The 'Epitome' of Vesalius on vellum in the British Museum library / W.G. Spencer, London.

Contributors

Spencer, Walter George, 1858-1940

Publication/Creation

[Zürich] : [place of publication not identified], [1924?]

Persistent URL

https://wellcomecollection.org/works/dr9nwmwc



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org REPRINTED FROM ESSAYS ON THE HISTORY OF MEDICINE

from by

presented to PROFESSOR KARL SUDHOFF edited by

CHARLES SINGER and HENRY E.SIGERIST PUBLISHED BY VERLAG SELDWYLA/ZÜRICH



THE 'EPITOME' OF VESALIUS ON VELLUM IN THE BRITISH MUSEUM LIBRARY.

W. G. Spencer, London

The 'Epitome' was composed by Vesalius, and the special drawings were made, whilst the 'Fabrica' was being prepared*).

He intended it as a *semita* or short cut, a *compendium* or abridgement, an *appendix* or appendage to the 'Fabrica', an index. and guide to anatomy apart from dissecting. The peculiar arrangement of its contents bears witness to one phase of the genius of Vesalius; it presents the anatomy and physiology known to him in such a condensed way that an elementary knowledge might be rapidly acquired.

The perfectly preserved copy of the Epitome on vellum in the British Museum Library, in addition to its anatomical importance, is a very fine production, both as regards printing and woodblock engraving, accomplished about one hundred years after the introduction of those two arts. It was doubtless the example included in the sale of Dr. Richard Mead's books in November 1754 and April 1755, and purchased for £ 8.12.0. There existed for 371 years in the Library at Louvain another specimen on vellum. D. P. Delaunay the Librarian has stated that it was among the books burned in 1914. These copies may have been prepared for presentation to Charles V, and to Prince Philip, later Philip II, but there is nothing to confirm this on the one in the British Museum. The College of Physicians possesses a specimen on good paper apparently in the original binding, which has been long in the Library. Other copies of the 'Epitome' in public collections are comparatively few. The 'Epitome' I describe is a maximo folio, the yellow leather covers measure 550 mm. x 370 mm., and enclose 14 leaves, marked A to O (omitting J), but the pages are not numbered. There are no mythological figures, such as are found in the 'Fabrica' either in front, or at the back.

*) Fab: 1543. Praef: 4. a. l. 4. - ib: lib: lll. c. i. p. 257 (bis) l. 16. etc.).

1

The following summary will indicate some of its peculiar characteristics. —

Leaf A recto has a reproduction of the Frontispiece of the 'Fabrica' with the alteration of the title to: 'Andreae Vesalii Bruxellensis, Scholae Medicorum Patavinae Professoris — suorum de humani corporis fabrica librorum Epitome.' Below, in the space left by the greater height of the page as compared with the 'Fabrica', is the 'Address to the Reader', and at the foot, 'Basileae' without date. *A. verso* contains the Dedicatory Letter to Prince Philip, then aged 15, dated Aug: 13th 1542.

The 'Address to the Reader' and the 'Dedicatory Letter' are in difficult Latin the substance of which is thus summarised by Miss Joyce Lowe M. A: —

Firstly, Vesalius intended this work for the *Common man;* in was a shame that whilst studying other philosophies man should continue in ignorance of the structure and working of the body which accompanies him throughout life. The *Common man,* in order to get an elementary knowledge, should read the text, whilst using the illustrations as an atlas. Students of Art and of Medicine could make a beginning in anatomy with the illustrations against which was set a voluminous index of the lettering. The illustrations could be studied in a synthetical fashion, beginning from the skeleton and working up to the nudes, or by an analytical procedure, which might be accompanied by dissecting, descend from the nude figures to the skeleton. To the finished drawings were added diagrams, intended to be cut out and superimposed on the main figures.

Secondly, a standpoint of Vesalius differs from present day views. One speaks now in terms of Evolution. Vesalius spoke of the *Divinus Opifex*, the Divine Designer and Constructor of the Universe and of Man, or of the *Divinus Artifex*, the Divine Artisan who originated minute details and fastened together the various parts — Vesalius employed the same word *compages* ('articulation') when referring to the fastening together by the *Divine Artifex*, as when speaking of a skeleton which he himself had put together. The finished and highest work of the Designer was the young adult human being, which Vesalius aimed to depict, not as when dead, but alive, with the muscles in action. Animals were products of a less elaborate design.

