 Corpus cavernosum
19 Vas capillare
20 Vas lymphaticum
21 Plexus lymphaticus
22 Lymphoglandula
23 Nodulus lymphaticus
24 Cisterna
25 Tunica externa [adventicia]
26 Tunica media
27 Tunica intima
28 Vasa vasorum
29 Vagina vasorum
30 Sanguis
31 Lympha

32 COR

33 Basis cordis
34 Facies sternocostalis
35 Facies diaphragmatica
36 Apex cordis
37 Incisura [apicis] cordis
38 Sulcus longitudinalis anterior
39 Sulcus longitudinalis posterior
40 Sulcus coronarius
41 Pericardium
42 Liquor pericardii
43 Ligg. sternopericardiaca
44 Sinus transversus pericardii
45 Epicardium
46 Myocardium
47 Endocardium
48 Ventriculus cordis
49 Septum ventriculorum
50 Septum musculare ventriculorum
51 Septum membranaceum ventriculorum
52 Atrium cordis
53 Auricula cordis
54 Septum atriorum
55 Pars membranacea septi atriorum
56 Ostium venosum
57 Ostium arteriosum
58 Trabeculae carneae
59 Vortex cordis
60 Mm. papillares
61 Chordae tendineae
62 Trigona fibrosa
63 Annuli fibrosi

1 Atrium dextrum
2 Mm. pectinati
3 Sulcus terminalis atrii dexti
4 Crista terminalis
5 Sinus venarum [cavarum]
6 Limbus fossae ovalis [Vieussenii]
7 Auricula dextra
8 Tuberculum intervenosum [Loweri]
9 Valvula venae cavae inferioris [Eustachii]
10 Fossa ovalis
11 Valvula sinus coronarii [Thebesii]
12 Foramina venarum minimarum [Thebesii]

13 Ventriculus dexter
14 Valvula tricuspidalis
15 Cuspis anterior
16 Cuspis posterior
17 Cuspis medialis
18 Crista supraventricularis
19 Conus arteriosus
20 Valvulae semilunares a. pulmonalis
21 Valvula semilunaris anterior
22 Valvula semilunaris dextra
23 Valvula semilunaris sinistra
24 Noduli valvularum semilunarium
25 Lunulae valvularum semilunarium

26 Atrium sinistrum
27 Auricula sinistra
28 Valvula foraminis ovalis

29 Ventriculus sinister
30 Valvula bicuspidalis [mitralis]
31 Cuspis anterior
32 Cuspis posterior
33 Valvulae semilunares aortae
34 Valvula semilunaris posterior
35 Valvula semilunaris dextra
36 Valvula semilunaris sinistra
37 Noduli valvularum semilunarium [Arantii]
38 Lunulae valvularum semilunarium

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39 arteriae

40 A. pulmonalis
41 Ramus dexter
42 Ramus sinister
43 Ductus arteriosus [Botalli]*
44 Ligamentum arteriosum

45 Aorta
46 Aorta ascendens
47 Bulbus aortae
48 Sinus aortae [Valsalvae]
49 Arcus aortae
50 Isthmus aortae
51 Aorta descendens
52 A. coronaria [cordis] dextra
53 Ramus descendens posterior
54 A. coronaria [cordis] sinistra
55 Ramus circumflexus
56 Ramus descendens anterior

57 A. anonyma
58 (A. thyreoidea ima)

59 A. carotis communis

60 A. carotis externa
61 a. thyreoidea superior
62 Ramus hyoideus
63 Ramus sternocleidomastoideus
64 A. laryngea superior
65 Ramus cricothyreoideus

1 Ramus anterior
2 Ramus posterior
3 Rami glandulares

4 A. PHARYNGEA ASCENDENS
5 A. meningea posterior
6 Rami pharyngei
7 A. tympanica inferior

8 A. LINGUALIS
9 Ramus hyoideus
10 A. sublingualis
11 Rami dorsales linguae
12 A. profunda linguae

13 A. MAXILLARIS EXTERNA
14 A. palatina ascendens
15 Ramus tonsillaris
16 A. submentalis
17 Rami glandulares
18 A. labialis inferior
19 A. labialis superior
20 A. angularis

21 A. STERNOCLEIDOMASTOIDEA

22 A. OCCIPITALIS
23 Ramus mastoideus
24 Ramus auricularis
25 Rami musculares
26 Ramus descendens
27 (Ramus meningeus)
28 Rami occipitales

29 A. AURICULARIS POSTERIOR
30 A. stylomastoidea
31 A. tympanica posterior
32 Rami mastoidei
33 Ramus stapedius
34 Ramus auricularis
35 Ramus occipitalis

36 A. TEMPORALIS SUPERFICIALIS
37 Rami parotidei
38 A. transversa faciei
39 Rami auriculares anteriores
40 A. zygomaticoorbitalis
41 A. temporalis media
42 Ramus frontalis
43 Ramus parietalis

44 A. MAXILLARIS INTERNA
45 A. auricularis profunda
46 A. tympanica anterior
47 A. alveolaris inferior
48 R mylohyoideus
49 A. mentalis
50 A. meningea media
51 (Ramus meningeus accessorius)
52 Ramus petrosus superficialis
53 A. tympanica superior
54 A. masseterica
55 A. temporalis profunda posterior
56 A. temporalis profunda anterior
57 Rami pterygoidei
58 A. buccinatoria
59 A. alveolaris superior posterior
60 A. infraorbitalis
61 Aa. alveol. superiores anteriores
62 A. palatina descendens
63 A. canalis pterygoidei [Vidii]
64 A. palatina major
65 Aa. palatinae minores
66 A. sphenopalatina
67 Aa. nasales posteriores laterales et septi

68 A. CAROTIS INTERNA
69 Ramus caroticotympanicus

70 A. OPTHALMICA
71 A. centralis retinae
72 A. lacrimalis
73 Aa. palpebrales laterales
74 Rami musculares
75 Aa. ciliares posteriores breves
76 Aa. ciliares posteriores longae

1 Aa. ciliares anteriores
2 Aa. conjunctivales anteriores
3 Aa. conjunctivales posteriores
4 Aa. episclerales
5 A. supraorbitalis
6 A. ethmoidalis posterior
7 A. ethmoidalis anterior
8 A. meningea anterior
9 Aa. palpebrales mediales
10 Arcus tarseus superior
11 Arcus tarseus inferior
12 A. frontalis
13 A. dorsalis nasi

14 AA. CEREBRI
15 A. communicans posterior
16 A. chorioidea
17 A. cerebri anterior
18 A. communicans anterior
19 A. cerebri media

20 A. SUBCLAVIA
21 A. VERTEBRALIS
22 Rami spinales
23 A. spinalis posterior
24 A. spinalis anterior
25 Ramus meningeus
26 A. cerebelli inferior posterior

27 A. BASILARIS
28 A. cerebelli inferior anterior
29 A. auditiva interna
30 Rami ad pontem
31 A. cerebelli superior
32 A. cerebri posterior
33 Circulus arteriosus [Willisi]

34 A. MAMMARIA INTERNA
35 Aa. mediastinales anteriores
36 Aa. thymicae
37 Rami bronchiales
38 A. pericardiacophrenica
39 Rami sternales
40 Rami perforantes
41 Rami mammarii
42 Rami musculares
43 Rami cutanei
44 (Ramus costalis lateralis)
45 Rami intercostales
46 A. musculophrenica
47 A. epigastrica superior

48 TRUNCUS THYREOCERVICALIS
49 A. THYREOIDEA INFERIOR
50 A. laryngea inferior
51 Rami pharyngei
52 Rami oesophagei
53 Rami tracheales
54 Rami glandulares

55 A. CERVICALIS ASCENDENS
56 Rami spinales
57 Rami musculares
58 Ramus profundus

59 A. CERVICALIS SUPERFICIALIS

60 A. TRANSVERSA SCAPULAE
61 Ramus acromialis

62 TRUNCUS COSTOCERVICALIS
63 A. intercostalis suprema
64 Rami dorsales
65 Rami spinales
66 A. cervicalis profunda

67 A. TRANSVERSA COLLI
68 Ramus ascendens
69 Ramus descendens

70 A. AXILLARIS
71 Rami subscapulares

1 A. THORACALIS SUPREMA

2 A. THORACOACROMIALIS
3 Ramus acromialis
4 Rete acromiale
5 Ramus deltiodeus
6 Rami pectorales

7 A. THORACALIS LATERALIS
8 Rami mammarii externi

9 A. SUBSCAPULARIS
10 A. thoracodorsalis
11 A. circumflexa scapulae

12 A. CIRCUMFLEXA HUMERI ANTERIOR

13 A. CIRCUMFLEXA HUMERI POSTERIOR

14 BRANCHIALIS

15 A. PROFUNDA BRACHII
16 Aa. nutritiae humeri
17 R. deltoideus
18 A. collateralis media
19 A. collateralis radialis

20 A. COLLATERALIS ULNARIS SUPERIOR

21 A. COLLATERALIS ULNARIS INFERIOR

22 A. RADIALIS
23 A. recurrens radialis
24 Rami musculares
25 Ramus carpeus volaris
26 Ramus volaris superficialis
27 Ramus carpeus dorsalis
28 Rete carpi dorsale
29 Aa. metacarpeae dorsales
30 Aa. digitales dorsales
31 A. princeps pollicis
32 A. volaris indicis radialis
33 Arcus volaris profundus
34 Aa. metacarpeae volares
35 Rami perforantes

36 A. ULNARIS
37 Aa. recurrentes ulnares
38 Rete articulare cubiti
39 A. interossea communis
40 A. interossea dorsalis
41 A. interossea recurrens
42 A. interossea volaris
43 A. mediana
44 Rami musculares
45 Ramus carpeus dorsalis
46 Ramus carpeus volaris
47 Ramus volaris profundus
48 Arcus volaris superficialis
49 Aa. digitales volares communes
50 Aa. digitales volares propriae

51 AORTA THORACALIS
52 Rami viscerales
53 Aa. bronchiales
54 Aa. oesophageae
55 Rami pericardiaci

56 Rami parietales
57 Rami mediastinales
58 Aa. phrenicae superiores

59 AA. INTERCOSTALES
60 Rami posteriores
61 Ramus spinalis
62 Rami musculares
63 Ramus cutaneus medialis
64 Ramus cutaneus lateralis
65 Rami anteriores
66 Rami musculares
67 Rami cutanei laterales [pectorales et abdominales]
68 Ramus posterior

1 Ramus anterior
2 Rami mammarii laterales
3 Rami cutanei anteriores [pectorales et abdominales]
4 Rami mammarii mediales

5 AORTA ABDOMINALIS
6 Rami parietales

7 A. PHRENICA INFERIOR
8 Rami suprarenales superiores

9 AA. LUMBALES
10 Ramus dorsalis
11 Ramus spinalis

12 A. SACRALIS MEDIA
13 A. lumbalis ima
14 Glomus coccygeum

15 Rami viscerales

16 A. COELIACA
17 A. gastrica sinistra
18 Rami oesophagei
19 A. hepatica
20 A. gastrica dextra
21 A. hepatica propria
22 Ramus dexter
23 A. cystica
24 Ramus sinister
25 A. gastroduodenalis
26 A. pancreaticoduodenalis superior
27 Rami pancreatici
28 Rami duodenales
29 A. gastroepiploica dextra
30 Rami epiploici
31 A. lienalis
32 Rami pancreatici
33 A. gastroepiploica sinistra
34 Aa. gastricae breves
35 Rami lienales

36 A. MESENTERICA SUPERIOR
37 Aa. intestinales
38 A. pancreaticoduodenalis inferior
39 Aa. jejunales
40 Aa. ileae
41 A. ileocolica
42 A. appendicularis
43 A. colica dextra
44 A. colica media

45 A. MESENTERICA INFERIOR
46 A. colica sinistra
47 Aa. sigmoideae
48 A. haemorrhoidalis superior

49 A. SUPRARENALIS MEDIA

50 A. RENALIS
51 A. suprarenalis inferior

52 A. SPERMATICA INTERNA

53 A. TESTICULARIS

54 A. OVARICA

55 A. ILIACA COMMUNIS

56 A. HYPOGASTRICA
57 Rami parietales

58 A. ILIOLUMBALIS

59 Ramus lumbalis
60 Ramus spinalis
61 Ramus iliacus

62 A. SACRALIS LATERALIS
63 Rami spinales

64 A. OBTURATORIA
65 Ramus pubicus
66 Ramus anterior
67 Ramus posterior
68 A. acetabuli

1 A. GLUTAEA SUPERIOR
2 Ramus superior
3 Ramus inferior

4 A. GLUTAEA INFERIOR

5 A. comitans n. ischiadici

6 Rami viscerales

7 A. UMBILICALIS
8 Aa. vesicales superiores
9 [Ligamentum umbilicale laterale]

10 A. VESICALIS INFERIOR

11 A. DEFERENTIALIS

12 A. UTERINA
13 A. vaginalis
14 Ramus ovarii
15 Ramus tubarius

16 A. HAEMORRHOIDALIS MEDIA

17 A. PUDENDA INTERNA
18 A. haemorrhoidalis inferior
19 A. perinei
20 Aa. scrotales posteriores
21 Aa. labiales posteriores
22 A. penis
23 A. urethralis
24 A. bulbi urethrae
25 A. bulbi vestibuli [vaginae]
26 A. profunda penis
27 A. dorsalis penis
28 A. clitoridis
29 A. profunda clitoridis
30 A. dorsalis clitoridis

