A compendious treatise of anatomy: adapted to the arts of designing, painting, and sculpture, on ten folio copper-plates; and in which the external muscles and bones of the human body are represented as they appear in the best chosen attitudes, when cleared of the skin, the membrana adiposa, and the veins and arteries that lie on their surface.

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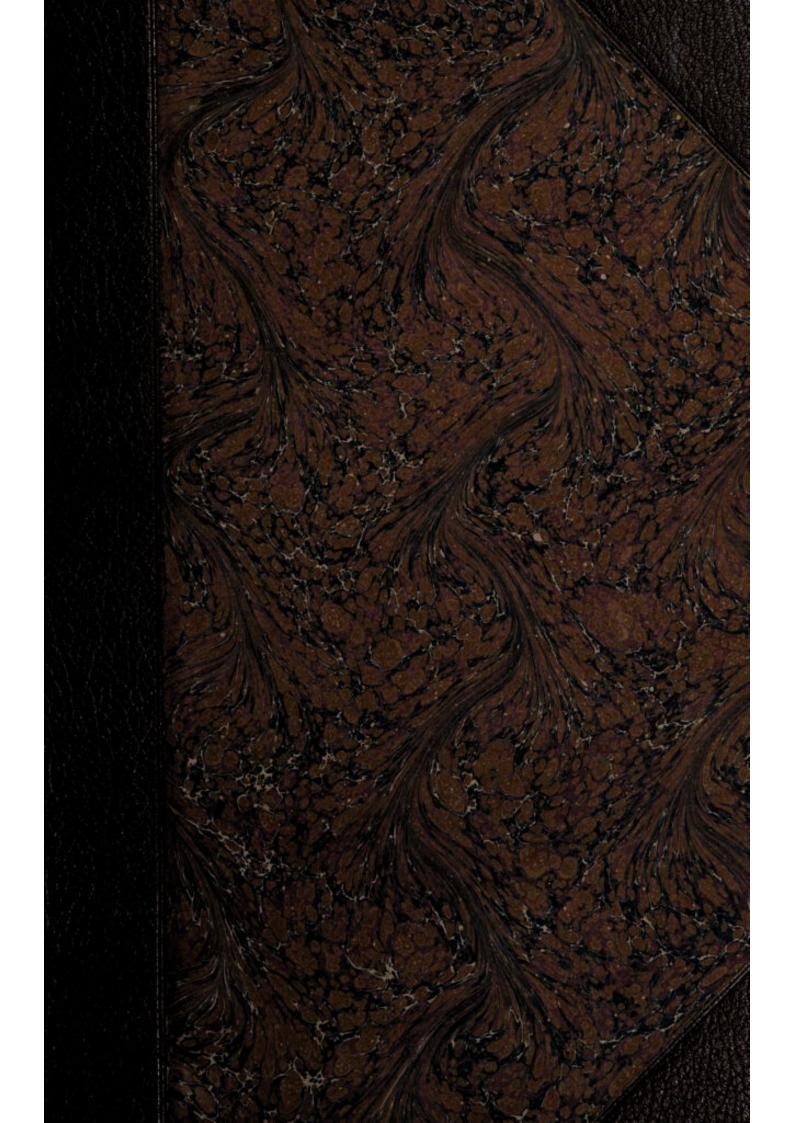
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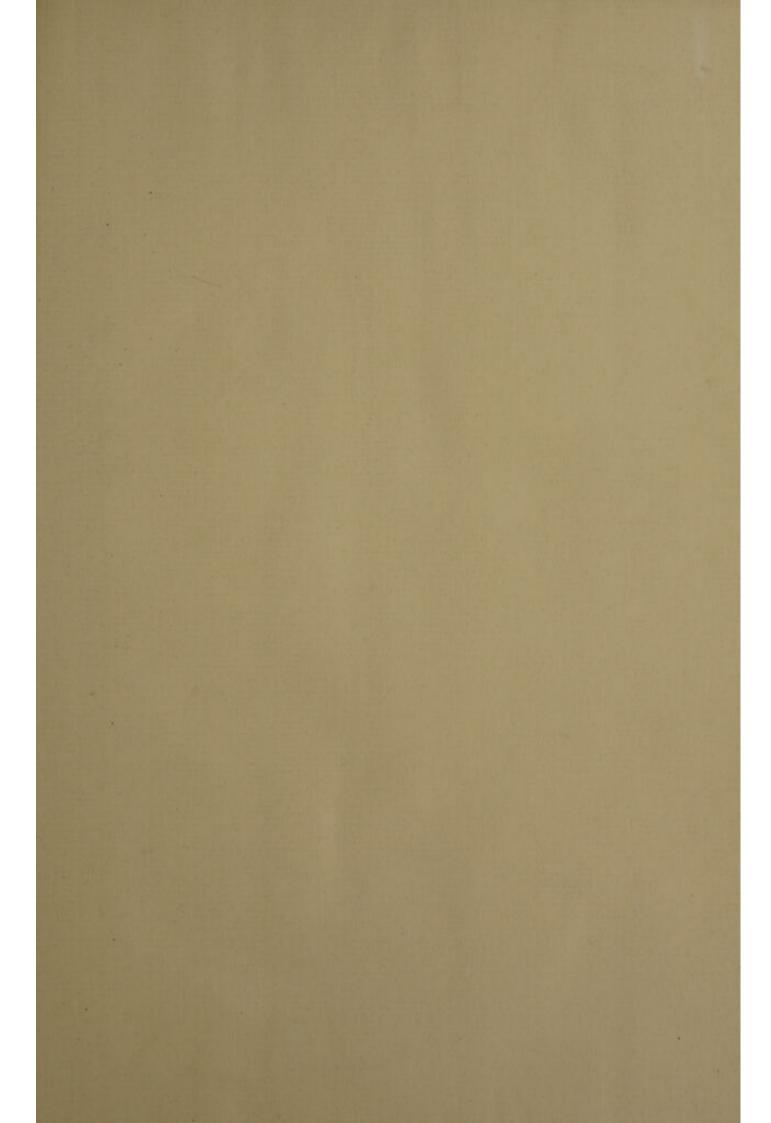
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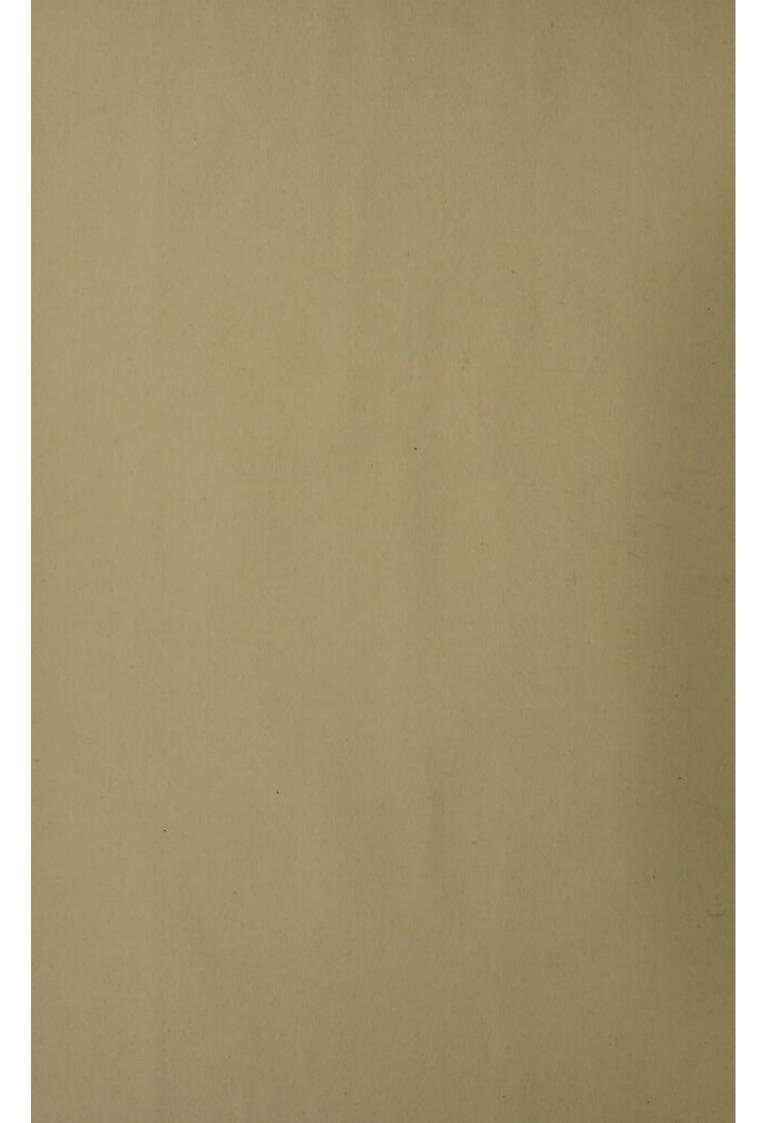