The leaves *B. recto* to *G. recto* contain in double columns the brief text; the outer margin of each column has the Greek synonyms, but only Greek, of the Latin terms. — The text is divided into six chapters, I. 'On the Bones and Cartilages, or those parts

EXTERNARVM HVMANI CORPORIS SEDIVM PARTIVMVE



ICNON prolixior nominum ex-ternas hominis fedes loca ue indicantium enumeratio inftituitur , quâm cômodé imaginu uirilis muliebrisép corporis fuperficié exprimentiu mar-pinibus adhiberi poteft. Quanquam fuccinctam eorum deferiptionem, ac

nihil obstet, quum eadem fere nomina externis corporis fedibus ac offibus, partibus que externa fedi fubditis, accom modentur, quorum præcipua, ab ijsér qui reftiùs diffecan-di rationem aggrefli fuerunt inftituta, iam prius in orationis contextu, quantum propolita nobis Epitome requirit, recenfuimus, Soletitaque uniuerfa corporis fuperficies ab illius nominum inftitutoribus primum in magnas fedes diuidi, ac dein illarum partes rurfus uarijs nomenclaturis do nari. Atque ita Ægyptij medici corpus in "Caput," Tho. facem, Manus, & "Crura diuidebant: Thoracem, perin. deac Ariftoteles, nominantes, uniuerfum corporis " truncum, à iugulo aut collo clauiculis'ue ad inguina & pubem, aute magis ad femorum ulque fuperiora pertinentem: non autem tantum, ut Galenus, nonnulliór Anatomicorum pri marij, corporis fedem coftis feptam. Alij facultatum corpus uniuerfum difpenfantium , animarum@ fedibus mentem adhibentes,quadrifariam quidem fimiliter ac Ægyptij cor-

poris superficiem difernunt, uerum fecus quàm illi corporis trun cum in duas fedes primum diftin guêtes, manus & crura unius par tis loco prima hac diuifione enuflan merit, illa quæ'Artus proprié uo catos constituunt, extremoru no mine complectètes. Ac in corpo-

ris trunco du as præcipuas locant fedes, fecundum duas cauitates fecantibus inibi obuias: quarum in ferior ab elatiori, interuentu fepti tranfuerfi feiúcta, iecur naturalis altricis'ue animæ fedem fanguifi. cationists officină, ac infuper huic fubministranția organa compleclitur, partibus quoque generationi famulantibus parata. Supe-rior cauitas cordi irafcibilis ani mæ fomiti uitaliste fpiritus fonti, illige fubferuientibus organis af.

feribitur. Cæterûm tertia corporis cauitas capi-ti tribuitur, cerebro que potifiimum principis aninxe fedi, animalis' que fpiritus promptuario facra-tur. Corpore in hune modum obiter diuifo, fingu larum partium fuperficies ita rurfus diftinguutur, itis totius pars anterior fupercilijs fuperpo-

ut capitis tonius pars anterior fupercilijs fuperpo-lita, act erinibus nuda, "lineas que qualdam pro-ponens, ' Frons nominetur . Hac fuperior & uer-fus capitis medium uergens, ' Sinciput. Vtrinque ad fincipitis latus, fupra que ' Aurem, cui " Audi-torius meatus ineft, confiftens, " Tempus. Media torida meatus inett, contattens, "Tempus. Media recepting fedes finciput uerfus pofteriora fuperans, "Originem circunferibeneis. Poft uerticem ulque ad "mulculorum qui utrinque in ceruicis fummo pro-mineures in media fumera di utrinque no eruicis fummo prominentes, in medio foueam oftendunt, acplerifo "Tendines dicuntur, elatiflimarn federn "Occiput fpectatur. Prior auté capitis pars à frôte ad mentir ul protenfa, Facies. Inferiorenim frôtispars, Su percilijs ueluti eminētibus, pilisģr colītis terminis, corundemģr "medio circunferibitur. His fublunt "Oculi, infernus & fuperius "Palpebris intefti: qua Story Continuerrus conspects properties and continuent. Serie po-rum fieles ubi inuicem conniuent, & erechis ordi-nata que, utin naubus remos fpectamus, ferie po-fitis pilis, quos * Cilia nuncuparnus, ornatur, quo dammodo que cartilagineæ funt, * Tarfi haben-s taute, tur. Commilfionis huius termini, * Anguli funt.