31 A. ILIACA EXTERNA

32 A. EPIGASTRICA INFERIOR
33 Ramus pubicus
34 Ramus obturatorius
35 A. spermatica externa
36 A. lig. teretis uteri

37 A. CIRCUMFLEXA ILIUM PROFUNDA

38 A. FEMORALIS
39 A. epigastrica superficialis
40 A. circumflexa ilium superficialis
41 Aa. pudendae externae
42 Aa. scrotales anteriores
43 Aa. labiales anteriores
44 Rami inguinales
45 A. profunda femoris
46 A. circumflexa femoris medialis
47 Ramus superficialis
48 Ramus profundus
49 Ramus acetabuli
50 A. circumflexa femoris lateralis
51 Ramus ascendens
52 Ramus descendens
53 A. perforans prima
54 A. nutricia femoris superior
55 A. perforans secunda
56 A. perforans tertia
57 A. nutricia femoris inferior
58 Rami musculares
59 A. genu suprema
60 Rami musculares
61 Ramus saphenus
62 Rami articulares

63 A. POPLITEA
64 A. genu superior lateralis
65 A. genu superior medialis
66 A. genu media
67 Aa. surales
68 A. genu inferior lateralis
69 A. genu inferior medialis
70 Rete articulare genu
71 Rete patellae

1 A. TIBIALIS ANTERIOR
2 (A. recurrens tibialis posterior)
3 A. recurrens tibialis anterior
4 A. malleolaris anterior lateralis
5 A. malleolaris anterior medialis
6 Rete malleolare mediale
7 Rete malleolare laterale
8 A. dorsalis pedis
9 A. tarsea lateralis
10 Aa. tarseae mediales
11 A. arcuata
12 Rete dorsale pedis
13 Aa. metatarseae dorsales
14 Aa. digitales dorsales
15 Ramus plantaris profundus

16 A. TIBIALIS POSTERIOR
17 Ramus fibularis
18 A. peronaea
19 A. nutricia fibulae
20 Ramus perforans
21 Ramus communicans
22 A. malleolaris posterior lateralis
23 Rami calcanei laterales
24 A. nutricia tibiae
25 A. malleolaris posterior medialis
26 Rami calcanei mediales
27 Rete calcaneum
28 A. plantaris medialis
29 Ramus profundus
30 Ramus superficialis
31 A. plantaris lateralis
32 Arcus plantaris
33 Aa. metatarseae plantares
34 Rami perforantes
35 Aa. digitales plantares

36 VENAE

37 VENAE PULMONALES
38 Vv. pulmonales dextrae
39 Vv. pulmonales sinistrae

40 VV. CORDIS
41 Sinus coronarius
42 V. cordis magna
43 V. posterior ventriculi sinistri
44 V. obliqua atrii sinistri [Marshalli]
45 Lig. v. cavae sinistrae
46 V. cordis media
47 V. cordis parva
48 Vv. cordis anteriores
49 Vv. cordis minimae

50 VENA CAVA SUPERIOR

51 VV. ANONYMAE DEXTRA ET SINISTRA
52 Vv. thyreoideae inferiores
53 V. thyreoidea ima
54 Plexus thyreoideus impar
55 V. laryngea inferior
56 Vv. thymicae
57 Vv. pericardiacae
58 Vv. phrenicae superiores
59 Vv. mediastinales anteriores
60 Vv. bronchiales anteriores
61 Vv. tracheales
62 Vv. oesophageae
63 V. vertebralis
64 V. cervicalis profunda
65 V. mammaria interna
66 Vv. subcutaneae abdominis
67 V. epigastrica superior
68 V. intercostalis suprema

69 V. JUGULARIS INTERNA
70 Bulbus venae jugularis superior
71 V. canaliculi cochleae

1 Bulbus v. jugularis inferior
2 Plexus pharyngeus
3 Vv. pharyngeae
4 Vv. meningeae
5 Vv. canalis pterygoidei [Vidii]
6 V. lingualis
7 Vv. dorsalis linguae
8 V. sublingualis
9 V. comitans n. hypoglossi
10 (Vv. thyreoideae superiores)
11 V. sternocleidomastoidea
12 V. laryngea superior

13 SINUS DURAE MATRIS

14 Sinus transversus
15 Confluens sinuum
16 Vv. auditivae internae
17 Sinus occipitalis
18 Plexus basilaris
19 Sinus sagittalis superior
20 Sinus sagittalis inferior
21 Sinus rectus
22 Sinus petrosus inferior
23 Sinus petrosus superior
24 Sinus cavernosus
25 Sinus intercavernosus anterior
26 Sinus intercavernosus posterior
27 Sinus circularis
28 Sinus sphenoparietalis
29 Venae diploicae
30 V. diploica frontalis
31 V. diploica temporalis anterior
32 V. diploica temporalis posterior
33 V. diploica occipitalis
34 Emissarium parietale
35 Emissarium mastoideum
36 Emissarium condyloideum
37 Emissarium occipitale
38 Rete canalis hypoglossi
39 Rete foraminis ovalis
40 Plexus venosus caroticus internus

41 VENAE CEREBRI

42 Vv. cerebri superiores
43 V. cerebri media
44 Vv. cerebri inferiores
45 Vv. cerebelli superiores
46 Vv. cerebelli inferiores
47 Vv. cerebri internae
48 V. cerebri magna [Galeni]
49 V. septi pellucidi
50 V. terminalis
51 V. basalis [Rosenthali]
52 V. chorioidea
53 V. opthalmomeningea

54 V. OPTHALMICA SUPERIOR

55 V. nasofrontal s
56 V. ethmoidalis anterior
57 V. ethmoidalis posterior
58 V. lacrimalis
59 Vv. musculares
60 Vv. vorticosae
61 Vv. ciliares posteriores
62 Vv. ciliares anteriores
63 V. centralis retinae
64 Vv. episclerales
65 Vv. palpebrales
66 Vv. conjunctivales anteriores
67 Vv. conjunctivales posteriores
68 V. opthalmica inferior

69 V. FACIALIS COMMUNIS

70 A. FACIALIS ANTERIOR

71 V. angularis
72 Vv. frontales
73 V. supraorbitalis
74 Vv. palpebrales superiores
75 Vv. nasales externae
76 Vv. palpebrales inferiores
77 V. labialis superior

1 V. labialis inferior
2 Vv. massetericae
3 Vv. parotideae anteriores
4 V. palatina
5 V. submentalis

6 V. FACIALIS POSTERIOR

7 Vv. temporales superficiales
8 Vv. auriculares anteriores
9 Vv. parotideae posteriores
10 Vv. articulares mandibulae
11 Vv. tympanicae
12 V. stylomastoidea
13 V. transversa faciei
14 V. temporalis media
15 Plexus pterygoideus
16 Vv. meningeae mediae
17 Vv. temporales profundae
18 V. thyreoidea superior

19 V. JUGULARIS EXTERNA

20 V. occipitalis
21 V. auricularis posterior
22 V. jugularis anterior
23 Arcus venosus juguli
24 (V. mediana colli)
25 V. transversa scapulae

26 V. SUBCLAVIA

27 V. thoracoacromialis
28 Vv. transversae colli

29 V. AXILLARIS

30 V. thoracalis lateralis
31 Vv. costoaxillares
32 Vv. thoracoepigastricae
33 Plexus venosus mamillae
34 Vv. brachiales
35 Vv. radiales
36 Vv. ulnares
37 V. cephalica
38 V. cephalica accessoria
39 V. basilica
40 V. mediana cubiti
41 (V. mediana antibrachii)
42 (V. mediana basilica)
43 (V. mediana cephalica)
44 Rete venosum dorsale manus
45 Vv. intercapitulares
46 Arcus volaris venosus superficialis
47 Arcus volaris venosus profundus
48 Vv. digitales volares communes
49 Vv. metacarpeae dorsales
50 Vv. metacarpeae volares
51 Vv. digitales volares propriae
52 Arcus venosi digitales

53 V. AZYGOS

54 V. hemiazygos
55 V. hemiazygos accessoria
56 Vv. intercostales
57 Ramus dorsalis
58 Ramus spinalis
59 Vv. oesophageae
60 Vv. bronchiales posteriores
61 V. lumbalis ascendens
62 Vv. basivertebrales
63 Plexus venosi vertebrales externi
64 Plexus venosi vertebrales anteriores
65 Plexus venosi vertebrales posteriores
66 Plexus venosi vertebrales interni
67 Retia venosa vertebrarum
68 Sinus vertebrales longitudinales
69 Vv. intervertebrales
70 Vv. spinales externae anteriores

1 Vv. spinales externae posteriores
2 Vv. spinales internae

3 V. CAVA INFERIOR
4 Radices parietales
5 V. phrenica inferior
6 Vv. lumbales

7 Radices viscerales
8 Vv. hepaticae
9 Vv. renales
10 Vv. suprarenales
11 V. spermatica
12 V. testicularis
13 V. ovarica
14 Plexus pampiniformis

15 VENA PORTAE
16 V. coronaria ventriculi
17 V. mesenterica superior
18 Vv. intestinales
19 V. gastroepiploica dextra
20 Vv. pancreaticae
21 V. ileocolica
22 Vv. colicae dextrae
23 V. colica media
24 Vv. pancreaticoduodenales
25 Vv. duodenales
26 V. mesenterica inferior
27 V. colica sinistra
28 Vv. sigmoideae
29 V. haemorrhoidalis superior
30 V. lienalis
31 Vv. gastricae breves
32 V. gastroepiploica sinistra
33 V. cystica
34 Vena umbilicalis*
35 Ductus venosus [Arantii]*
36 Vv. parumbilicales [Sappeyi]

37 VENA ILIACA COMMUNIS
38 V. sacralis media

39 V. HYPOGASTRICA
40 Vv. glutaeae superiores
41 Vv. glutaeae inferiores
42 Vv. obturatoriae
43 Vv. sacrales laterales
44 V. iliolumbalis
45 Plexus sacralis anterior
46 Plexus haemorrhoidalis
47 Plexus vesicalis
48 Plexus pudendalis
49 V. dorsalis penis
50 Vv. profundae penis
51 V. dorsalis clitoridis
52 Vv. profundae clitoridis
53 Vv. uterinae
54 Plexus uterovaginalis
55 V. haemorrhoidalis media
56 Vv. haemorrhoidales inferiores
57 Vv. scrotales posteriores

58 V. ILIACA EXTERNA
59 V. epigastrica inferior
60 V. circumflexa ilium profunda
61 V. femoralis
62 Vv. dorsales penis subcutaneae
63 Vv. scrotales anteriores
64 Vv. pudendae externae
65 V. epigastrica superficialis
66 V. saphena magna
67 V. saphena accessoria
68 V. circumflexa ilium superficialis
69 Vv. circumflexae femoris mediales
70 Vv. circumflexae femoris laterales
71 Vv. comitantes
72 Vv. profundae femoris
73 Vv. perforantes

1 V. saphena parva
2 V. femoropoplitea
3 Vv. peronaeae
4 Vv. popliteae
5 Vv. tibiales posteriores
6 Vv. tibiales anteriores
7 Rete venosum dorsale pedis
8 Arcus venosus dorsalis pedis
9 Vv. digitales communes pedis
10 Vv. metatarseae dorsales pedis
11 Vv. intercapitulares
12 Rete venosum plantare
13 Arcus venosus plantaris
14 Vv. metatarseae plantares
15 Vv. digitales pedis dorsales
16 Vv. digitales plantares

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17 SYSTEMA LYMPHATICUM

18 VASA LYMPHATICA

19 Vasa lymphatica superficialia
20 Vasa lymphatica profunda
21 Truncus jugularis
22 Truncus subclavius
23 Truncus bronchomediastinales dexter
24 Ductus lymphaticus dexter