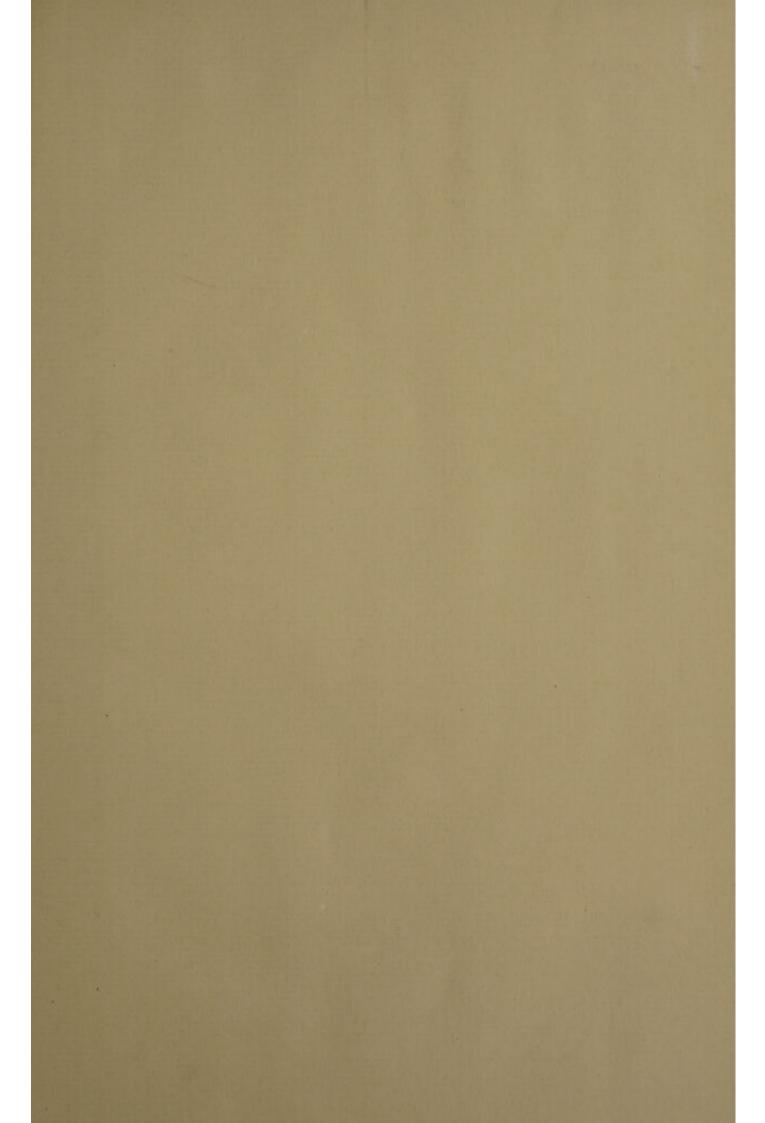
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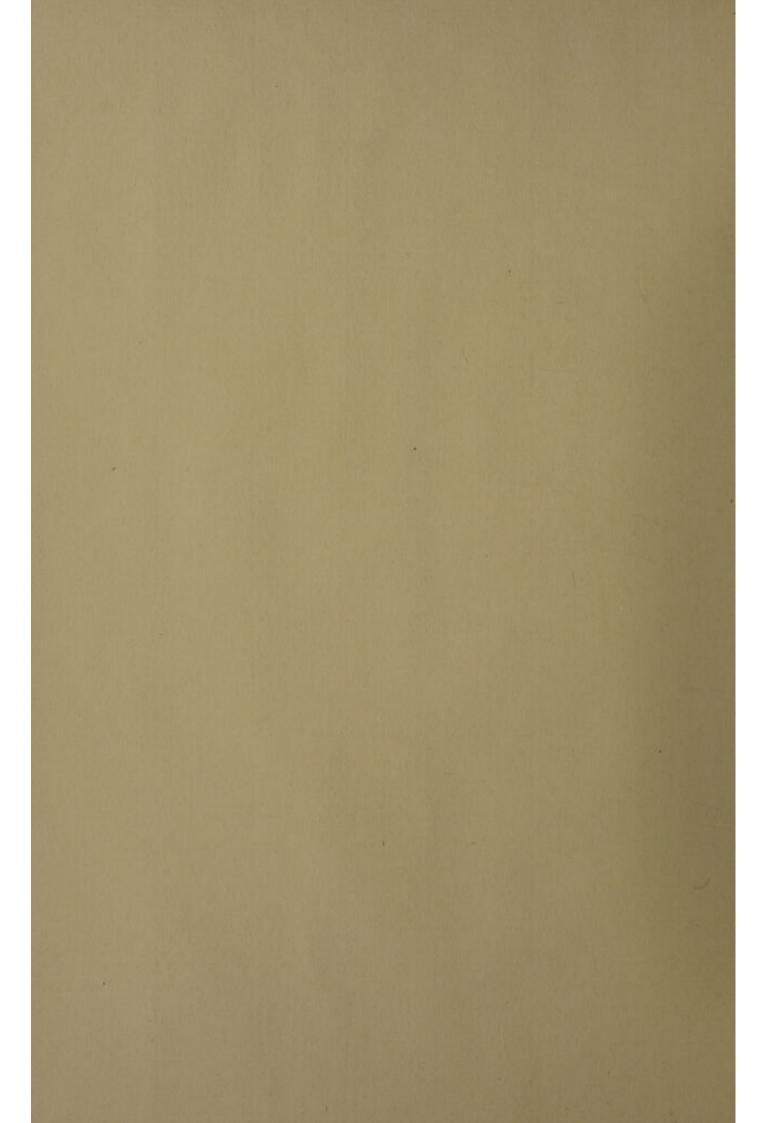


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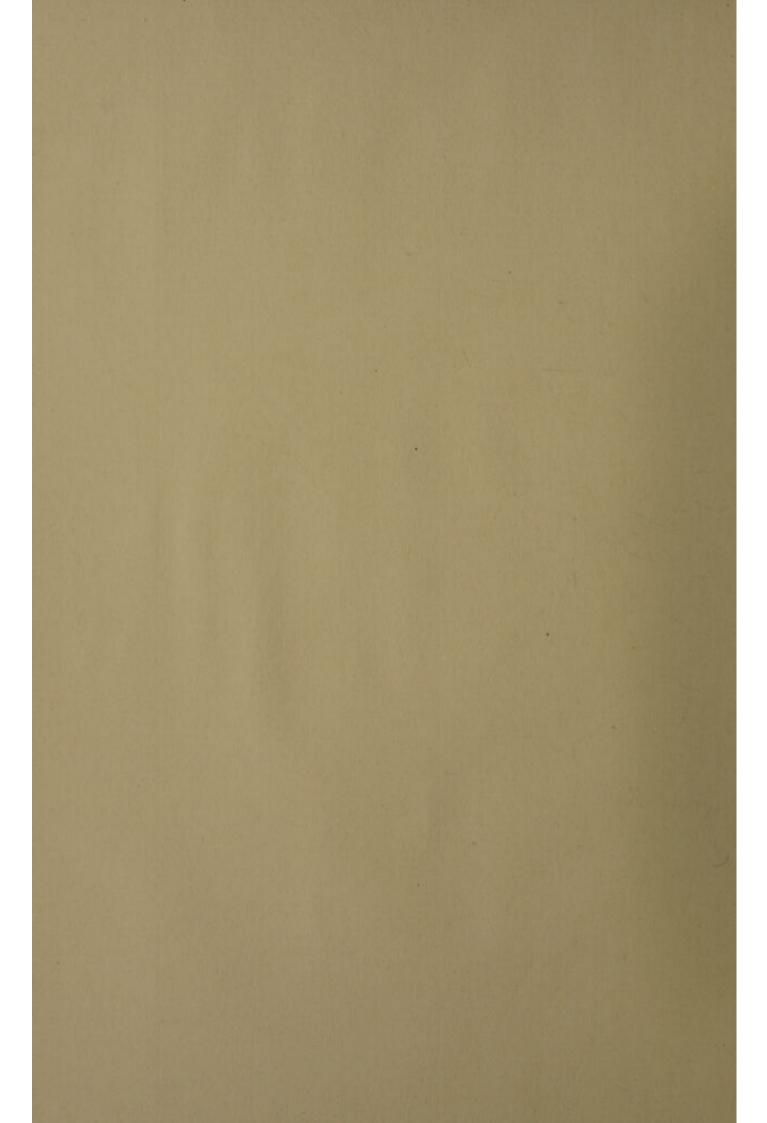