quorum maior nafum, minor tempus fpectat. In difunctarum palpebrarum medio præter ' Ca-terior runculam in maiori angulo confpicuam, ' Album f bre candidum'ue oculorum apparet : in cuius medio

minulæ

APPELLATIONES. DISSECTIONEM OCCVRRENTIVM CITRA

minulæ ac rubentes, 'Malæ,& quibuídam Genæ uc cantur. Sedes in // ter nafum & malas mediæ nonnullis "Concaua dicuntur, quonomi ne alit totam oculorum fedem à palpebris ad malas metitarit uoca-runt. Faciei pars quam inflamus "Buccaeft, tota uerò ipfius pars à fu percilijs ad elatiorem ulque dentium feriem pertinenz, "Superior ma xilla nominatur, reliqua autem quæ in uiris "Barba decoratur, Inferunc. Facter pars quam inflamus' Buccaeft, tota uero ipius pars a lu-pereilijs ad elatiorem ulque dentium feriem pertinenz, "Superior ma-xilla nominatur, reliqua autem que in uiris "Barba decoratur, 'Infe-rior, cuius anterius extermum, 'Mentum nonnunquam' fouea orna tum educit, fub" Labri inferioris rubore confiftens. Elatioris labri fedes nafo fubdita, "Sulculos donata, "Muftax cenfetur. Quod la-bris circunferibitur & continetur, "Os,quo hiante "Lingua," Palacu, "Gargareon, 'Dentes, 'Gingiuz, internas' "Faucium fedes occurrit. Quod caput ad dauiculas ulga aut thoracem excipit, "Collum & Cer-uix eft. & the pofterius nomen mapis pofteriori parti accommoderur. Quod capurad cadiculas une autoracem exeput, Columne Cert-uix eft, & fi pofterius nomen magis pofteriori parti accommodetur, uti & anteriorem quaalpera arteria, & poinfimum ipfius caput can-gentibus occurrit, Guttur dictam legimus. Humerus ueteribus uo-cabanur brachij offis cum fcapula articulus, unde & partem maxime ad colli radicem thoracisés latera eminentem, Summum humerum director constati di accordine ueffue "Jonglum forerantus in colli ad colli radicem thoracisós latera eminentem, 'Summum humerum dixerunt, Quod ab illo prorfum uerúus " lugulum foucamue in colli radice obuium uergit, 'Clauicula eft. Quod autem ab isfo ad extremă digitorum aciem protenditur,' Manus:cuius prima pars (fub qua ca-uitas 'Axilla aut Ala appellata, & mufculis quos 'T endines permulti illic uocant fepta, confiftit) ad proximum ulque articulum 'Cubiti'ue flexum produsfa,' Brachium, & Latinorum quibufdam Humerus dicitur. Pofterior flexus illus fedes 'Gibberus eft. Pars ab hoc ad con-terminum articulum ducfa, 'Cubitus, & Latinorum quibufdam Humerus dicitur. Pofterior flexus illus fedes 'Gibberus eft. Pars ab hoc ad con-terminum articulum ducfa, 'Cubitus, & Latinorum quibufdam Bra-chium & VIra. Ad cubiti extremum 'Summa manus incipir, cuius pars à cubito ad quatuor digitorum radices porrecta, in duas fedes par titur: ac cubito proprinquior 'Brachiale eft, alia 'Poftbrachiale, que à t confructionis fpecie cum pectore etiam 'Pectus, à quibufdam Palma nuncupatur. Huits interior fedes caua ac uarits monticulis fepta, mul-tiség lineis interfincta,' Volam efficit. Reliqua fummer