25 DUCTUS THORACICUS

26 Trunci lumbales
27 Truncus intestinalis
28 Cisterna chyli

29 LYMPHOGLANDULAE

30 Vasa afferentia
31 Vasa efferentia
32 Substantia corticalis
33 Substantia medullaris
34 Hilus
35 Lymphoglandulae occipitales
36 " auriculares posteriores
37 " auriculares anteriores
38 " submaxillares
39 " faciales profundae
40 " parotideae
41 " cervicales superficiales
42 Lymphoglandulae cervicales profundae superiores
43 " cervicales profundae inferiores
44 " linguales
45 " axillares
46 " subscapulares
47 " pectorales
48 " epigastricae
49 " cubitales superficiales
50 " cubitales profundae
51 " tracheales
52 " bronchiales
53 " intercostales
54 " mediastinales posteriores
55 " mediastinales anteriores
56 " sternales
57 " iliacae
58 " lumbales
59 " coeliacae
60 " gastricae superiores
61 " gastricae inferiores
62 " hepaticae
63 " pancreaticolienales
64 " mesentericae
65 " mesocolicae
66 " hypogastricae

1 Lymphoglandulae sacrales
2 " inguinales
3 " sublinguinales superficiales
4 " subinguinales profundae
5 " popliteae
6 (Lymphoglandula tibialis anterior)

7 PLEXUS LYMPHATICI

8 Plexus jugularis
9 Plexus axillaris
10 Plexus mammarius
11 Plexus lumbalis
12 Plexus aorticus
13 Plexus sacralis medius
14 Plexus hypogastricus
15 Plexus coeliacus
16 Plexus iliacus externus
17 Plexus inguinalis

1 NEUROLOGIA

2 Nervus
3 Ganglion
4 Substantia alba
5 Substantia grisea
6 Substantia gelatinosa
7 Taenia telarum
8 Ependyma ventriculorum
9 Sulcus limitans ventriculorum
10 Nuclei nervorum cerebralium
11 Nuclei originis
12 Nuclei terminales
13 Ramus communicans
14 Ramus anastomoticus
15 Ramus muscularis
16 Nervus cutaneus
17 Nervus articularis
18 Plexus nervorum spinalium

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19 SYSTEMA NERVORUM CENTRALE

20 MEDULLA SPINALIS

21 Pars cervicalis
22 Intumescentia cervicalis
23 Pars thoracalis
24 Pars lumbalis
25 Intumescentia lumbalis
26 Conus medullaris
27 Filum terminale
28 Ventriculus terminalis
29 Fissura mediana anterior
30 Sulcus medianus posterior
31 Sulcus lateralis anterior
32 Sulcus lateralis posterior
33 Sulcus intermedius posterior
34 (Sulcus intermedius anterior)
35 Funiculi medullae spinalis
36 Funiculus anterior
37 Funiculus lateralis
38 Funiculus posterior

39 SECTIONES MEDULLAE SPINALIS

40 Canalis centralis
41 Substantia grisea centralis
42 Commissura anterior alba
43 Commissura anterior grisea
44 Commissura posterior
45 Columnae griseae
46 Columna anterior
47 Columna lateralis
48 Columna posterior
49 Cervix columnae posterioris
50 Apex columnae posterioris
51 Substantia gelatinosa [Rolandi]
52 Nucleus dorsalis [Stillingi, Clarkii]
53 Fromatio reticularis
54 Funiculus anterior
55 Fasciculus cerebrospinalis anterior [pyramidalis anterior]

1 Fasciculus anterior proprius [Flechsigi]
2 Funiculus lateralis
3 Fasciculus cerebrospinalis lateralis [pyramidalis lateralis]
4 Fasciculus cerebellospinalis
5 Fasciculus anterolateralis superficialis [Gowersi]
6 Fasciculus lateralis proprius [Flechsigi]
7 Funiculus posterior
8 Fasciculus gracilis [Golli]
9 Fasciculus cuneatus [Burdachi]

10 ENCEPHALON

11 RHOMBENCEPHALON

12 MYELENCEPHALON

13 Medulla oblongata

14 Fissura mediana posterior
15 Fissura mediana anterior
16 Foramen caecum
17 Pyramis medullae oblongatae
18 Decussatio pyramidum
19 Sulcus lateralis anterior
20 Sulcus lateralis posterior
21 Oliva
22 Corpus restiforme
23 Funiculus lateralis
24 Funiculus cuneatus
25 Tuberculum cinereum
26 Funiculus gracilis
27 Clava
28 Fibrae arcuatae externae

29 SECTIONES MEDULLAE OBLONGATAE

30 Raphe
31 Stratum nucleare
32 Nucleus n. hypoglossi
33 Nucleus ambiguus
34 Nucleus alae cinereae
35 Tractus solitarius
36 Nucleus tractus solitarii
37 Tractus spinalis n. trigemini
38 Nucleus tractus spinalis n. trigemini trigemini
39 Nucleus funiculi gracilis
40 Nucleus funiculi cuneati
41 Nuclei laterales
42 Nucleus olivaris inferior
43 Hilus nuclei olivaris
44 Nucleus olivaris accessorius medialis
45 Nucleus olivaris accessorius dorsalis
46 Nuclei arcuati
47 Fibrae arcuatae internae
48 Substantia reticularis grisea
49 Substantia reticularis alba
50 Fasciculus longitudinalis medialis
51 Stratum interolivare lemnisci
53 Corpus restiforme
54 Fasciculi corporis restiformis
55 Fibrae cerebelloolivares
56 Fasciculi pyramidales
57 Fibrae arcuatae externae

58 Ventriculus quartus

59 Fossa rhomboidea
60 Pars inferior fossae rhomboideae
61 [Calamus scriptorius]
62 Pars intermedia [fossa rhomboideae]
63 Recessus lateralis fossae rhomboideae
64 Pars superior fossae rhomboideae
65 Sulcus limitans [fossae rhomboideae]
66 Fovea inferior

1 Fovea superior
2 Trigonum n. hypoglossi
3 Striae medullares
4 Eminentia medialis
5 Colliculus facialis
6 Ala cinerea
7 Area acustica
8 Locus caeruleus
9 Tegmen ventriculi quarti
10 Velum medullare posterius
11 Taenia ventriculi quarti
12 Obex
13 Lamina chorioidea epithelialis
14 (Apertura medialis ventriculi quarti [Foramen Magendii])
16 (Apertura lateralis ventriculi quarti)
17 Fastigium

18 METENCEPHALON

19 Pons [Varolii]
20 Sulcus basilaris
21 Fasciculus obliquus [pontis]
22 (Fila lateralia pontis)
23 Brachium pontis

24 SECTIONES PONTIS

25 Pars dorsalis pontis
26 Raphe
27 Nucleus n. abducentis
28 Nuclei motorii n. trigemini
29 Radix descendens [mesencephalica] n. trigemini
30 Tractus spinalis n. trigemini
31 Nucleus tractus spinalis n. trigemini
32 Nucleus n. facialis
33 Radix n. facialis
34 Pars prima
35 Genu [internum]
36 Pars secunda
37 Nuclei n. acustici
38 Nuclei n. cochlearis
39 Nuclei n. vestibularis
40 Nucleus olivaris superior
41 Nucleus lemnisci lateralis
42 Fasciculus longitudinalis medialis
43 Formatio reticularis
44 Corpus trapezoideum
45 Lemniscus
46 Lemniscus medialis [sensitivus]
47 Lemniscus lateralis [acusticus]
48 Pars basilaris pontis
49 Fibrae pontis profundae
50 Fasciculi longitudinales [pyramidales]
51 Nuclei pontis
52 Fibrae pontis superficialis
53 Cerebellum
54 Gyri cerebelli
55 Sulci cerebelli
56 Vallecula cerebelli
57 Incisura cerebelli anterior
58 Incisura cerebelli posterior
59 Sulcus horizontalis cerebelli
60 Fissura transversa cerebelli
61 Vermis
62 Lingula cerebelli
63 Vincula lingulae cerebelli
64 Lobulus centralis
65 Monticulus
66 Culmen
67 Declive
68 Folium vermis
69 Tuber vermis
70 Pyramis [vermis]
71 Uvula [vermis]
72 Nodulus
73 Hemisphaerium cerebelli
74 Facies superior
75 Ala lobuli centralis
76 Lobulus quadrangularis
77 Pars anterior
78 Pars posterior

1 Lobulus semilunaris superior
2 Facies inferior
3 Lobulus semilunaris inferior
3 Lobulus gracilis
4 Lobulus biventer
5 Tonsilla cerebelli
6 Flocculus
7 (Flocculi secondarii)
8 Pedunculus flocculi
9 Nidus avis

10 SECTIONES CEREBELLI

11 Corpus medullare
12 Laminae medullares
13 Arbor vitae
14 Substantia corticalis
15 [Lamina basalis]
16 [Stratum cinereum]
17 [Stratum gangliosum]
18 Stratum granulosum
19 Nucleus dentatus
20 Hilus nuclei dentati
21 Nucleus fastigii
22 Nucleus globosus
23 Nucleus emboliformis
24 Capsula nuclei dentati

25 ISTHMUS RHOMBENCEPHALI

26 Brachium conjunctivum [cerebelli]
27 Lemniscus
28 Lemniscus lateralis
29 Lemniscus medialis
30 Trigonum lemnisci
31 Velum medullare anterius
32 Frenulum veli medullaris anterioris

33 SECTIONES ISTHMI [vide Pedunculus cerebri]

34 Ganglion interpedunculare
35 Nucleus n. trochlearis

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36 CEREBRUM

37 Facies convexa cerebri
38 Facies medialis cerebri
39 Basis cerebri

40 MESENCEPHALON

41 [Facies inferior]

42 Fossa interpeduncularis [Tarini]
43 Recessus anterior
44 Recessus posterior
45 Substantia perforata posterior

46 Pedunculus cerebri

47 Aquaeductus cerebri [Sylvii]
48 Sulcus lateralis
49 Sulcus n. oculomotorii

50 SECTIONES PEDUNCULI CEREBRI

51 Tegmentum
52 Stratum griseum centrale
53 Formatio reticularis
54 Fasciculus longitudinalis medialis
55 Radix descendens n. trigemini
56 Nucleus radicis descendentis n. trigemini
57 Nucleus n. oculomotorii
58 Nuclei tegmenti
59 Nucleus ruber
60 Decussationes tegmentorum
61 Decussatio brachii conjunctivi
62 Lemniscus lateralis
63 Lemniscus medialis
64 Substantia nigra
65 Basis pedunculi

1 Corpora quadrigemina
2 Lamina quadrigemina
3 Colliculus superior
4 Colliculus inferior
5 Brachium quadrigeminum superius
6 Brachium quadrigeminum inferius
7 SECTIONES CORPORUM QUADRIGEMINORUM
8 Stratum zonale
9 Stratum griseum colliculi superioris
10 Nucleus colliculi inferioris
11 Stratum album profundum

12 PROSENCEPHALON

13 DIENCEPHALON

14 Ventriculus tertius
15 Aditus ad aquaeductum cerebri
16 Commissura posterior [cerebri]
17 Foramen interventriculare [Monroi]
18 Sulcus hypothalamicus [Monroi]
19 Massa intermedia
20 Recessus opticus
21 Recessus infundibuli
22 Commissura anterior [cerebri]
23 Recessus triangularis

24 HYPOTHALAMUS

25 Pars mamillaris hypothalami
26 Corpus mamillare
27 Pars optica hypothalami
28 Tuber cinereum
29 Infundibulum
30 Hypophysis
31 Lobus anterior
32 Lobus posterior
33 Tractus opticus
34 Radix medialis
35 Radix lateralis
36 Chiasma opticum
37 Lamina terminalis

38 SECTIONES HYPOTHALAMI
39 Nucleus hypothalamicus [Corpus Luysi]
40 Pars grisea hypothalami
41 Commissura superior [Meynerti]
42 Commissura inferior [Guddeni]
43 Nuclei corporis mamillaris
44 Fasciculus thalamomamillaris [Vicq' d'Azyri]
45 Fasciculi pedunculomamillares
46 Pars tegmentalis
47 Pars basilaris
48 Ansa peduncularis
49 Ansa lenticularis
50 Pedunculus thalami inferior

51 THALAMENCEPHALON

52 Thalamus
53 Pulvinar
54 Tuberculum anterius thalami
55 Taenia thalami
56 Stria medullaris
57 Lamina choriodea epithelialis
58 Metathalamus
59 Corpus geniculatum mediale
60 Corpus geniculatum laterale

61 Epithalamus
62 Corpus pineale
63 Recessus pinealis
64 Recessus suprapinealis
65 Habenula
66 Commissura habenularum
67 Trigonum habenulae
68 SECTIONES THALAMENCEPHALI
69 Stratum zonale
70 Nucleus anterior thalami
71 Nucleus medialis thalami
72 Nucleus lateralis thalami
73 Laminae medullares thalami