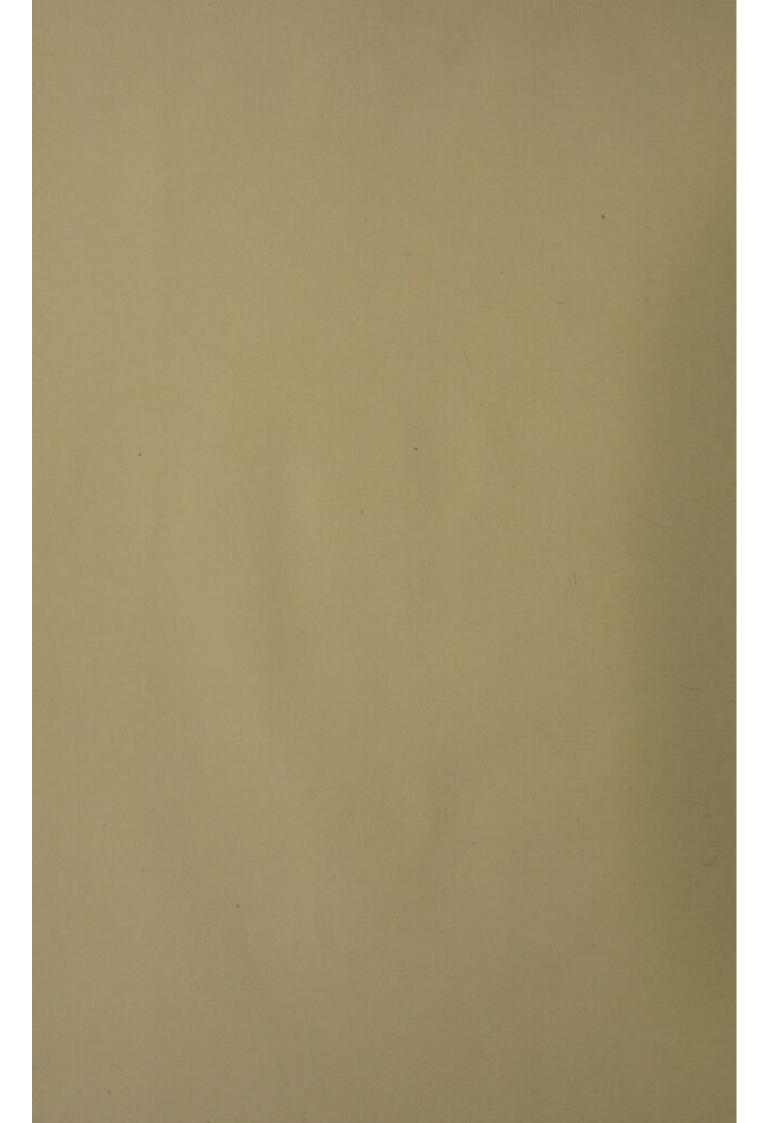


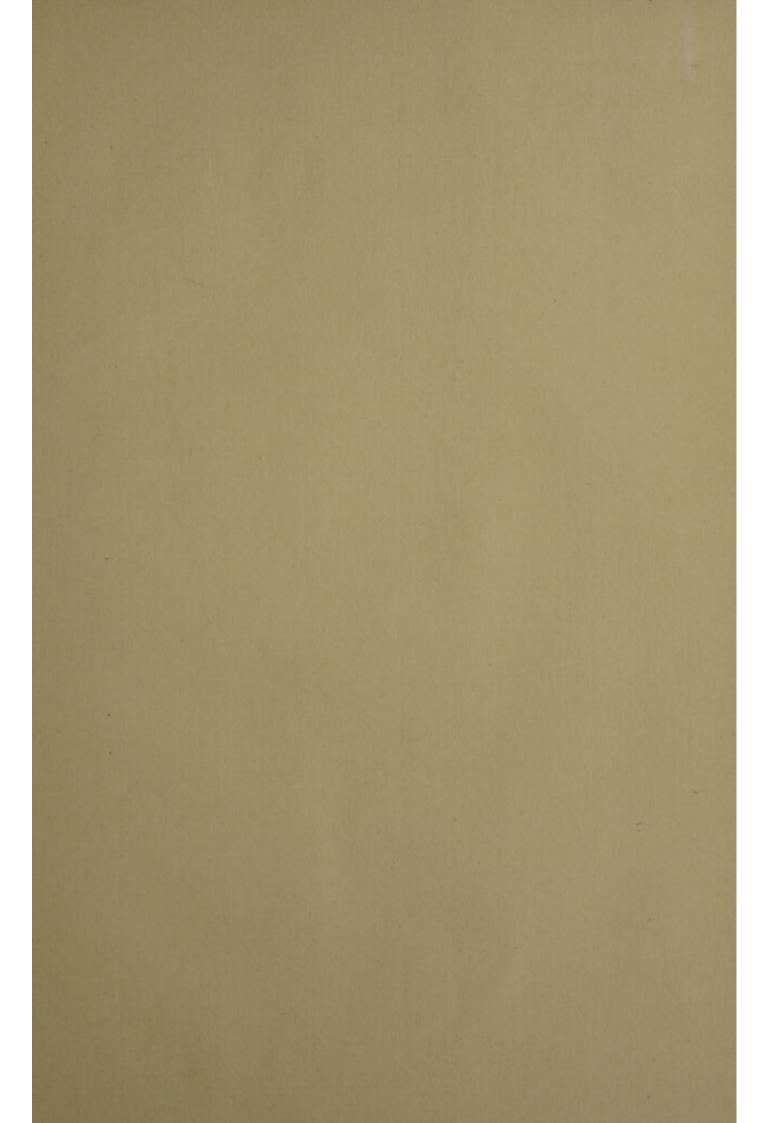


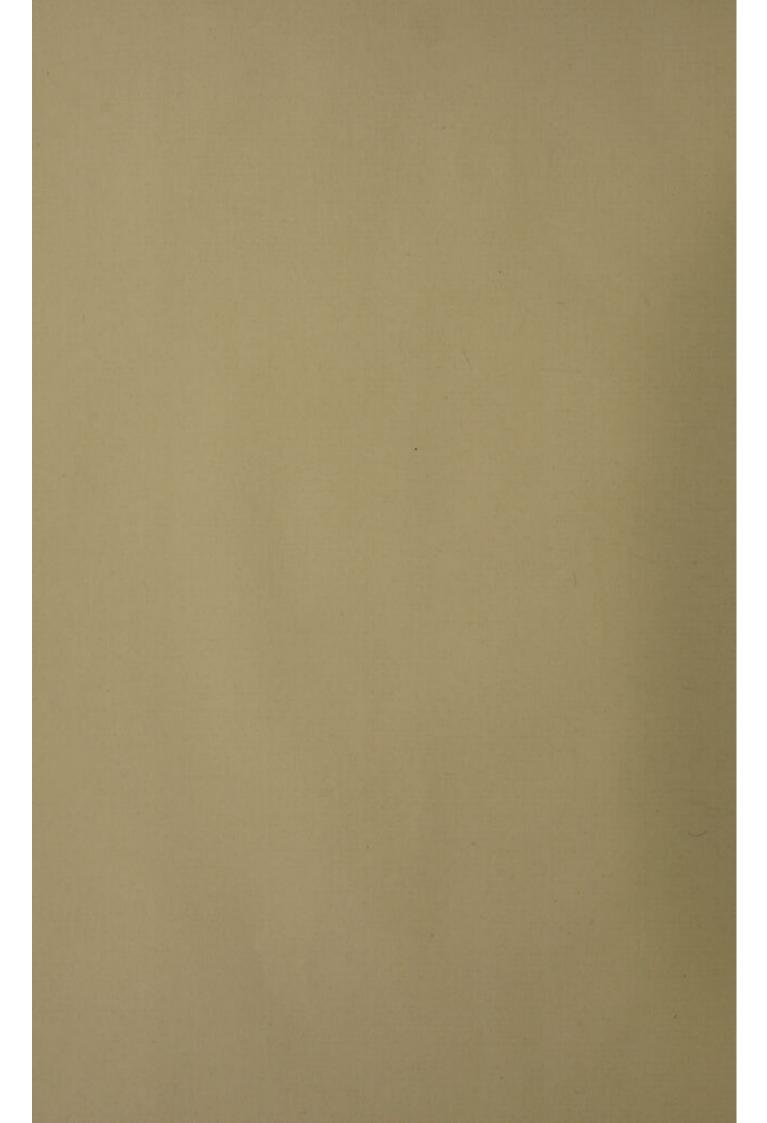


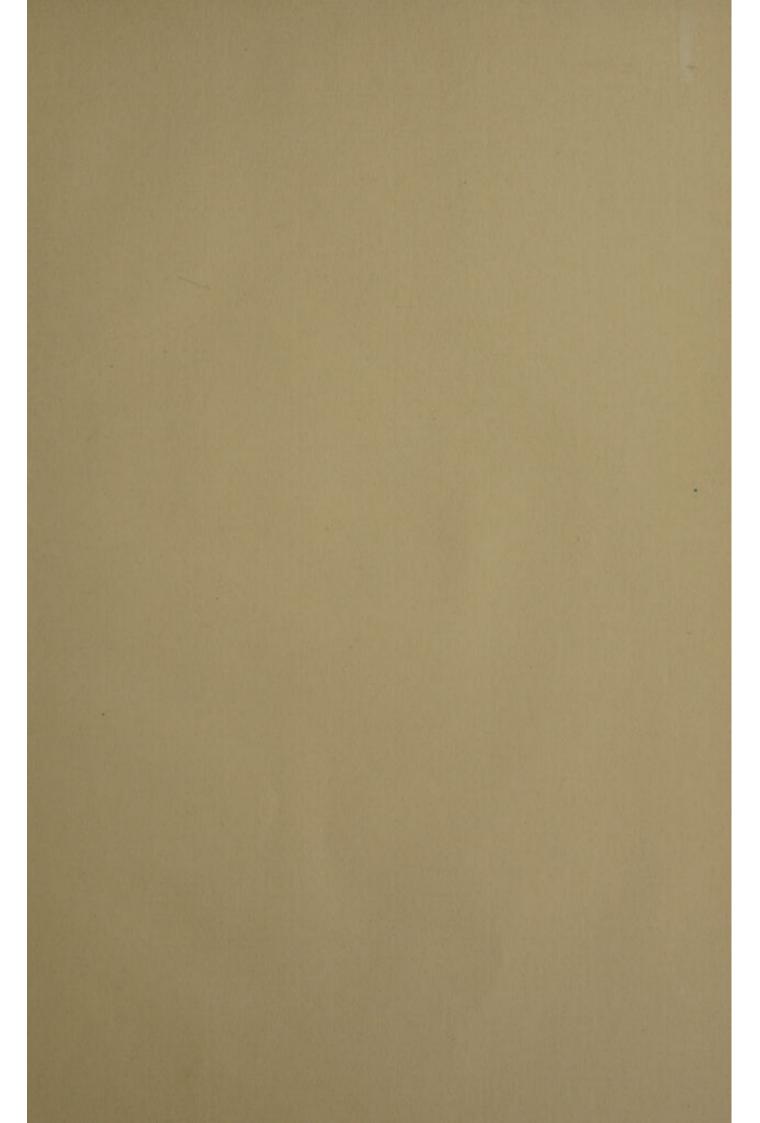


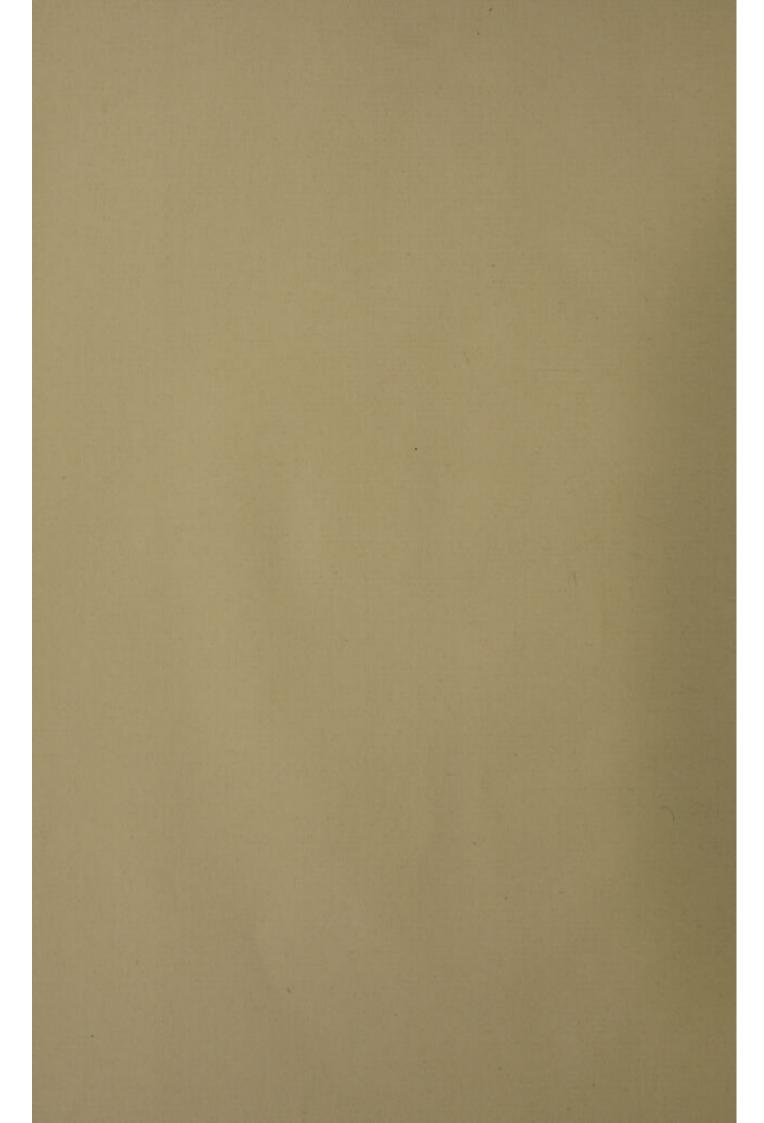


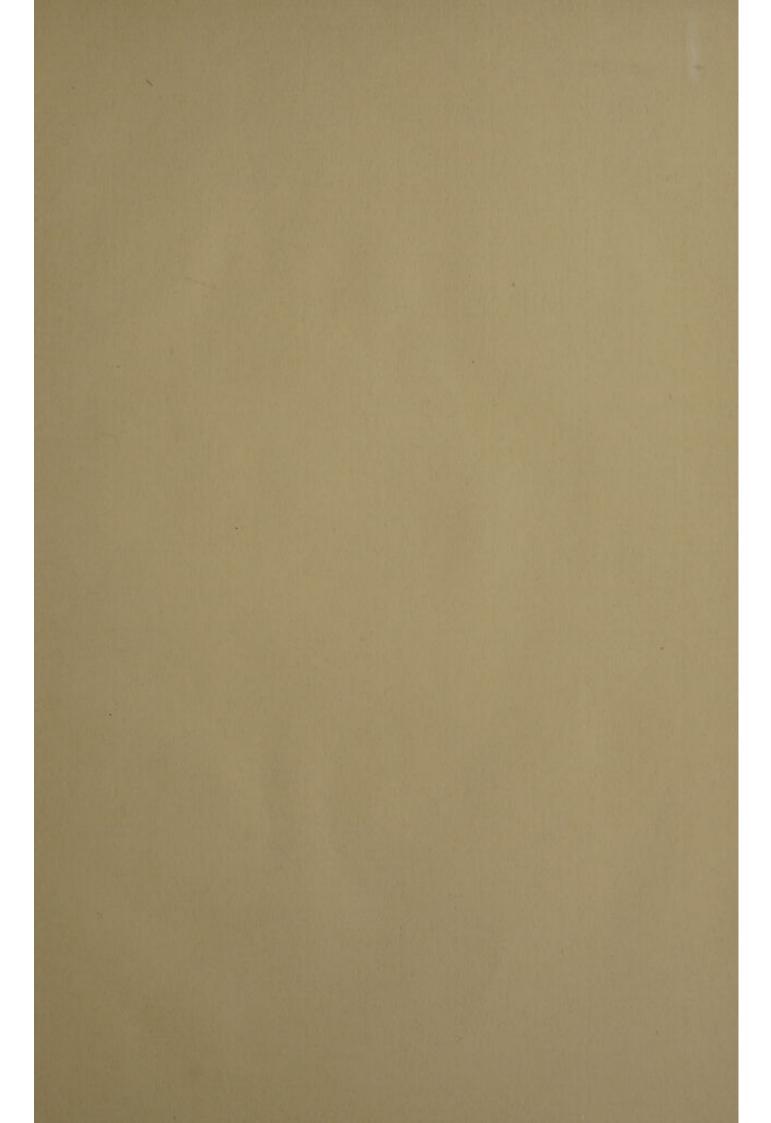


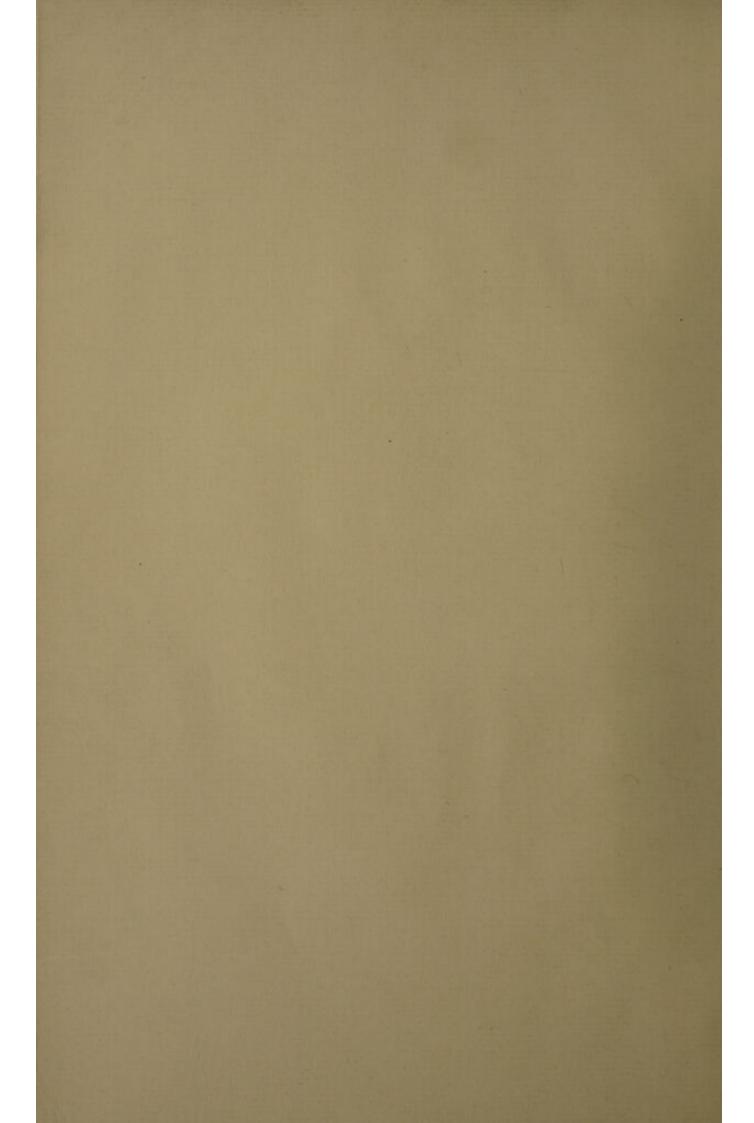












John 17 17 126.

COMPENDIOUS

TREATISE OF ANATOMY,

ADAPTED TO THE ARTS

OF

Designing, Painting, and Sculpture.

ON TEN FOLIO COPPER-PLATES.

IN WHICH THE

EXTERNAL MUSCLES OF THE HUMAN BODY

ARE REPRESENTED AT LARGE,

AS THEY APPEAR IN THE BEST CHOSEN ATTITUDES, WHEN CLEARED OF THE SKIN, THE MEMBRANA ADIPOSA, AND THE VEINS AND ARTERIES, THAT LIE ON THEIR SURFACE.

MOST ACCURATELY ENGRAVED FROM

THE BEST ANATOMICAL TABLES EXTANT.

WITH

A CONCISE, YET CLEAR,

EXPLANATION,

SHEWING

THEIR NAMES, ORIGIN, INSERTION, AND USE.

A WORK NOT ONLY VERY USEFUL, BUT ABSOLUTELY NECESSARY, TO PAINTERS, STATUARIES, AND ALL PROFESSORS OF DRAWING AND DESIGN;

AS WELL AS A"

PROPER INTO DUCTION TO THE STUDY OF ANATOMY, FOR THE USE OF YOUNG SURGEONS: AND WHICH IS, ALSO,
BOTH AN ORNAMENTAL AND INSTRUCTIVE ARTICLE OF FURNITURE FOR THE STUDIES
AND LIBRARIES OF THE CURIOUS.