1 Nucleus corporis geniculati medialis
2 Nucleus corporis geniculati lateralis
3 Nucleus habenulae
4 Fasciculus retroflexus [Meynerti]

5 TELENCEPHALON

6 HEMISPHAERIUM

7 Pallium

8 Fissura longitudinalis cerebri
9 Fissura transversa cerebri
10 Gyri cerebri
11 Gyri profundi
12 Gyri transitivi
13 Sulci cerebri
14 Impressio petrosa
15 Fossa cerebri lateralis [Sylvii]
16 Fissura cerebri lateralis [Sylvii]
17 Ramus posterior
18 Ramus anterior ascendens
19 Ramus anterior horizontalis
20 Lobi cerebri
21 Insula
22 Gyri insulae
23 Gyrus longus insulae
24 Gyri breves insulae
25 Sulcus circularis [Reili]
26 Operculum
27 Pars frontalis
28 Pars parietalis
29 Pars temporalis
30 Sulcus centralis [Rolandi]
31 Gyrus centralis anterior
32 Gyrus centralis posterior
33 Lobus frontalis
34 Polus frontalis
35 Sulcus praecentralis
36 Gyrus frontalis superior
37 Sulcus frontalis superior
38 Gyrus frontalis medius
39 Pars superior
40 Pars inferior
41 Sulcus frontalis inferior
42 Gyrus frontalis inferior
43 Pars opercularis
44 Pars triangularis
45 Pars orbitalis
46 Gyrus rectus
47 Sulcus olfactorius
48 Gyri orbitales
49 Sulci orbitales
50 Lobus temporalis
51 Polus temporalis
52 Sulci temporales transversi
53 Gyri temporales transversi
54 Gyrus temporalis superior
55 Sulcus temporalis superior
56 Gyrus temporalis medius
57 Sulcus temporalis medius
58 Gyrus temporalis inferior
59 Sulcus temporalis inferior
60 Fissura collateralis
61 Gyrus fusiformis
62 Gyrus lingualis
63 Lobus occipitalis
64 Polus occipitalis
65 Sulcus occipitalis transversus
66 Gyri occipitalis superiores
67 Sulci occipitalis superiores
68 Gyri occipitalis laterales
69 Sulci occipitales laterales
70 Lobus parietalis
71 Lobulus parietalis superior
72 Sulcus interparietalis
73 Lobulus parietalis inferior
74 Gyrus supramarginalis
75 Gyrus angularis

76 FACIES MEDIALIS HEMISPHAERII

77 Sulcus corporis callosi
78 Sulcus cinguli
79 Pars subfrontalis

1 Pars marginalis
2 Sulcus subparietalis
3 Fissura hippocampi
4 Gyrus fornicatus
5 Gyrus cinguli
6 Isthmus gyri fornicati
7 Gyrus hippocampi
8 Uncus [gyri hippocampi]
9 Substantia reticularis alba [Arnoldi]
10 Lobulus paracentralis
11 Praecuneus
12 Fissura parietooccipitalis
13 Fissura calcarina
14 Cuneus

15 Corpus callosum

16 Splenium corporis callosi
17 Truncus corporis callosi
18 Genu corporis callosi
19 Rostrum corporis callosi
20 Lamina rostralis
21 Striae transversae
22 Stria longitudinalis medialis
23 Stria longitudinalis lateralis
24 Fasciola cinerea

25 Fornix
26 Crus fornicis
27 Corpus fornicis
28 Taenia fornicis
29 Columna fornicis
30 Pars libera columnae fornicis
31 Pars tecta columnae fornicis
32 Septum pellucidum
33 Laminae septi pellucidi
34 Cavum septi pellucidi

35 Ventriculus lateralis
36 Pars centralis
37 Cornu anterius
38 Cornu posterius
39 Cornu inferius
40 Corpus striatum
41 Nucleus caudatus
42 Caput nuclei caudati
43 Cauda nuclei caudati
44 Stria terminalis
45 Lamina affixa
46 Taenia chorioidea
47 Lamina chorioidea epithelialis
48 Calcar avis
49 (Bulbus cornu posterioris)
50 Eminentia collateralis
51 Trigonum collaterale
52 Hippocampus
53 Fimbria hippocampi
54 Taenia fimbriae
55 Digitationes hippocampi
56 Fascia dentata hippocampi
57 Commissura hippocampi

58 Rhinencephalon
59 Sulcus parolfactorius anterior
60 Pars anterior [rhinencephali]
61 Lobus olfactorius
62 Bulbus olfactorius
63 Tractus olfactorius
64 Trigonum olfactorium
65 Stria medialis
66 Stria intermedia
67 Area parolfactoria [Brocae]
68 Sulcus parolfactorius posterior
69 Pars posterior [rhinencephali]
70 Gyrus subcallosus [Pedunculus corporis callosi]
71 Substantia perforata anterior
72 Stria olfactoria lateralis
73 Limen insulae

74 SECTIONES TELENCEPHALI

75 Substantia corticalis
76 Centrum semiovale
77 Decursus fibrarum cerebralium

1 Fibrae arcuatae cerebri
2 Cingulum
3 Fasciculus longitudinalis superior
3 Fasciculus longitudinalis inferior
5 Fasciculus uncinatus
6 Radiatio corporis callosi
7 Pars frontalis
8 Pars parietalis
9 Pars temporalis
10 Pars occipitalis
11 Tapetum
12 Nucleus lentiformis
13 Putamen
14 Globus pallidus
15 Claustrum
16 Capsula externa
17 Capsula interna
18 Genu capsulae internae
19 Pars frontalis capsulae internae
20 Pars occipitalis capsulae internae
21 Nucleus amygdalae
22 Corona radiata
23 Pars frontalis
24 Pars parietalis
25 Pars temporalis
26 Pars occipitalis
27 Radiatio corporis striati
28 Radiatio occipitothalamica [Gratioleti]
29 Commissura anterior [cerebri]
30 Pars anterior
31 Pars posterior

32 MENINGES

33 Dura mater encephali
34 Falx cerebri
35 Tentorium cerebelli
36 Falx cerebelli
37 Diaphragma sellae
38 Foramen diaphragmatis [sellae]
39 Incisura tentorii
40 Dura mater spinalis
41 Filum durae matris spinalis
42 Cavum epidurale
43 Cavum subdurale
44 Arachnoidea spinalis
45 Arachnoidea encephali
46 Cavum subarachnoideale
47 Cisternae subarachnoidales
48 Cisterna cerebellomedullaris
49 Cisterna fossae lateralis cerebri [Sylvii]
50 Cisterna chiasmatis
51 Cisterna interpeduncularis
52 Cisterna venae magnae cerebri
53 Granulationes arachnoideales [Pacchioni]
54 Pia mater spinalis
55 Lig. denticulatum
56 Septum cervicale intermedium
57 Pia mater encephali
58 Tela choriodea ventriculi quarti
59 Plexus chorioideus ventriculi quarti
60 Tela chorioidea ventriculi tertii
61 Plexus chorioideus ventriculi tertii
62 Plexus chorioideus ventriculi lateralis
63 Glomus chorioideum
64 Acervulus

1 SYSTEMA NERVORUM PERIPHERICUM

2 NERVI CEREBRALES

3 Nn. OLFACTORII

4 N. OPTICUS

5 N. OCULOMOTORIUS

6 Ramus superior
7 Ramus inferior
8 Radix brevis ganglii ciliaris

9 N. TROCHLEARIS

10 Decussatio nervorum trochlearium

11 N. TRIGEMINUS

12 Portio major
13 Ganglion semilunare [Gasseri]
14 Portio minor

15 N. OPTHALMICUS

16 N. tentorii
17 N. lacrimalis
18 Ramus anastomoticus cum n. zygomatico
19 N. frontalis
20 N. supraorbitalis
21 Ramus frontalis
22 N. supratrochlearis
23 N. nasociliaris
24 Radix longa ganglii ciliaris
25 Nn. ciliares longi
26 N. ethmoidalis posterior
27 N. ethmoidalis anterior
28 Rami nasales anteriores
29 Rami nasales interni
30 Rami nasales laterales
31 Rami nasales mediales
32 Ramus nasalis externus
33 N. infratrochlearis
34 Ramus palpebralis superior
35 R. palpebralis inferior

36 G. ciliare

37 Nn. ciliares breves

38 N. MAXILLARIS

39 N. meningeus [medius]
40 N. xygomaticus
41 Ramus zygomaticotemporalis
42 Ramus zygomaticofacialis
43 Nn. sphenopalatini
44 Nn. alveolares superiores
45 Rami alveolares superiores posteriores
46 N. infraorbitalis
47 R. alveolaris superior medius
48 Rami alveolares superiores anteriores
49 Plexus dentalis superior
50 Rami dentales superiores
51 Rami gingivales superiores
52 Rami palpebrales inferiores
53 Rami nasales externi
54 Rami nasales interni
55 Rami labiales superiores
56 Ganglion sphenopalatinum
57 Rami orbitales
58 N. canalis pterygoidei [Vidii]
59 N. petrosus superficialis major
60 N. petrosus profundus
61 Rami nasales posteriores superiores laterales
62 Rami nasales posteriores superiores mediales
63 N. nasopalatinus [Scarpae]

1 Rami nasales posteriores inferiores [laterales]
2 Nn. palatini
3 N. palatinus anterior
4 N. palatinus medius
5 N. palatinus posterior

6 N. MANDIBULARIS

7 N. spinosus
8 N. masticatorius
9 N. massetericus
10 Nn. temporales profundi
11 N. temporalis profundus posterior
12 N. temporalis profundus anterior
13 N. buccinatorius
14 N. pterygoideus externus
15 N. pterygoideus internus
16 N. auriculotemporalis
17 N. meatus auditorii externi
18 R. membranae tympani
19 Rami parotidei
20 Rami anastomotici cum n. faciali
21 Nn. auriculares anteriores
22 Rami temporales superficiales
23 N. lingualis
24 Rami isthmi faucium
25 Rami anastomotici cum n. hypoglosso
26 N. sublingualis
27 Rami linguales
28 N. alveolaris inferior
29 Plexus dentalis inferior
30 Rami dentales inferiores
31 Rami gingivales inferiores
32 N. mylohyoideus
33 N. mentalis
34 Rami mentales
35 Rami labiales inferiores
36 Ganglion oticum
37 N. petrosus superficialis minor
38 N. tensoris veli palatini
39 N. tensoris tympani
40 Ramus anastomoticus cum n. spinoso
41 R. anastomoticus cum n. auriculotemporali
42 Ramus anastomoticus cum chorda tympani
43 Ganglion submaxillare
44 Rami communicantes cum n. linguali
45 Rami submaxillares

46 N. ABDUCENS

47 N. FACIALIS

48 Geniculum n. facialis
49 Ganglion geniculi
50 N. stapedius
51 Ramus anastomoticus cum plexu tympanico
52 N. auricularis posterior
53 Ramus occipitalis
54 Ramus digastricus
55 Ramus stylohyoideus
56 Ramus anastomoticus cum n. glossopharyngeo
57 Plexus parotideus
58 Rami temporales
59 Rami zygomatici
60 Rami buccales
61 Ramus marginalis mandibulae
62 Ramus colli
63 N. intermedius
64 Chorda tympani

65 N. ACUSTICUS

66 Radix vestibularis
67 Radix cochlearis
68 Fila anastomotica
69 N. vestibuli
70 Ganglion vestibulare

1 N. utricularis
2 N. ampullaris superior
3 N. ampullaris lateralis
4 N. ampullaris inferior
5 N. cochleae
6 Ganglion spirale
7 N. saccularis

8 N. GLOSSOPHARYNGEUS

9 Ganglion superius
10 Ganglion petrosum
11 N. tympanicus
12 Intumescentia tympanica
13 Plexus tympanicus [Jacobsoni]
14 N. caroticotympanicus superior
15 N. caroticotympanicus inferior
16 Ramus tubae
17 R. anastomoticus cum ramo auriculari n. vagi
18 Rami pharyngei
19 Ramus stylopharyngeus
20 Rami tonsillares
21 Rami linguales

22 N. VAGUS

23 Ganglion jugulare
24 Ganglion nodosum
25 Ramus meningeus
26 Ramus auricularis
27 R. anastomoticus cum n. glossopharyngeo
28 Rami pharyngei
29 Plexus pharyngeus
30 N. laryngeus superior
31 Ramus externus
32 Ramus internus
33 Ramus anastomoticus cum n. laryngeo inferiore
34 Rami cardiaci superiores
35 (N. depressor)
36 N. recurrens
37 Rami cardiaci inferiores
38 Rami tracheales
39 Rami oesophagei
40 N. laryngeus inferior
41 Ramus anterior
42 Ramus posterior
43 Rami bronchiales anteriores
44 Rami bronchiales posteriores
45 Plexus pulmonalis anterior
46 Plexus pulmonalis posterior
47 Rami oesophagei
48 Plexus oesophageus anterior
49 Plexus oesophageus posterior
50 Rami gastrici
51 Plexus gastricus anterior
52 Plexus gastricus posterior
53 Rami hepatici
54 Rami coeliaci
55 Rami lienales
56 Rami renales

57 N. ACCESSORIUS

58 Ramus internus
59 Ramus externus

60 N. HYPOGLOSSUS

61 Ramus descendens
62 Ansa hypoglossi
63 Ramus thyreohyoideus
64 Rami linguales

65 N. SPINALES

66 Fila radicularia
67 Radix anterior
68 Radix posterior
69 Ganglion spinale
70 Ramus anterior
71 Ramus posterior
72 Ramus communicans
73 Ramus meningeus
74 Cauda equina
75 Ansae

1 NN. CERVICALES
2 Rami posteriores
3 Ramus medialis
4 Ramus lateralis
5 N. suboccipitalis
6 N. occipitalis major
7 (N. occipitalis tertius)
8 Rami anteriores
9 Plexus cervicalis
10 N. occipitalis minor
11 N. auricularis magnus
12 Ramus posterior
13 Ramus anterior
14 N. cutaneus colli
15 Rami superiores
16 Rami inferiores
17 Nn. supraclaviculares
18 Nn. supraclaviculares anteriores
19 Nn. supraclaviculares medii
20 Nn. supraclaviculares posteriores
21 N. phrenicus
22 Ramus pericardiacus
23 Rami phrenicoabdominales

24 PLEXUS BRACHIALIS
25 Pars supraclavicularis
26 Nn. thoracales posteriores
27 N. dorsalis scapulae
28 N. thoracalis longus
29 Nn. thoracales anteriores
30 Nn. subclavius
31 N. suprascapularis
32 Nn. subscapulares
33 N. thoracodorsalis
34 N. axillaris
35 Rami musculares
36 N. cutaneus brachii lateralis
37 Pars infraclavicularis
38 Fasciculus lateralis
39 Fasciculus medialis
40 Fasciculus posterior
41 N. musculocutaneus
42 Rami musculares lateralis
43 N. cutaneus antibrachii
44 N. cutaneus brachii medialis
45 N. cutaneus antibrachii medialis
46 Ramus volaris
47 Ramus ulnaris

48 N. MEDIANUS
49 Rami musculares
50 N. interosseus [antibrachii] volaris
51 Ramus palmaris n. mediani
52 Ramus anastomoticus cum n. ulnari
53 Nn. digitales volares communes
54 Nn. digitales volares proprii

55 N. ULNARIS
56 Ramus cutaneus palmaris
57 Ramus dorsalis manus
58 Nn. digitales dorsales
59 Ramus volaris manus
60 Ramus superficialis
61 Nn. digitales volares communes
62 Nn. digitales volares proprii
63 Ramus profundus
64 Rami musculares

65 N. RADIALIS
66 N. cutaneus brachii posterior
67 Rami musculares
68 N. cutaneus antibrachii dorsalis
69 Ramus profundus
70 N. interosseus [antibrachii] dorsalis
71 Ramus superficialis
72 Ramus anastomoticus ulnaris
73 Nn. digitales dorsales

74 NN. THORACALES
75 Rami posteriores
76 Ramus cutaneus lateralis
77 Ramus cutaneus medialis

1 Rami anteriores [Nn. intercostales]
2 Rami musculares
3 Ramus cutaneus lateralis [pectoralis et abdominalis]
4 Ramus posterior
5 Ramus anterior
6 Rami mammarii laterales
7 Nn. intercostobrachiales
8 Ramus cutaneus anterior [pectoralis et abdominalis]
9 Rami mammarii mediales

10 NN. LUMBALES, SACRALES, COCCYGEUS

11 Nn. lumbales
12 Rami posteriores
13 Ramus medialis
14 Ramus lateralis
15 Nn. clunium superiores
16 Rami anteriores
17 Nn. sacrales et coccygeus:
18 Rami posteriores
19 Ramus medialis
20 Ramus lateralis
21 Nn. clunium medii

22 PLEXUS LUMBOSACRALIS

23 PLEXUS LUMBALIS

24 Rami musculares

25 N. ILIOHYPOGASTRICUS

26 Rami musculares
27 Ramus cutaneus lateralis
28 Ramus cutaneus anterior

29 N. ILIOINGUINALIS

30 Rami musculares
31 Nn. scrotales anteriores
32 Nn. labiales anteriores

33 N. GENITOFEMORALIS

34 N. lumboinguinalis
35 N. spermaticus externus

36 N. CUTANEUS FEMORIS LATERALIS

37 N. OBTURATORIUS

38 Ramus anterior
39 Ramus cutaneus
40 Ramus posterior

41 N. FEMORALIS

42 Rami cutanei anteriores
43 Rami musculares
44 N. saphenus
45 Ramus infrapatellaris
46 Rami cutanei cruris mediales

47 PLEXUS SACRALIS

48 Truncus lumbosacralis
49 N. glutaeus superior
50 N. glutaeus inferior
51 N. cutaneus femoris posterior
52 Nn. clunium inferiores
53 Rami perineales

54 N. ISCHIADICUS

55 Rami musculares
56 N. peronaeus communis
57 Rami musculares
58 N. cutaneus surae lateralis
59 Ramus anastomoticus peronaeus
60 N. peronaeus superficialis
61 Rami musculares
62 N. cutaneus dorsalis medialis
63 N. cutaneus dorsalis intermedius
64 Nn. digitales dorsales pedis
65 N. peronaeus profundus
66 Rami musculares
67 Nn. digitales dorsales hallucis lateralis et digiti secundi medialis
68 N. tibialis
69 Rami musculares

1 N. interosseus cruris
2 N. cutaneus surae medialis
3 N. suralis
4 Rami calcanei laterales
5 N. cutaneus dorsalis lateralis
6 Rami calcanei mediales
7 N. plantaris medialis
8 Nn. digitales plantares communes
9 Nn. digitales plantares proprii
10 N. plantaris lateralis
11 Ramus superficialis
12 Nn. digitales plantares communes
13 Nn. digitales plantares proprii
14 Ramus profundus

15 PLEXUS PUDENDUS
16 N. haemorrhoidales medii
17 Nn. vesicales inferiores
18 Nn. vaginales
19 N. pudendus
20 Nn. haemorrhoidales inferiores
21 N. perinei
22 Nn. scrotales posteriores
23 Nn. labiales posteriores
24 N. dorsalis penis
25 N. dorsalis clitoridis

26 N. COCCYGEUS
27 Plexus coccygeus
28 Nn. anococcygei

29 SYSTEMA NERVORUM SYMPATHICUM

30 Truncus sympathicus
31 Ganglia trunci sympathici
32 Plexus sympathici
33 Ganglia plexuum sympathicorum

34 PARS CEPHALICA ET CERVICALIS S. SYMPATHICI
35 Ganglion cervicale superius
36 N. jugularis
37 N. caroticus internus
38 Plexus caroticus internus
39 Plexus cavernosus
40 Plexus arteriae cerebri anterioris
41 Plexus arteriae cerebri mediae
42 Plexus arteriae chorioideae
43 Plexus opthalmicus
44 Radices sympathicae ganglii ciliaris
45 Nn. carotici externi
46 Plexus caroticus externus
47 Plexus thyreoideus superior
48 Plexus lingualis
49 Plexus maxillaris externus
50 Radix sympathica ganglii submaxillaris
51 Plexus occipitalis
52 Plexus auricularis posterior
53 Plexus temporalis superficialis
54 Plexus maxillaris internus
55 Plexus meningeus
56 Plexus caroticus communis
57 Rami laryngopharyngei
58 Plexus pharyngeus ascendens
59 N. cardiacus superior
60 Ganglion cervicale medium
61 N. cardiacus medius
62 Ganglion cervicale inferius
63 Ansa subclavia [Vieussenii]
64 N. cardiacus inferior
65 Plexus subclavius
66 Plexus mammarius interus
67 Plexus thyreoideus inferior
68 Plexus vertebralis

1 Pars thoracalis s. sympathici
2 Ganglia thoracalia
3 N. splanchnicus major
4 Ganglion splanchnicum
5 N. splanchnicus minor
6 Ramus renalis
7 (N. splanchnicus imus)
8 Plexus aorticus thoracalis
9 Plexus cardiacus
10 Plexus coronarius cordis anterior
11 Ganglion cardiacum [Wrisbergi]
12 Plexus coronarius posterior
13 Rami pulmonales
14 Plexus pulmonalis

15 Pars abdominalis et pelvina s. sympathici
16 Ganglia lumbalia
17 Ganglia sacralia
18 Plexus aorticus abdominalis
19 Plexus coeliacus
20 Ganglia coeliaca
21 Ganglion mesentericum superius
22 Plexus phrenicus
23 Ganglia phrenica
24 Plexus phrenicus
25 Plexus lienalis
26 Plexus gastricus superior
27 Plexus gastricus inferior
28 Plexus suprarenalis
29 Plexus renalis
30 Plexus spermaticus
31 Plexus arteriae ovaricae
32 Plexus mesentericus superior
33 Plexus myentericus
34 Plexus submucosus
35 Plexus mesentericus inferior
36 Nn. haemorrhoidales superiores
37 Plexus iliacus
38 Plexus iliacus
39 Plexus hypogastricus
40 Plexus haemorrhoidalis medius
41 Plexus prostaticus
42 Plexus deferentialis
43 Plexus uterovaginalis
44 Plexus vesicalis
45 Nn. vesicales superiores
46 Nn. vesicales inferiores
47 Plexus cavernosus penis
48 N. cavernosus penis major
49 Nn. cavernosi penis minores
50 Plexus cavernosus clitoridis
51 N. cavernosus clitoridis major
52 Nn. cavernosi clitoridus minores
53 Plexus femoralis
54 Plexus popliteus

1 ORGANA SENSUUM ET INTEGUMENTUM COMMUNE

2 ORGANON VISUS

3 Oculus

4 Opticus

5 Vaginae n. optici
6 Spatia intervaginalia

7 Bulbus oculi

8 Polus anterior
9 Polus posterior
10 Aequator
11 Meridiani
12 Axis oculi externa
13 Axis oculi interna
14 Axis optica
15 [Linea visus]
16 Vesicula ophthalmica*
17 Caliculus ophthalmicus*

18 Tunica fibrosa oculi

19 sclera

20 Sulcus sclerae
21 Rima cornealis
22 Sinus venosus sclerae [Canalis Schlemmi, Lauthi]
23 Lamina fusca
24 Lamina cribrosa sclerae
25 (Raphe sclerae)
26 (Funiculus sclerae)

27 cornea

28 Annulus conjunctivae
29 Vertex corneae
30 Limbus cornae
31 Facies anterior
32 Facies posterior
33 Epithelium corneae
34 Lamina elastica anterior [Bowmani]
35 Substantia propria
36 Lamina elastica posterior [Demoursi, Descemeti]
37 Endothelium camerae anterioris

38 Tunica Vasculosa Oculi

39 chorioidea

40 Lamina suprachorioidea
41 Spatium perichorioideale
42 Lamina vasculosa
43 Lamina choriocapillaris
44 Lamina basalis
45 (Raphe chorioideae)

46 corpus ciliare

47 Corona ciliaris
48 Processus ciliares
49 Plicae ciliares
50 Orbiculus ciliaris
51 M. ciliaris
52 Fibrae meridionales [Brueckei]
53 Fibrae circulares [Muelleri]
54 Plexus gangliosus ciliaris

55 iris

56 Margo pupillaris
57 Margo ciliaris
58 Facies anterior

1 Facies posterior
2 Annulus iridis major
3 Annulus iridis minor
4 Plicae iridis
5 Pupilla
6 M. sphincter pupillae
7 Stroma iridis
8 M. dilatator pupillae
9 Lig. pectinatum iridis
10 Spatia anguli iridis [Fontanae]
11 Circulus arteriosus major
12 Circulus arteriosus minor
13 Membrana pupillaris*

14 Stratum pigmenti

15 Stratum pigmenti retinae
16 Stratum pigmenti corporis ciliaris
17 Stratum pigmenti iridis

18 Retina

19 Pars optica retinae
20 Ora serrata
21 Pars ciliaris retinae
22 Papilla n. optici
23 Excavatio papillae n. optici
24 Macula lutea
25 Fovea centralis
26 Vasa sanguinea retinae
27 Circulus vasculosus n. optici [Halleri]
28 Arteriola [Venula] temporalis retinae superior
29 Arteriola [Venula] temporalis retinae inferior
30 Arteriola [Venula] nasalis retinae superior
31 Arteriola [Venula] nasalis retinae inferior
32 Arteriola [Venula] macularis superior
33 Arteriola [Venula] macularis inferior
34 Arteriola [Venula] retinae medialis