BY J. TINNEY.

· LONDON:

PRINTED FOR RICHARD HOLMES LAURIE,

No. 53, FLEET STREET.

gring, Painting, and Benlytare. EXTERNAL MUNCHASTAR STREET E Grove wide of by hope Warn and River, Little Britain, Lordon.

PREFACE.

The human body being the most common, as well as most noble, subject of the arts of Statuary, Painting, Engraving, &c., some part of the Anatomy of it ought to be well understood by every one engaged in the practice of any of them, who is ambitious of attaining that perfection which is the foundation of a solid reputation.

The ancients had so great an opinion of the knowledge of Anatomy, that they thought it the most essential qualification of a good Painter or Statuary; and it was probably for the sake of shewing their skill in that useful science, that they generally made their figures naked; and, however faulty some of them are in other respects, they seldom fail of displaying a just disposition of the muscles, which gives a pleasing harmony, even to some of their worst performances.

But the opinion of the usefulness of this study has not been confined to the ancients only; several of the moderns have likewise been very sensible of the great consequence of it, particularly Michael Angelo, who understood it perfectly well, having himself dissected several subjects; and who thought a regular and just disposition of the muscles one of the principal beauties of a good picture; as we may judge by observing his works, where he always took care to mark the muscles justly, according to their appearance in the several actions. He was so fond of shewing his knowledge in this particular, that he made all his figures as if they were intended for the use of anatomists, hardly sparing his women and children. This, indeed, was carrying it to a fault, and what we ought to avoid; however, he deservedly gained a very great reputation in painting, and the study of his works may be of great service to us; only let us be careful to remember, that the muscles are covered with the common skin and fatty membrane, which occasion them to appear more or less smooth and round, according to the age, sex, and other circumstances, of the subject.

Beside Michael Angelo, there have been other masters who have possessed this knowledge in an eminent degree; as Raphael, Bacchio Bandinelli, Daniel Volterra, Pierrino Del Vaga, Rosso of Florence, Francisco Salviati, and several others, who have arrived at a firm grand manner of designing, by the assistance of Anatomy.

It may be thought, by some, unnecessary to load the mind with the intricate study of ANATOMY, and by that means run the hazard of falling into a hard and dry manner, when they can learn all that they want by drawing after the life; but, if they would consider the thing deliberately, they would soon be convinced of the contrary; and that it is impossible to make a perfectly true and just outline, even from the life itself, except by chance, without this knowledge; because, not knowing the office of the muscles, they cannot tell which ought to appear swelled, and which not; that depending on their office and action. The truth of what is here advanced will be evident, if we consider the nature of the muscles, and of muscular motion. A muscle is composed of a very great number of fleshy fibres, like threads, which run parallel to each other, and are wrapt up and kept together by one common membrane or skin: its middle is fleshy, and its origin and insertion generally tendinous; and this last being fixed to a bone, draws it towards the place of the origin of the muscle. When the muscles act, they contract in length, and appear to swell in thickness and breadth; so that, in every attitude, those muscles will seem most swelled, and their separation from the neighbouring muscles appear strongest, that act in bringing the body to that attitude, and continuing its motion, while the other muscles will appear comparatively flat. Now, if the model could continue any considerable time in the attitude wherein it is placed, with the same spirit as at first, a painter might do very well by drawing after the life; but, before you can well have sketched out your figure, the model grows weary, the muscles become languid and flat, and he is obliged to have recourse to a cord or staff to support himself in the attitude required: and then, although the body and limbs may remain nearly in the same position, yet the muscles that properly belong to the action are not the most swelled, but those that act in making use of the cord

or staff for the support. For instance, if you should set the model on one leg, on tip-toe, with one of the arms extended, you would find the muscles of the calf of the leg very strongly marked, the whole weight of the body, at that time, being borne by them; but, as the model would be unable to sustain himself long in that attitude, without some assistance, it would be found necessary to put something under the heel to support it, or to support the body by a cord, or some other method that should be found most convenient; and then there will be a very remarkable difference in the appearance of the muscles, those of the calf of the leg becoming flatter, while others in some part of the body or arms, which before were at rest, and which are useless in the simple action you at first proposed, will become swelled: besides, the muscles of that leg which supports the body will be much more strongly marked than those of the other: these differences a painter ought to be able to account for, and to treat accordingly. From this it must appear, that the knowledge of Anatomy is not useless, but, on the contrary, of very great advantage to a painter.

Before a young painter begins to draw after the life, he should draw after figures of plaister of Paris, till he has acquired a freedom of handling, and a tolerable knowledge of light and shadow: and then he should apply himself to the study of Anatomy, so far as it relates to his profession. By this method he will make a quicker progress in his drawing; will draw with boldness and certainty, without doubt or hesitation; will be able to judge of the reasons of the different appearances of the body; will know with certainty some of the greatest beauties of a good performance, and make a proper use of them; and will profit more in drawing after the life in one season, than otherwise he could do in many years. However, I would not be supposed to think that the knowledge of Anatomy is sufficient of itself to produce a perfect figure, without the addition of a good taste, beautiful nature, and the proportions of the antique; but with these assistances it will be of infinite service.

One reason why Anatomy is not so much studied by painters, &c. as it deserves, is, the want of proper assistances on the subject, especially in our language: I don't mean that there are not English authors who have treated it in a learned and judicious manner; but that what they have written, being intended for the use of physicians and surgeons only, contains so much more than is absolutely necessary for a painter, that it requires by far too much pains to select what is needful to him, from those innumerable minute parts of the body which belong not to his art. To remove this difficulty was the reason of composing these few sheets, which contain the external muscles of the human body, explained in so concise and clear a manner, that, whoever will apply himself attentively to them for a short time, may attain such a knowledge of Anatomy as will be of vast service to him in the prosecution of his studies: for he may thereby render himself a perfect master of that very branch which immediately answers his occasion.

The best method a young painter can follow in his study of Anatomy is, to learn the shape, proportion, situation, and manner of the joining of the bones to one another; their names; the shape and situation of the muscles; their names, their origin, their insertion, and their use; then to compare them with some anatomical figure of plaister of Paris, (of which sort there is an excellent one done by Mr. Roubillac,) and to draw from it on every side; and, lastly, to compare it with the life, by setting a very muscular man in such attitudes as will best shew the muscles you are in any doubt about.

In this work, two of the skeletons are taken from Vesalius, the other from Cowper; the first three figures are likewise from Vesalius, and were drawn by Titian for the use of painters; the other figures are taken (with a little alteration) from Cowper, who affirms that their outlines are taken from the best masters, and the muscles laid in from the life. These figures are cleared of the skin, the fatty membrane, the nerves, and the veins and arteries, that appear on the surface of the body, in order to shew the muscles more plainly; and, if studied with attention, will be of very great service to young painters, statuaries, engravers, and all others who would arrive at perfection in the arts of drawing and designing.

EXPLANATION

OF

Plates I, II, and III.

In the Structure of the Human Body, the Bones are what sustain and support it, as its Foundation; and the Muscles are the Parts that move the Bones. The Bones join one another, either in the manner of a Socket and Ball, or else like a Hinge; and the Muscles being fixed to them, that is, their Origin to one and their Insertion to another, when they act, become shorter, and by that Means draw those Bones different Ways, proper to the Uses Nature has designed them for. The Skeleton or Bones ought to be first well understood; their Length and Size determining the Measure of the several Parts of the Body; and, without knowing their Proportion and Situation, we shall not be able to cover them properly with the Muscles, and so make a just and well-proportioned Figure.

In this short Work, we shall not enlarge farther on the Explanation of the Bones, than to give their Names, and mark out some particular Parts, where the Origin and Insertion of the Muscles are. However, so much ought to be understood, and you would do well to examine them with a real Skeleton, before you proceed to the Study of the Muscles.

- A. Os Frontis, or Bone of the Forehead.
- B. Ossa Bregmatis.
- C. Os Temporum.
- D. Os Occipitis, or Back Part of the Head.
- a. The Mastoide Process.
- E. Os Jugale.
- F. The Upper Jaw.
- G. The Lower Jaw.
- H. The Clavicula, or Collar Bone.
- I. The Sternum, or Breast Bone.
- K. The seven Vertebræ of the Neck.
- L. The twelve Vertebræ of the Ribs.
- M. The five Vertebree of the Loins.
- 1, 2, 3, 4, 5, 6, 7. The seven True Ribs.
- 8, 9, 10, 11, 12. The five False Ribs.
- N. The Scapula, or Shoulder-Blade.
- b. The Coracoide Process of the Scapula.
- c. The Acromium of the Scapula.
- d. The Spine of the Scapula.
- e. The Base of the Scapula.
- O. The Humerus, or Bone of the Arm.
- f. The Head of the Humerus.
- g. A Sulcus, or Furrow, in which passes one of the Heads of the Biceps.
- h. The outer Protuberance of the Humerus; from which arise the Muscles that extend the Wrist and Fingers.
- The inner Protuberance; from which arise the Muscles that bend the Wrist and Fingers.
- P. The Radius.

 Q. The Ulna.

 The Bones of the Fore-Arm.