35 Camera oculi anterior

36 Angulus iridis

37 Camera oculi posterior

38 Corpus vitreum

39 A. hyaloidea*
40 Canalis hyaloidea
41 Fossa hyaloidea
42 Membrana hyaloidea
43 Stroma vitreum
44 Humor vitreus

45 Lens crystallina

46 Substantia lentis
47 Substantia corticalis
48 Nucleus lentis
49 Fibrae lentis
50 Epithelium lentis
51 Capsula lentis
52 Polus anterior lentis
53 Polus posterior lentis
54 Facies anterior lentis
55 Facies posterior lentis
56 Axis lentis
57 Aequator lentis
58 Radii lentis

59 Zonula ciliaris [Zinni]

60 Fibrae zonulares
61 Spatia zonularia

62 Organa oculi accessoria

63 musculi oculi, fasciae orbitales

64 M. orbitalis
65 M. rectus superior
66 M. rectus inferior
67 M. rectus medialis
68 M. rectus lateralis
69 Lacertus musculi recti lateralis
70 Annulus tendineus communis [Zinni]
71 M. obliquus superior

1 Trochlea
2 M. obliquus inferior
3 M. levator palpebrae superioris
4 Periorbita
5 Septum orbitale
6 Fasciae musculares
7 Fascia bulbi [Tenoni]
8 Spatium interfasciale [Tenoni]
9 Corpus adiposum orbitae

10 SUPERCILIUM

11 PALPEBRAE

12 Palpebra superior
13 Palpebra superior
14 Facies anterior palpebrarum
15 Facies posterior palpebrarum
16 Rima palpebrarum
17 Commissura palpebrarum lateralis
18 Commissura palpebrarum medialis
19 Angulus oculi lateralis
20 Angulus oculi medialis
21 Limbi palpebrales anteriores
22 Limbi palpebrales posteriores
23 Tarsus superior
24 Tarsus inferior
25 Lig. palpebrale mediale
26 Raphe palpebralis lateralis
27 Glandulae tarsales [Meibomi]
28 Sebum palpebrale
29 M. tarsalis superior
30 M. tarsalis inferior

31 CONJUNCTIVA

32 Plica semilunaris conjunctivae
33 Caruncula lacrimalis
34 Tunica conjunctiva bulbi
35 Tunica conjunctiva palpebrarum
36 Fornix conjunctivae superior
37 Fornix conjunctivae palpebrarum
38 Gl. mucosae [Krausei]
39 Noduli lymphatici conjunctivales
40 (Pinguecula)

41 APPARATUS LACRIMALIS
42 Glandula lacrimalis superior
43 Glandula lacrimalis inferior
44 (Gl. lacrimales accessoriae)
45 Ductili excretorii [gl. lacrimalis]
46 Rivus lacrimalis
47 Lacus lacrimalis
48 Puncta lacrimalia
49 Ductus lacrimales
50 Papillae lacrimales
51 Ampulla ductus lacrimalis
52 Saccus lacrimalis
53 Fornix sacci lacrimalis
54 Ductus nasolacrimalis
55 Plica lacrimalis [Hasneri]
56 Lacrimae

57 ORGANON AUDITUS

58 AURIS INTERNA

59 LABYRINTHUS MEMBRANACEUS

60 Ductus endolymphaticus
61 Saccus endolymphaticus
62 Ductus utriculosaccularis
63 Utriculus
64 Ductus semicirculares
65 Ductus semicircularis superior
66 Ductus semicircularis posterior
67 Ductus semicircularis lateralis
68 Ampullae membranaceae
69 Sulcus ampullaris
70 Crista ampullaris
71 Ampulla membranacea superior
72 Ampulla membranacea posterior
73 Ampulla membranacea lateralis
74 Sacculus
75 Ductus reuniens [Henseni]
76 Maculae acusticae
77 Macula acustica utriculi
78 Macula acustica sacculi

1 Otoconia
2 Endolympha
3 Perilympha
4 Spatium perilymphaticum
5 Ductus perilymphatici
6 Ductus cochlearis
7 Caecum cupulare
8 Caecum vestibulare
9 Lamina basilaris
10 Membrana vestibularis [Reissneri]
11 Lig. spirale cochleae
12 Prominentia spiralis
13 Stria vascularis
14 Sulcus spiralis
15 Labium tympanicum
16 Foramina nervosa
17 Labium vertibulare
18 Ganglion spirale cochleae
19 Organon spirale [Cortii]
20 Vasa auris internae
21 A. auditiva interna
22 Rami vestibulares
23 Ramus cochleae
24 Glomeruli arteriosi cochleae
25 Vv. auditivae internae
26 V. spiralis modioli
27 Vas prominens
28 Vv. vestibulares
29 V. aquaeductus vestibuli
30 V. canaliculi cochleae

31 Labyrinthus osseus

32 vestibulum

33 Recessus sphaericus
34 Recessus ellipticus
35 Crista vestibuli
36 Pyramis vestibuli
37 Recessus cochlearis
38 Maculae cribrosae
39 Macula cribrosa superior
40 Macula cribrosa media
41 Macula cribrosa inferior
42 Canales semicirculares ossei
43 Canalis semicircularis superior
44 Canalis semicircularis posterior
45 Canalis semicircularis lateralis
46 Ampullae osseae
47 Ampulla ossea superior
48 Ampulla ossea posterior
49 Ampulla ossea lateralis
50 Crura ampullaria
51 Crus commune
52 Crus simplex

53 cochlea

54 Cupula
55 Basis cochleae
56 Canalis spiralis cochleae
57 Modiolus
58 Basis modioli
59 Lamina modioli
60 Lamina spiralis ossea
61 Hamulus laminae spiralis
62 Scala vestibuli
63 Scala tympani
64 Helicotrema
65 Lamina spiralis secundaria
66 Canalis spiralis modioli
67 Canales longitudinales modioli

68 meatus acusticus internus

69 Porus acusticus internus
70 Fundus meatus acustici interni
71 Crista transversa
72 Area n. facialis
73 Area cochleae
74 Tractus spiralis foraminosus
75 Area vestibularis superior
76 Area vestibularis inferior
77 Foramen singulare

78 Cavum tympani

79 Paries tegmentalis

1 Recessus epitympanicus
2 Pars cupularis
3 Paries jugularis
4 Prominentia styloidea
5 Paries labyrinthica
6 Fenestra vestibuli
7 Fossula fenestrae vestibuli
8 Promontorium
9 Sulcus promontorii
10 Subiculum promontorii
11 Sinus tympani
12 Fenestra cochleae
13 Fossula fenestrae cochleae
14 Crista fenestrae cochleae
15 Processus cochleariformis
16 Paries mastoidea
17 Antrum tympanicum
18 Prominentia canalis semicircularis lateralis
19 Prominentia canalis facialis
20 Eminentia pyramidalis
21 Fossa incudis
22 Sinus posterior
23 Apertura [tympanica] canaliculi chordae
24 Cellulae mastoideae
25 Cellulae tympanicae
26 Paries carotica
27 Paries membranacea

28 MEMBRANA TYMPANI
29 Pars flaccida
30 Pars tensa
31 Limbus membranae tympani
32 Plica malleolaris anterior
33 Plica malleolaris posterior
34 Prominentia malleolaris
35 Stria malleolaris
36 Umbo membranae tympani
37 Stratum cutaneum
38 Annulus fibrocartilagineus
39 Stratum radiatum
40 Stratum circulare
41 Stratum mucosum

42 OSSICULA AUDITUS
43 Stapes
44 Capitulum stapedis
45 Crus anterius
46 Crus posterius
47 Basis stapedis
48 Incus
49 Corpus incudis
50 Crus longum
51 Processus lenticularis
52 Crus breve
53 Malleus
54 Manubrium mallei
55 Capitulum mallei
56 Collum mallei
57 Processus lateralis
58 Processus anterior [Folii]

59 ARTICULATIONES OSSICULORUM AUDITUS
60 Articulatio incudomalleolaris
61 Articulatio incudostapedia
62 Syndesmosis tympanostapedia

63 LIGG. OSSICULORUM AUDITUS
64 Lig. mallei anterius
65 Lig. mallei superius
66 Lig. mallei laterale
67 Lig. incudis superius
68 Lig. incudis posterius
69 Membrana obturatoria [stapedis]
70 Lig. annulare baseos stapedis
71 [M. fixator baseos stapedis]

72 MUSCULI OSSICULORUM AUDITUS
73 M. tensor tympani
74 M. stapedius

1 TUNICA MUCOSA TYMPANICA
2 (Gl. tympanicae)
3 Plica malleolaris posterior
4 Plica malleolaris anterior
5 Recessus membranae tympani anterior
6 Recessus tympani membranae superior
7 Recessus membranae tympani posterior
8 Plica incudis
9 Plica stapedis
10 Membrana tympani secundaria

11 TUBA AUDITIVA [EUSTACHII]

12 Ostium tympanicum tubae auditivae
13 Pars ossea tubae auditivae
14 Isthmus tubae auditivae
15 Cellulae pneumaticae tubariae
16 Pars cartilaginae tubae auditivae
17 Cartilago tubae auditivae
18 Lamina [cartilaginis] medialis
19 Lamina [cartilaginis] lateralis
20 Lamina membranacea
21 Tunica mucosa
22 Gl. mucosae
23 Moduli lymphatici tubarii
24 Ostium pharyngeum tubae auditivae

25 MEATUS ACUSTICUS EXTERNUS
26 Porus acusticus externus
27 Incisura tympanica [Rivini]
28 Meatus acusticus externus cartilagineus
29 Cartilago meatus acustici
30 Incisurae cartilaginis meatus acustici externi [Santorini]
31 Lamina tragi

32 AURICULAE
33 Lobulus auriculae
34 Cartilago auriculae
35 Helix
36 Crus helicis
37 Spina helicis
38 Cauda helicis
39 Anthelix
40 Fossa triangularis [auriculae]
41 Crura anthelicis
42 Scapha
43 Concha auriculae
44 Cymba conchae
45 Cavum conchae
46 Antitragus
47 Tragus
48 Incisura anterior [auris]
49 Incisura intertragica
50 (Tuberculum auriculae [Darwini])
51 (Apex auriculae [Darwini)]
52 Sulcus auriculae posterior
53 (Tuberculum supratragicum)
54 Isthmus cartilaginis auris
55 Incisura terminalis auris
56 Fissura antitragohelicina
57 Sulcus anthelicis transversus
58 Sulcus cruris helicis
59 Fossa anthelicis
60 Eminentia conchae
61 Eminentia scaphae
62 Eminentia fossae triangularis
63 Ligg. auricularia [Valsalvae]
64 Lig. auriculare anterius
65 Lig. auriculare superius
66 Lig. auriculare posterius
67 M. helicis major
68 M. helicis minor
69 M. tragicus
70 (M. pyramidalis auriculae [Jungi])
71 M. Antitragicus
72 M. transversus auriculae
73 M. obliquus auriculae
74 (M. incisurae helicis [Santorini])

1 Organon olfactus

2 Organon gustus
3 Calyculi gustatorii

4 Integumentum commune

5 Cutis
6 Sulci cutis
7 Cristae cutis
8 Retinacula cutis
9 Toruli tactiles
10 Foveola coccygea
11 Lig. caudale

12 epidermis
13 Stratum corneum
14 Stratum germinativum [Malpighii]

15 corium
16 Tunica propria
17 Corpus papillare
18 Papillae

19 tela subcutanea
20 Panniculus adiposus

21 corpuscula nervorum terminalia
22 Corpuscula bulboidea [Krausii]
23 Corpuscula lamellosa [Vateri, Pacini]
24 Corpuscula tactus [Meissneri]
25 Corpuscula nervorum genitalia
26 Corpuscula nervorum articularia

27 Pili
28 Lanugo
29 Capilli
30 Supercilia
31 Cilia
32 Barba
33 Tragi
34 Vibrissae
35 Hirci
36 Pubes
37 Folliculus pili
38 Fundus folliculi pili
39 Collum folliculi pili
40 Papilla pili
41 Scapus pili
42 Radix pili
43 Bulbus pili
44 Mm. arrectores pilorum
45 Flumina pilorum
46 Vortices pilorum
47 (Vortex coccygeus)

48 Ungues
49 Matrix unguis
50 Cristae matricis unguis
51 Sulcus matricis unguis
52 Vallum unguis
53 Corpus unguis
54 Radix unguis
55 Lunula
56 Margo occultus
57 Margo liber
58 Margo lateralis
59 Stratum corneum unguis
60 Stratum germinativum unguis

61 Glandulae Cutis

62 gl. glomiformes
63 Gl. sudoriferae
64 Corpus gl. sudoriferae
65 Ductus sudoriferus
66 Porus sudoriferus
67 Sudor
68 Gl. ciliares [Molli]
69 Gl. circumanales

1 Gl. ceruminosae
2 Cerumen

3 GLANDULAE SEBACEAE
4 Sebum cutaneum

5 MAMMA
6 Papilla mammae
7 Corpus mammae
8 Lobi mammae
9 Lobuli mammae
10 Ductus lactiferi
11 Sinus lactiferi
12 Lac femininum
13 Colostrum
14 Areola mammae
15 Gl. sebaceae
16 Gl. areolares [Montgomerii]
17 Mamma virilis
18 (Mammae accessoriae [muliebres et viriles])

1 REGIONES CORPORIS HUMANI

auctoribus Merkel, Rüdinger, Toldt

2 Linea mediana anterior
3 Linea mediana posterior
4 Linea sternalis
5 Linea parasternalis
6 Linea mamillaris
7 Linea axillaris
8 Linea scapularis

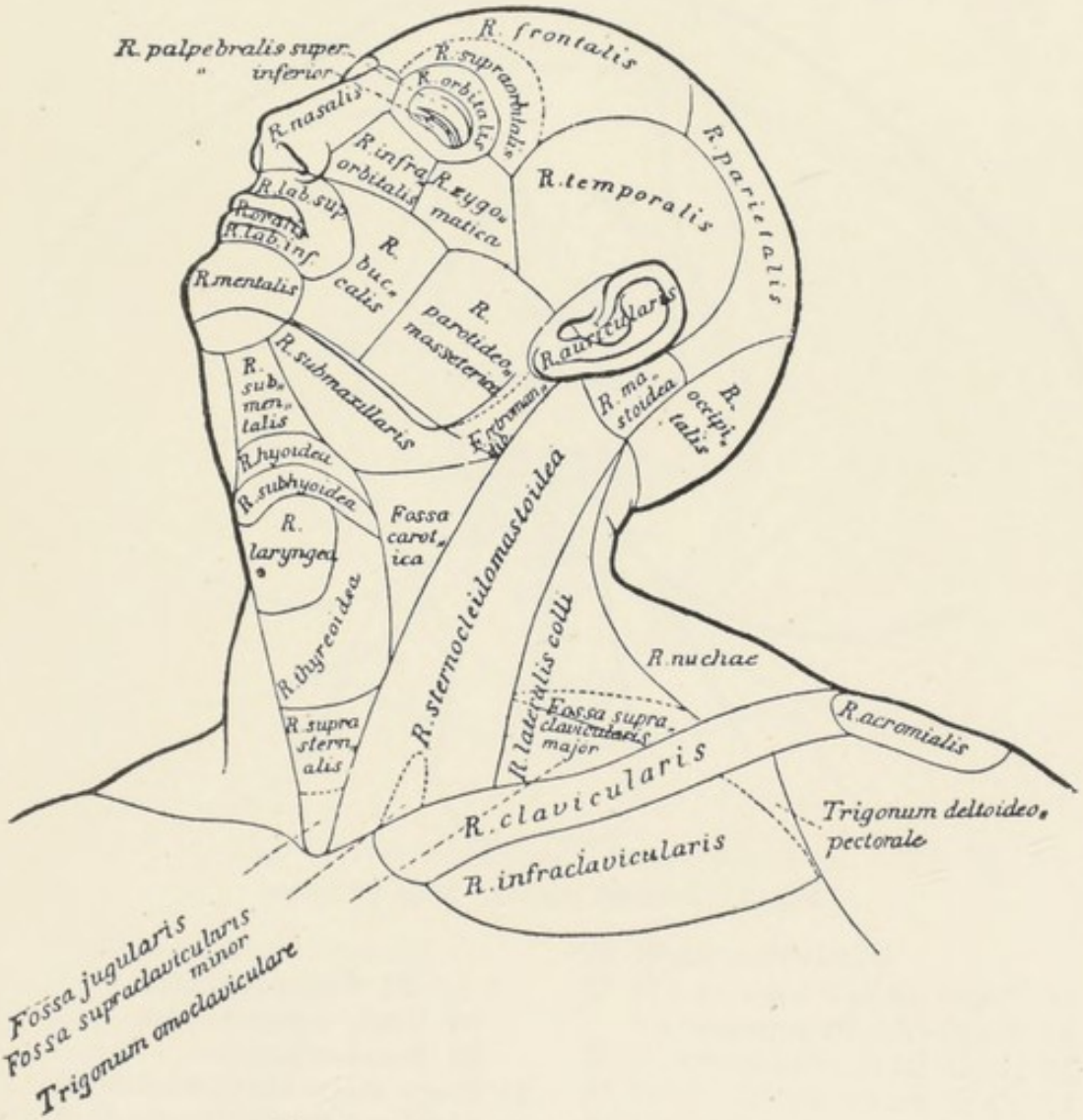


Fig. 1. Regions of the head and neck.

1 Regiones capitis
2 Regio frontalis
3 Regio supraorbitalis
4 Regio parietalis
5 Regio occipitalis
6 Regio temporalis
7 Regio auricularis
8 Regio mastoidea
9 Regiones faciei
10 Regio nasalis
21 Regio parotideomasseterica
22 Fossa retromandibularis
23 Regiones colli
24 Regio colli anterior
25 Regio submentalis
26 Regio hyoidea
27 Regio subhyoidea
28 Regio laryngea
29 Regio thyreoidea
30 Regio suprasternalis

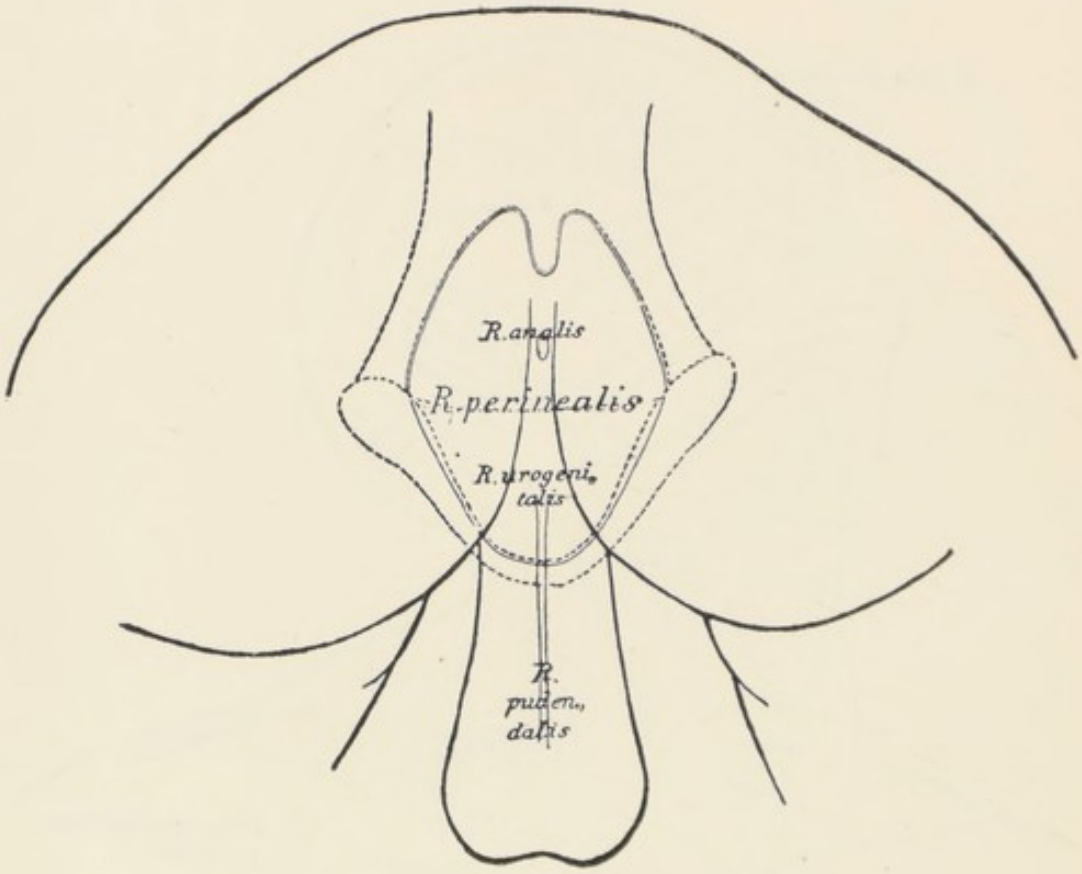


Fig. 2. Perineal regions. Male perineum.

11 Regio oralis
12 Regio labialis superior
13 Regio labialis inferior
14 Regio mentalis
15 Regio orbitalis
16 Regio palpebralis superior
17 Regio palpebralis inferior
18 Regio infraorbitalis
19 Regio buccalis
20 Regio zygomatica
31 Fossa jugularis
32 Regio submaxillaris
33 Fossa carotica
34 Regio sternocleidomastoidea
35 Fossa supraclivicularis minor
36 Regio colli lateralis
37 Fossa supraclavicularis major
38 Trigonum omoclaviculare
39 Regio colli posterior
40 Regio nuchae

1 Fovea nuchae
2 Regiones pectoris
3 Regio pectoris anterior
4 Regio sternalis
5 Regio clavicularis
6 Regio infraclavicularis
7 Trigonum deltoideo-pectorale
8 Regio mammalis
9 Regio inframammalis
10 Regio pectoris lateralis
11 Regio axillaris
12 Fossa axillaris
24 Regio mediana dorsi
25 Regio interscapularis
26 Regio scapularis
27 Regio suprascapularis
28 Regio infrascapularis
29 Regio lumbalis
30 Regio coxae
30 Regio sacralis
32 Regio glutaea
33 Regio perinealis
34 Regio analis
35 Regio urogenitalis

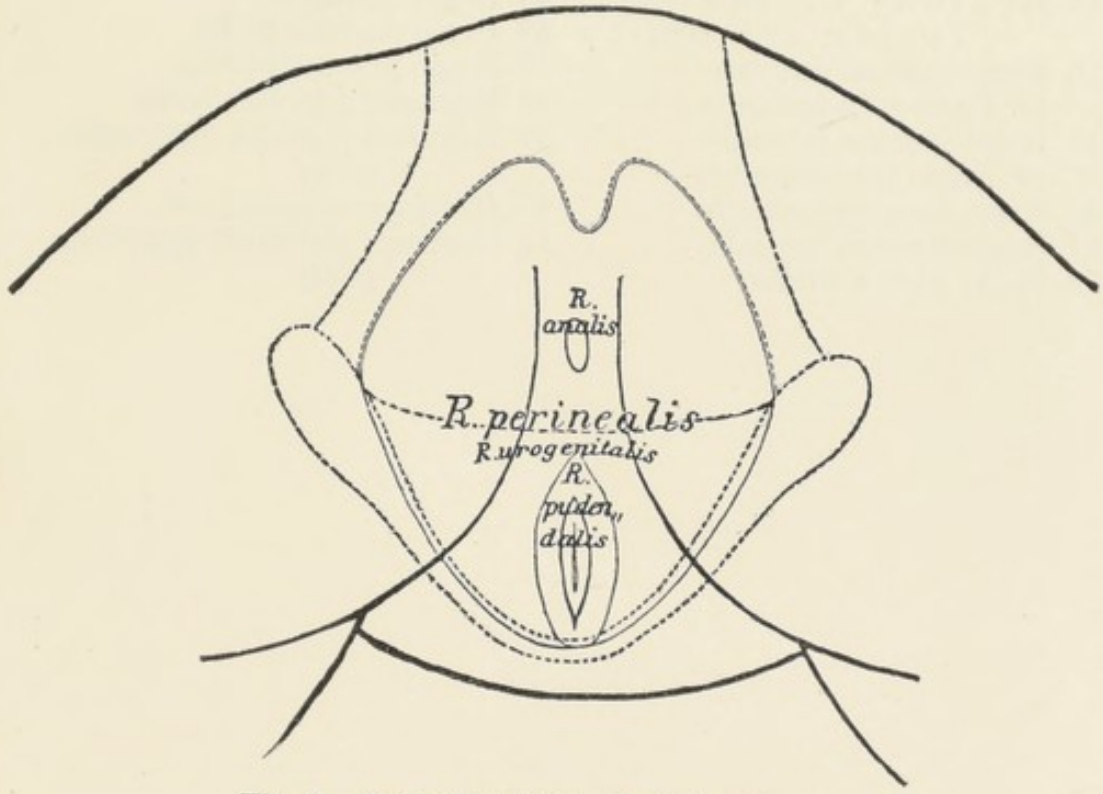


Fig. 3. Perineal regions. Female perineum.