- k. The Olecranon, or Tip of the Elbow.
- R. The Bones of the Carpus, or Wrist.
- S. The Bones of the Metacarpus, or Hand.
- T. The Bones of the Thumb.
- U. The Bones of the Fingers.
- W. Os Sacrum.
- X. Os Coccygis.
- Y. Os Ilium.
- 1. The Spine of the Ilium.
- Z. Os Ischium.
- m. The obtuse Process of the Ischium.
- A. Os Pubis.
- B. The Femur, or Thigh-Bone.
- n. The Head of the Femur.
- o. The great Trochanter.
- p. The lesser Trochanter.
- q. The Linea Aspera, or Spine of the Femur.
- r. The inner Protuberance of the Femur.
- s. The outer Protuberance of the Femur.
- C. The Patella or Knee-Pan.
- D. The Tibia, the largest Bone of the Leg.
- E. The Fibula.
- t. The lower Appendix of the Tibia, or inner Ankle.
- The lower Appendix of the Fibula, or outer Ankle.
- F. The Os Calcis, or Bone of the Heel.
- G. The Tarsus, or Instep, composed of six Bones besides the Os Calcis.
- H. Bones of the Metatarsus, or Foot.
- I. Bones of the Toes.

N.B. This Explanation serves for all the three Plates of Skeletons, the Letters of Reference being the same in them all.

EXPLANATION OF PLATE IV.

NAME.

- Sternohyoidæus.
 Mastoidæus, Pl. V.
 Trapezius, Pl. VI.
- 4. Pectoralis.
 5. Deltoides, Pl. V.
- 6. Biceps.
- 7. Brachizeus internus. This is part-ly covered by the Biceps, and is marked with two Figures, to pre-vent its being mistaken for two Muscles.
- 8. Gemellus, Pl. VI.
- 9. Pronator rotundus.
- 10. Supinator Radii longus.
- 11. Flexor Carpi radialis.
- 12. Flexor Carpi ulnaris.
- 13. Palmaris.
- 14. The Mass of Flesh that appears under the Flexor Carpi radialis, and the Palmaris, is composed of the Perforatus and Perforans.
- Extensor Carpi radialis, Pl. V.
 Extensor Pollicis, Pl V.
 Serratus Major anticus, Pl. V.
 Obliquus descendens, Pl. V.

- 22. Rectus.
- 31. Triceps.
- 32. Membranosus, Pl. V.
- 23. Sartorius.
- 34. Gracilis, Pl. VI.
- S. Rectus Femoris.
- 29. Vastus externus.
- 40. Vastus internus.
- 41. Tibialis anticus.
- 42. Gasterocnemius, PLVI.
- 43. Solæus, Pl. VI
- 44. Peronœus, Pl. V. 45. Extensor Digitorum Pedis.

ORIGIN AND INSERTION.

- Arises from the Sternum and the Clavicula; and is inserted into the Base of the Os Hyo-
- Ariseth from Part of the Clavicula, from the Sternum, and from the six upper Ribs; and is inserted by a strong Tendon into the Hu-merus, four Fingers' breadth below its Head.
- 6. Hath two heads; one of which arises from the upper Edge of the Scapula, the other from the Processus Coracoides of the Scapula:

 They both unite about the Middle of the Arm, and make one Belly, which is inserted by a strong round Tendon into the Tuberosity at the Upper End of the Radius.
- 7. Ariseth from the Middle and Internal Part of the Humerus; and is inserted into the upper and fore Part of the Ulna.
- Ariseth from the inner Protuberance of the Humerus, where those bending the Wrist and Fingers arise: and descends obliquely to its Insertion, a little above the middle of the Radius.
- 10. Ariseth a little-above the outer Protuberance of the Humerus; and is inserted into the lower Part of the Radius.
- Ariseth from the inner Protuberance of the Humerus, and upper Part of the Ulna; and is inserted into the first Bone of the Metacarpus, that sustains the Fore-Finger.
- 12. Ariseth from the inner Protuberance of the Humerus, and is inserted into the inner little Bone of the Wrist.
- 13. Ariseth from the inner Protuberance of the Humerus; and, passing by a slender Tendon to the Palm of the Hand, expands itself, and is inserted into the Bones of the Metacarpus, and into the first Bones of the Fingers.
- 14. The Perforatus ariseth from the inner Protu-The Perforatus ariseth from the inner Protu-berance of the Humerus, and from the Radius, and is divided into four Tendons, which are inserted into the second Bones of the four Fin-gers. Just above their Insertion, they are perforated or split, to give a Passage to the Tendons of the Perforans, which arises from the upper Part of the Ulna, and is likewise di-vided into Four Tendons, which pass through the Perforations just mentioned, and are in-serted into the third Bones of the four Fingers.
- Ariseth from the Sternum, and the two last true Ribs; and is inserted into the Os Pubis.
- 31. Hath its Name from its having three Heads:
 The first and second of them arise from near
 the Articulation of the Os Pubis, and the third
 from the Tubercle of the Ischium: They are
 inserted all along the Spine of the Femur.
- 33. Arises from the upper and fore Part of the Spine of the Ilium, and, descending obliquely over the Thigh, is inserted into the inner and upper Part of the Tibia.
- Ariseth from the lower Part of the Spine of the Ilium, and is inserted with the two follow-ing Muscles.
- Ariseth from the great Trochanter, and exter-nal Part of the Femur, and is inserted with the former and following Muscles.
- 40. Ariseth from the lesser Trochanter, and internal Part of the Femnr: This and the last two Muscles, just above the Knee, make one strong Tendon, which passes over the Patella, to which it adheres; and is inserted into the upper Part of the Tibia.
- Ariseth from the upper and outer Part of the Tibia, and is inserted into the inner Os Cunei-forme, and Os Metatarsi.
- 45. Ariseth from the upper Part of the Tibia, and 45. Extends the Toes. is inserted into the Bones of the Toes.

USE.

- Draws the Os H yoides downwards.
 The Action of this Muscle is hardly perceivable.
- 4. Draws the Arm forwards.
- 6. Bends the Fore-Arm.
- 7. Bends the Fore-Arm.
- 9. When this Muscle acts, it turns the Palm of the Hand downwards.
- 10. Turns the Palm of the Hand upwards.
- 11. Bends the Wrist.
- 12. Bends the Wrist and little Finger.
- Hends the Wrist and little Finger.
 Helps the Hand to grasp any thing closely.
 N.B. The Muscles of the Fore-arm are never so strongly marked as when the Hand is shut, or grasps something with all its Strength; because then the internal Muscles acting, the external ones are swellacting, the external ones are swelled more than ordinary.
- 14. These Muscles bend the Fingers.
- 22. Raises the Body when we lie on the Back, and sustains it when it is bent backwards. It bath three or four nervous or tendinous Intersecfour nervous or tendinous Intersections or Bands, which divide it,
 and make it appear like several
 Muscles. The third of these Bands
 is not in every Body exactly in
 the same Place; it being sometimes
 even with the Navel, and sometimes higher. Sometimes there is
 one of these Bands below the Navel; but it is not so in all Bodies.
 31. Pulls the Thigh inwards.
- 33. Crosses the Legs in the manner Tailors are used to sit; whence it
- has its name.
- These Muscles extend the Leg When a Figure stands upright, and rests on one Leg, there appear above the Knee certain Swellings, which are made by the Tendon of these three Muscles and the Skin. As soon as the Knee beads, they disappear.
- 41. Bends the Foot.

EXPLANATION OF PLATE V.

NAME.

- Mastoidæus.
 Trapezius, Pl. VI.
- 5. Deltoides.
- Biceps, Pl. IV.
 Brachiæus internus, Pl. IV.
 Gemellus, Pl. VI.
- 9. Pronator rotundus, Pl. IV.
 10. Supinator Radii longus, Pl. IV.
 11. Flexor Carpi radialis, Pl. IV.
 12. Flexor Carpi ulnaris, Pl. IV.
 13. Palmaris, Pl. IV.
 15. Extensor Carpi radialis.

- 16. Extensor Carpi ulnaris.
- 17. Extensor Pollicis.
- 18. Extensor Digitorum.
- 19. Extensor minimi Digiti.
- 20. Serratus major anticus.
- 21. Obliquus descendens.
- 23. Latissimus dorsi.
- 24. Teres major.
- Infraspinatus.
 Glutæus major, Pl. IV.
 Glutæus medius, Pl. VI.

- 30. Glutæus medius, Pl. VI.
 32. Membranosus.
 33. Sartorius, Pl. IV.
 34. Gracilis, Pl. VI.
 35. Biceps Femoris, Pl. VI.
 36. Seminervosus, Pl. VI.
 37. Semimembranosus, Pl. VI.
 39. Vastus externus, Pl. IV.
 40. Vastus internus, Pl. IV.
 42. Gasterocnemius, Pl. VI.
 43. Solæus, Pl. VI.
 44. Peronæus.

- 44. Peronæus.

ORIGIN AND INSERTION.

- 2. Ariseth from the Sternum, and Part of the Clavicula; and is inserted into the outer Part of the Mastoide Process
- 5. Ariseth from Part of the Clavicula, and from the Acromium and Spine of the Scapula: It is composed of several Lobes or Parcels of Flesh; which all join in one Tendon, and are inserted into the Humerus, four Fingers' breadth below its Head.
- 15. Ariseth from the outer Protuberance of the Humerus, and is inserted into the Bones of the Metacarpus, that sustain the fore and middle Fingers.
- Ariseth from the outer Protuberance of the Humerus, and is inserted into the Bone of the Metacarpus, which sustains the little Finger.
- 17. Ariseth from the hinder Part of the Middle of the Radius and Ulna; and, passing obliquely over the Tendon of the Extensor Carpi radialis, is inserted by two or three Tendons into the Bones of the Thumb.
- 18. Ariseth from the outer Protuberance of the Humerus, and from the hinder Part of the Radius and Ulna. At the Wrist it divides into three Tendons, which are inserted into the Bones of the first three Fingers.
- 19. Ariseth from the outer Protuberance of the Humerus, and from the upper Part of the Ulna; and is inserted into the third Bone of the little Finger.
- 20. Ariseth from the six lower true Ribs, and from the first, and sometimes second, of the false the first, and sometimes second, of the false
 Ribs, by so many distinct Portions, resembling the Teeth of a Saw; and is inserted into
 the Base of the Scapula. You see but Part
 of this Muscle; the rest being covered by the
 Pectoralis.