13 Regio costalis lateralis
14 Regiones abdominis
15 Regio epigastrica
16 Regio hypochondriaca
17 Regio mesogastrica
18 Regio umbilicalis
19 Regio abdominalis lateralis
20 Regio hypogastrica
21 Regio pubica
22 Regio inguinalis
23 Regiones dorsi
36 Regio pudendalis
37 Regiones extremitatis superioris
38 Regio acromialis
39 Regio deltoidea
40 Regio brachii lateralis
41 Regio brachii medialis
42 Regio brachii anterior
43 Regio brachii posterior
44 Regio cubiti anterior
45 Fossa cubitalis

1 Regio cubiti posterior
2 Regio olecrani
3 Regio cubiti lateralis
4 Regio cubiti medialis
5 Regio antibrachii volaris
6 Regio antibrachii dorsalis
7 Regio antibrachii radialis
8 Regio antibrachii ulnaris
9 Regio dorsalis manus
10 Regio volaris manus
11 Regiones digitales [manus]
12 Regiones dorsales digitorum
13 Regiones unguiculares
14 Regiones volares digitorum
15 Regions of the inferior extremity
16 Regio femoris anterior
17 Fossa subinguinalis
18 Regio femoris lateralis
19 Regio trochanterica
20 Regio femoris posterior
21 Regio femoris medialis
22 Regio genu anterior
23 Regio patellaris
24 Regio genu posterior
25 Fossa poplitea
26 Regio cruris anterior
27 Regio cruris posterior
28 Regio suralis
29 Regio cruris lateralis
30 Regio cruris medialis
31 Regio malleolaris lateralis
32 Regio malleolaris medialis
33 Regio retromalleolaris lateralis
34 Regio retromalleolaris medialis
35 Regio calcanea
36 Regio dorsalis pedis
37 Regio plantaris pedis
38 Regiones digitales pedis
39 Regiones dorsales digitorum pedis
40 Regiones unguiculares
41 Regiones plantares digitorum pedis

PLATE XI

Regions of the human body. Anterior aspect.

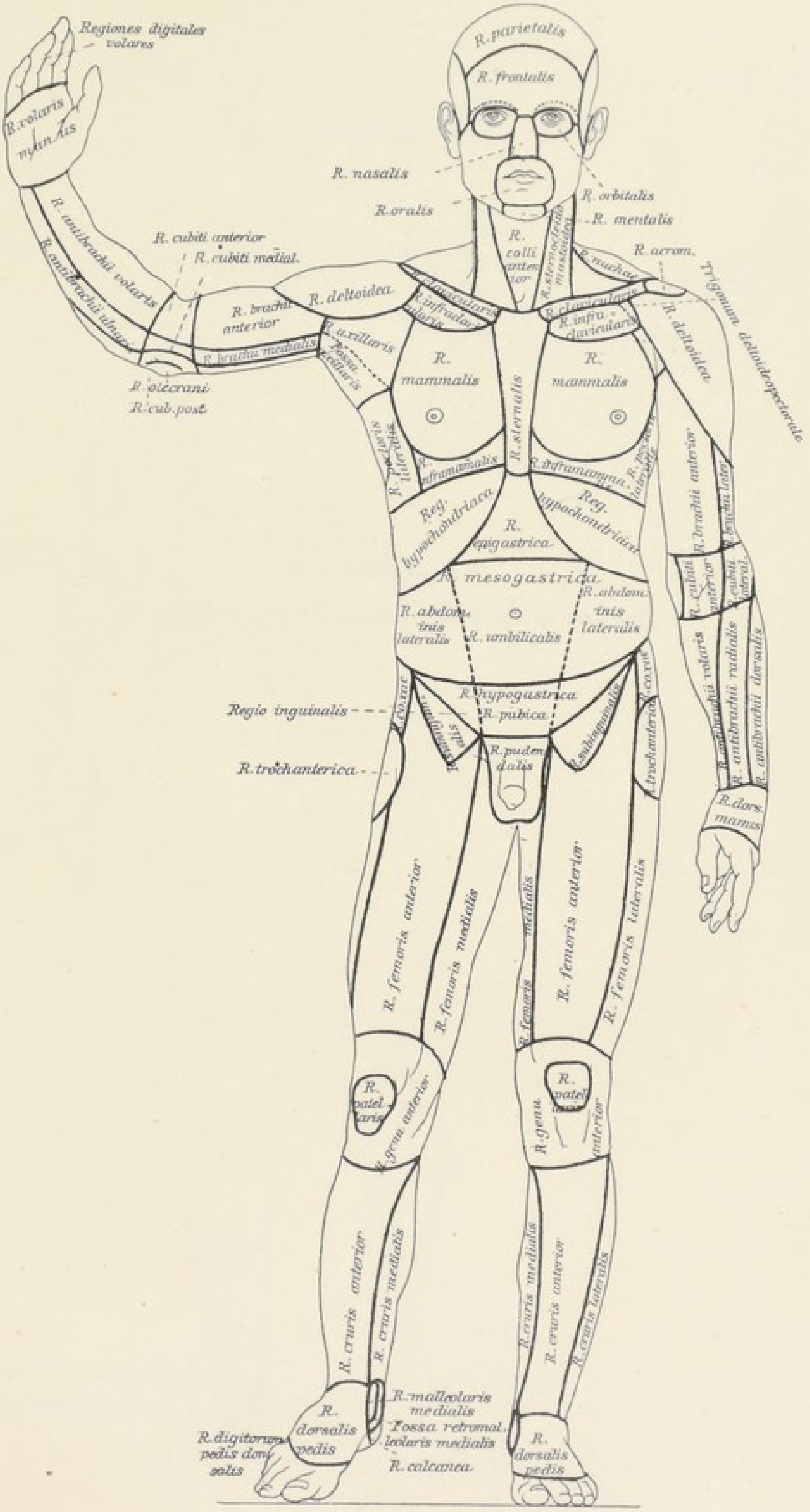
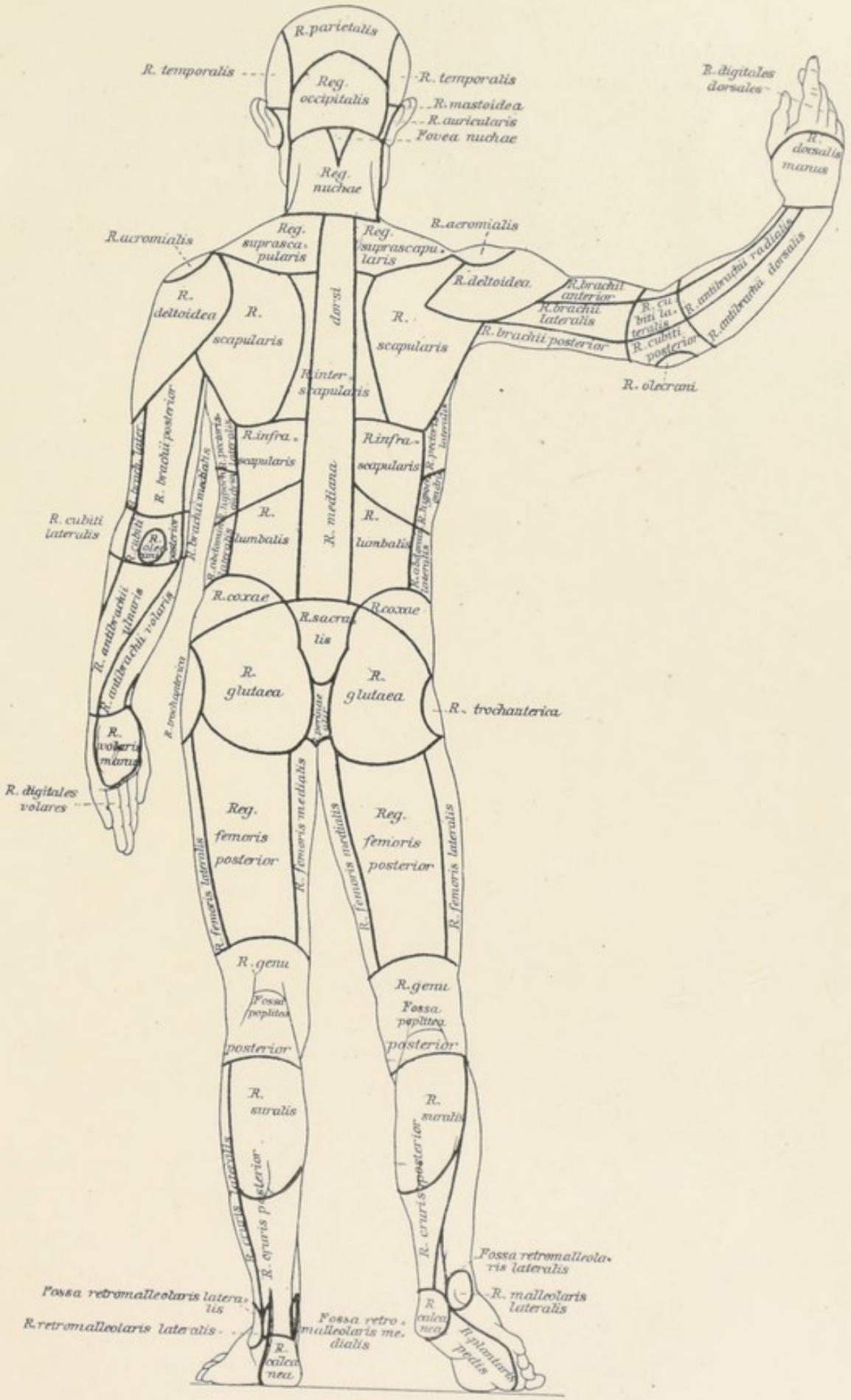

Regiones digitales volares
R. volaris manus
R. parietalis
R. frontalis
R. nasalis
R. orbitalis
R. oralis
R. mentalis
R. antibrachii volaris
R. cubiti anterior
R. cubiti medial.
R. acrom.
R. antibrachii ulnaris
R. deltoidea
R. brachii anterior
R. axillaris
R. brachii medialis
R. olecrani
R. cub. post.
R. mammalis
R. sternalis
R. mammalis
R. deltoidea
Trigonum deltoideopectorale
R. inframammalis
R. inframammalis
Reg. hypochondriaca
R. epigastrica
Reg. hypochondriaca
R. brachii anterior
R. mesogastrica
R. abdominis lateralis
R. umbilicalis
R. abdominis lateralis
R. hypogastrica
Regio inguinalis
R. pubica
R. pudendalis
R. trochanterica
R. antibrachii volaris
R. antibrachii radialis
R. antibrachii dorsalis
R. dors. manus
R. femoris anterior
R. femoris medialis
R. femoris anterior
R. femoris lateralis
R. patellaris
R. genu anterior
R. cruris anterior
R. cruris medialis
R. cruris medialis
R. cruris anterior
R. cruris lateralis
R. malleolaris medialis
Fossa retromalleolaris medialis
R. calcanea
R. digitorum pedis dorsalis
R. dorsalis pedis
R. dorsalis pedis

PLATE XII

Regions of the human body. Posterior aspect.


R. parietalis
R. temporalis
Reg. occipitalis
R. temporalis
R. mastoidea
R. auricularis
Fovea nuchae
Reg. nuchae
R. digitales dorsales
R. dorsalis manus
R. acromialis
Reg. suprascapularis
Reg. suprascapularis
R. acromialis
R. deltoidea
R. deltoidea
R. scapularis
dorsi
R. scapularis
R. brachii anterior
R. brachii lateralis
R. brachii posterior
R. cubiti lateralis
R. antibrachii radialis
R. antibrachii dorsalis
R. olecrani
R. brachii posterior
R. interscapularis
R. infrascapularis
R. infrascapularis
R. mediana
R. lumbalis
R. lumbalis
R. cubiti lateralis
R. coxae
R. coxae
R. sacralis
R. glutaea
R. glutaea
R. trochanterica
R. antibrachii ulnaris
R. antibrachii volaris
R. volaris manus
R. digitales volares
Reg. femoris posterior
Reg. femoris posterior
R. femoris lateralis
R. femoris medialis
R. femoris medialis
R. femoris lateralis
R. genu
R. genu
Fossa poplitea
Fossa poplitea
posterior
posterior
R. suralis
R. suralis
R. cruris posterior
R. cruris posterior
Fossa retromalleolaris lateralis
R. malleolaris lateralis
Fossa retromalleolaris lateralis
R. retromalleolaris lateralis
Fossa retromalleolaris medialis
R. calcanea
R. calcanea
R. plantaris pedis