 21. Ariseth from the two last true and five false
 Ribs, by five or six Digitations, the four uppermost of which lie between the Teeth of the
 serratus major antiques. It likewise assists
 in Respiration in extraordinary
 Difficulties. In this Case the
 Scapula is drawn upwards, and
 being so fixt, this Muscle, then
 acting, raises the Ribs.

 21. Assists in Expiration, and occasionally in discharging the Stomach and Belly of its Contents.
- Ribs, by five or six Digitations, the four up-permost of which lie between the Teeth of the serratus major anticus. It descends obliquely by a broad and very thin Tendon; and, passing under the Rectus, is inserted all along the Linea alba, to the upper and fore Part of the Spine of the Ilium, and to the fore Part of the Os Pubis.
- 23. Arises from the hinder Part of the Spine of the Ilium, from the upper Spine of the Os sacrum, from the Spines of all the Vertebræ of the Loins, and from the seven lower ones of the Back. It passes by the lower angle of the Scapula, to which some of its Fibres are fixed; and joining with the Teres major, is inserted with it into the Humerus, three Fingers' breadth below its Head.

 23. Helps to draw the Arm downwards, This Muscle, at its Origin, is so thin, that it does not hinder your seeing the Action of the Muscles that are underneath it; but towards its Insertion, becomes very thick and fleshy.
- 24. Ariseth from the lower Angle of the Scapula, and is inserted into the Humerus, with the Latissimus Dorsi.
- Ariseth from the Cavity below the Spine of the Scapula; and, filling that Cavity, is inserted into the Humerus, a little below its Head.
- 32. Ariseth from the upper and fore Part of the Spine of the Ilium: Its fleshy Part terminates at the great Trochanter, where its membranous Part begins, and spreading itself over the Muscles of the Thigh, passes to its Insertion, on the upper Part of the Tibia.
- 44. Arises from the upper and outer Part of the Fibula; and, passing under the Channel of the outer Ankle, is inserted into the outer Bone of the Metatarsus.

USE.

- 2. Draws the Head downwards and sideways.
- 5. Raises the Arm, and assists it in every Motion, except that of depressing it.
- 15. Extends the Wrist.
- 16. Extends the Wrist.
- 17. Extends the Thumb.
- 18. Extends the Fingers.
- 19. Extends the little Finger.
- Draws the Scapula forwards and downwards. It likewise assists
- Helps to draw the Arm down-wards, and obliquely backwards. This Muscle, at its Origin, is so thin, that it does not hinder your seeing the Action of the Muscles that are underneath it; but to-wards its Insertion, becomes very thick and fleshy.
- 24. Helps to draw the Arm downwards and backwards.
- 25. Draws the Arm downwards and backwards.
- 32. Draws the Leg and Thigh outwards.

EXPLANATION OF PLATE VI.

NAME.

- 2. Mastoidæus, Pl. V.

- Trapezius, or Cucullaris.
 Deltoides, Pl. V.
 Brachiæus internus, Pl. IV.
- S. Gemellas.
- · Anconseus.
- Anconæus.

 10. Supinator Radii longus, Pl. IV.

 12. Flexor Carpi ulnaris, Pl. IV.

 15. Extensor Carpi radialis, Pl. V.

 16. Extensor Carpi ulnaris, Pl. V.

 17. Extensor Pollicis, Pl. V.

 18. Extensor Digitorum, Pl. V.

 19. Extensor minimi Digiti, Pl. V.

 23. Latissimus Dorsi, Pl. V.

 24. Teres major, Pl. V.

 25. Infraspinatus, Pl. V.

- 26. Splenius.
- 27. Sacrolumbaris.
- 28. Longissimus Dorsi.
- 29. Glutzeus major.
- 30. Glutæus medius.
- 31. Triceps, Pl. IV.
 32. Membranosus, Pl. V.
 33. Sartorius, Pl. IV.
- 34. Gracilis.
- 35. Biceps Femoris.
- 36. Seminervosus.
- 37. Semimembranosus.
- 42. Gasterocnemius.
- 43. Solæus.

ORIGIN AND INSERTION.

- 3. Arises from the hinder Part of the Head from the Spines of the Vertebræ of the Neck, and the eight upper ones of the Back; and is in-serted into the Spine and Acromium of the Scapula, and the Clavicula.
- This may likewise be called Triceps Brachia-lis; it being composed of the Brachiæus ex-ternus, which arises about the middle and hinder Part of the Humerus; the Musculus longus, which arises from the lower Side of the Scapula, and the Musculus brevis, which arises from the hinder part of the Humerus. These three join together, and make one Tendon, which covers the Elbow, and is inserted into the hinder part of the Olectanium.
- Ariseth from the back Part of the outer Pro-tuberance of the Humerus; and is inserted into the Ulna, four Fingers' breadth below the Olecranium.
- Ariseth from the three lower Vertebræ of the Neck, and five upper ones of the Back, and is inserted above the Mastoide Process.
- 27. Ariseth from the upper Part of the Os Sacrum and back part of the Spine of the Ilium; and is inserted into the back Part of the Ribs, near their Root.
- 28. Ariseth from the same Origin as the last Mus-cle, and is inserted partly into the Processes of the Vertebræ of the Back and partly into
- Arises from the external Surface of the Ilium and Ischium, from the Os Coccygis and Os Sacrum, and is inserted into the Thigh-Bone, a Hand's breadth below the great Trochanter.
- 30. Ariseth from the external Surface of the Ilium and Ischium, and is inserted into the great Trochanter.
- 34. Ariseth from the Os Pubis, near its Articulation, and is inserted into the upper and inner Part
- 35. Has two Heads; one of which arises from the Tuberosity of the Ischium, the other from the Linea aspera of the Thigh-bone; they both join together, and are inserted by one Tendon into the upper Part of the Fibula.
- 36. Ariseth from the hinder Protuberance of the Ischium, and is inserted into the inner Part of the Tibia, below its Articulation with the
- S7. Ariseth from the upper Protuberance of the Ischium, and is inserted into the upper and back Part of the Tibia.
- 42. Has two distinct fleshy Originations, from the hindermost Part of the two Protuberances of the Thigh-Bone. In their Descent they are dilated into two fleshy Bellies, the innermost of which is thickest and largest; and, joining each other, make a broad strong Tendon, which joins with the Tendon of the Solæus, and is inserted with it. and is inserted with it.
- 43. Arises from the upper and back Part of the Tibia and Fibula, and increases to a large fleshy Belly, which lies under the Gasterocnemius; and, terminating in a very strong Tendon, (which by some is called the Cord of Achilles.) is inserted into the hinder Part of the Os Calcis.

USE.

- Moves the Scapula upwards, back-wards, and downwards. This Muscle, passing over the Scapula, contributes very much to give a certain roundness which we see in that Part.
- S. Extends the Arm.
- . Helps to extend the Arm.
- 26. Draws the Head backwards and sideways.
- These Muscles keep the Body erect, bend it backwards, and sustain it when it is bent for-wards; and when they act only on one side, they draw the Body
- sideways. Although these last three Muscles are entirely covered by the Trapezius and the Latissimus Dorsi, their Action and Shape appear very plainly.
- 29. Extends the Thigh;
- 30, Helps to extend the Thigh.
- 34. Helps to bend the Leg, and assists in bringing it and the Thigh in-
- Helps to bend the Leg, and is like-wise employed in turning the Leg and Foot outward, when we sit
- 37. Helps to bend the Leg.

 These last four Muscles, which bend the Leg, generally act together, and make one Mass, as if they were but one Muscle; especially about the middle of the Thigh.

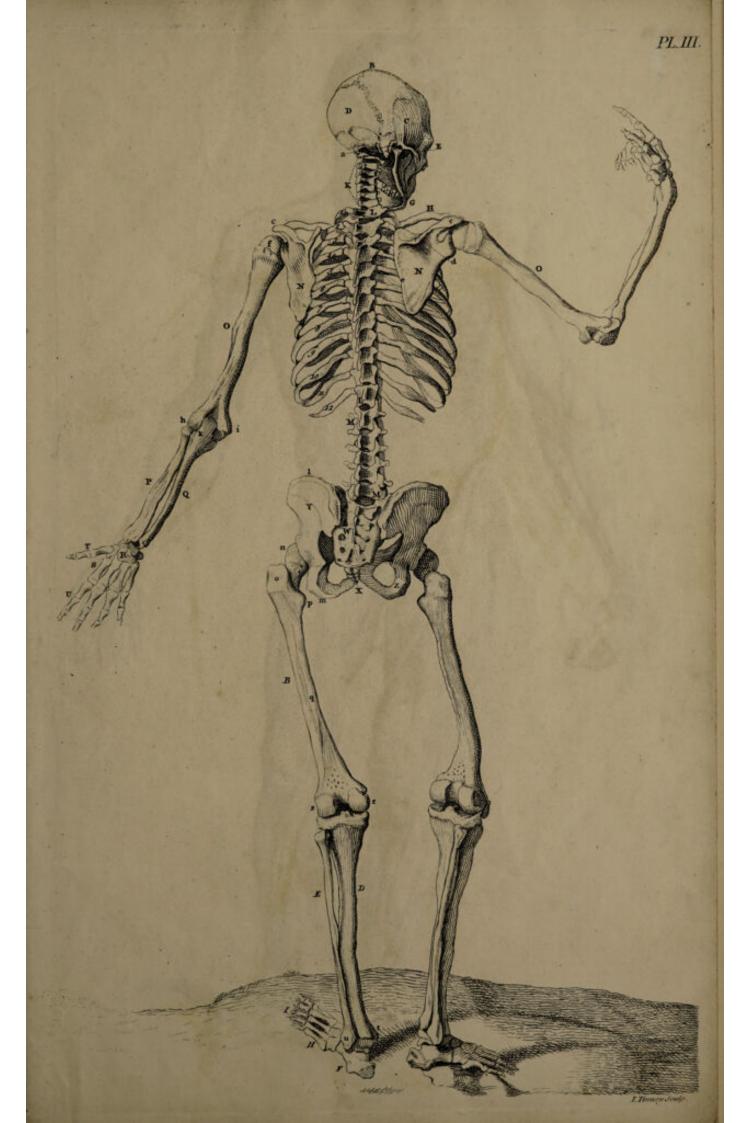
They extend the Foot. The Action of these Muscles is very necessary in walking, running, leaping, and standing on Tiptoe; and those who walk or run much, or who carry heavy burdens, have these Muscles larger than others.

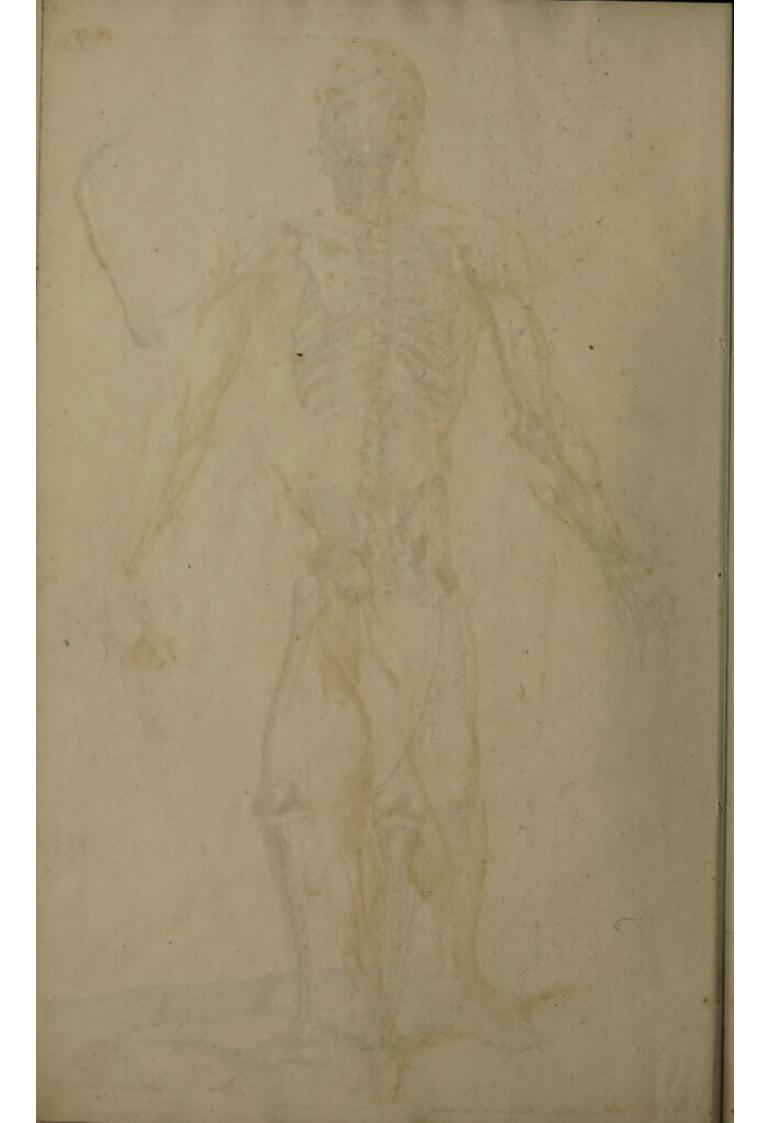


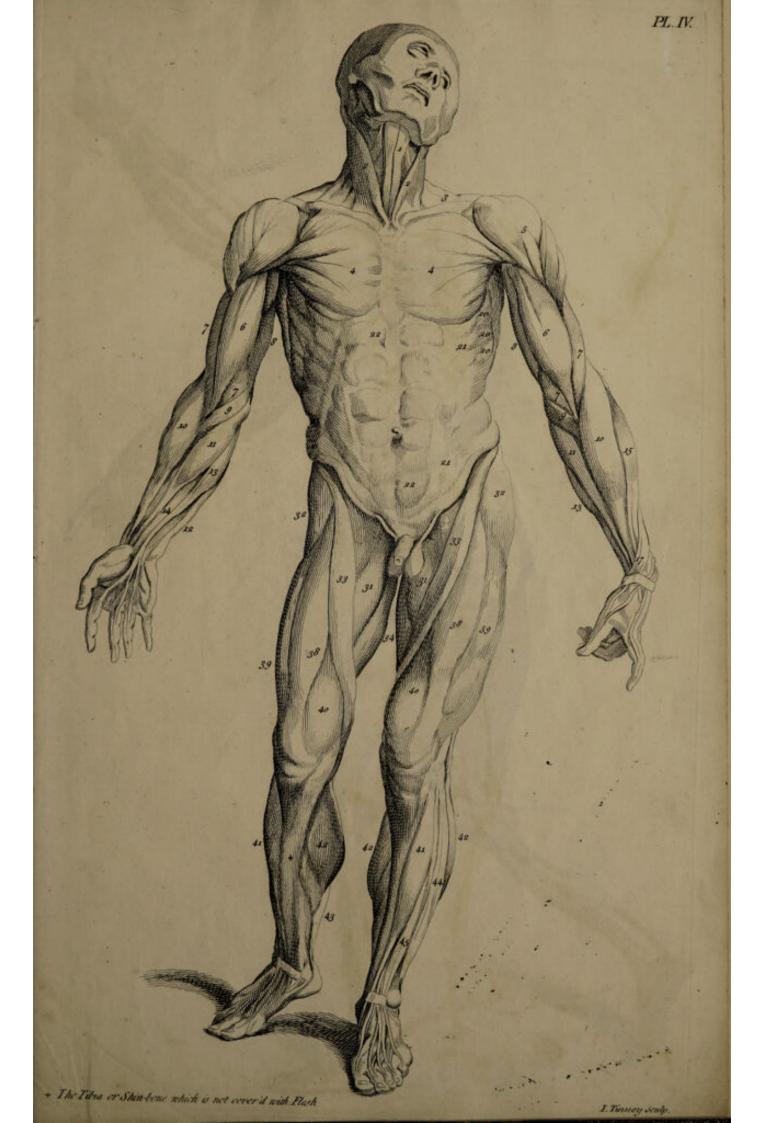








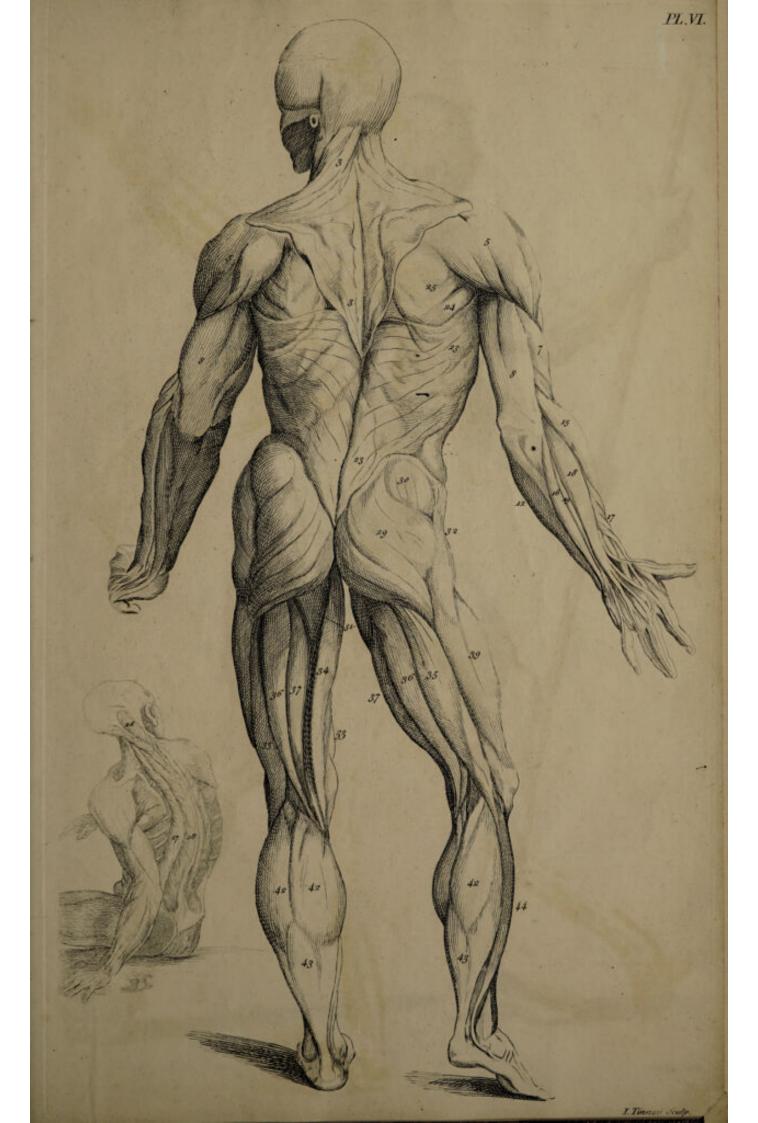




















I. Tinney soulp