tiste lineis interftincta, Volam efficit. Reliqua fumme manus pars, 'Digiti funt, finguli ternis' partibus tan-quam in acie locatis efformati, 80 exterius 'Vnguibus quantin acterioralis en dans de conservos y rigidou ornati. Horum maior altis se actione oppolitus * Pol-lex eft, illi proximus * Index, dein * Medius feu Impudi-cus, cui proximus eft * Medicus & Anularis. Extimam uerò fedem occupat ' Paruus, Auricularis ue. * Thorauerò fedem occupat 'Paruus, Auricularis'ue." Thora-eem hicnominamus corporis trunci partem 'Coftis feptam, maximamós fedem 'Laterum efformantem: cuius anterior fedes 'Pecfus eff, quam 'Mamilla ang in illarum medio 'Papilla cum obfuco ipfas ambien-te' circulo occupant . Reliqua anterior trunci fedes 'Abdomen conttinuit, cuius regio pectorisoffis carti-lagini & coftaru cartlaginibus illa humilioribus prozi ma, perinde 'Subcartilagine nuncupatur, ac uifera cartlaginibus illis complexa. Sic quibus fepti tranfuer nomen obtinuit, quanquam rurfus alij ita etiam thoracis anteriorem fedem nuncu-pent. Quod fub infinis coftis & fium offis fpina (que mulicribus multo magis quàm uiris educitur) offibus deftinitur, fangentibus (Lanai funt & 'Illa: in quori ucluti medio 'Vmbili cus cernitur, fub quo mox' Sumen, cuius infina fedes trunci termino proxima, 'Aqualiculus nuncupatur. Terminus autem ubi hic 'Pudenda &

termino proxima," Aqualiculus nuncupatur. Terminus autem ubi hic' Pudenda & Naturalia confiftunt, "Pubes eft & Pecten, ad cuius latera in femorum flexu" Inguina recenfemus. Maris pudendi pars citra fectionem confpicua, 'Penis & Coles uoca-tur: cuius fummitas magis quam reliqua longitudo craffeces, 'Glandem efformar, in cuius medio meatus urinze feminidi communis confipicitur . Huius inuolucrum Præputium eft lícet alijs tota penis fummitas ita nuncupetur. In inuolucro reliquado "Præputium eft, licet alijs tota penis fummitas ita nuncupetur. In inuolucro reliquaĝi ad anum cute procuberante futurare modo lineam uocantus 'Suturarn, & totam håc exporrectam extuberantem/pad anum ufque penis partem 'Taurum. Vri & fedem inter teftium inuolucrum(quod ex cute paratum 'Scorium dicitur)& anum confpi-cuan, "Interfeminium nuncupamus. Muliebris pudendirima, que uteri ocruicis eft orificium," Sinus uocatur, quem 'Alæ & Colles utrinque prominentes, & cuti-cularis in ipfius fummo apparens ' caro ornant. Recti inteftini orificium per fedem prodiens, à figura" Anulus, & ab officio 'Strictor appellatur. Pofterior trunci cor-poris pars, 'Dorfum aut Tergü ferè nuncupatur, cuius latera in clatiori pofteriorità thoracis fede 'Scapulis confitmunt.Inter ipfas uerò' mediu & dorfi fedes hinc ad infi mas ufas coftas aut'ubi id maximè in flexu prombrat perrinens. thoraci afferàbil. a e mas ules coltas, aut ubi id maxime in flexu protuberat, pertinens, thoraci afferibit, ac polt feptum transuerfum confistit. Sedes uerò hanc ad nates ules fequens, 'Lumbos còplectitur. Sunt auté' Nates carnex & globofa fedes, ilui offici occupătes dorfum, copectitur. Sunt aut d'Anator. Occerueron nancad nares ulquiequens, 'Lumbos i in quarum medio facri offia & coccygis polteriores proceffus uelut excarnes ad anu ulg occurrunt. Vbiarticulus fomoris percipitur, magnusbis Rotator extubert, 'Co-xendix eft, aut Coxa, quod nomen alij' Femori allenbunt, ab inguinibus ad 'Genu pertinenei: cuius polterior fedes & flexus 'Poples nuncupatur'. Genu ad proximum ulg articulum pedis uc initui 'T ibia fubfequitur, que nonullis Crus nominatur, &ti plures id nomen fimul tibia femori guelint effe comune. 'A Anterior tibia kedes offica tangétibus occurrit, polterior auté ubi ipfus' Venter feu Sun cominatur, attes ulg is exerptus recondituid nominătur. Polica pedis pars extra tibis refenuadinem retrorfum prominens,' Calx appellatur. Relique urò pedis fuperficiaria fedes pror fus oflium nomenclatură affurmunt, potfilmi aut "Tari", 'Pedi şe defenuaria fedes pror fus oflium nomenclatură affunut rui qu au calcarmas plerung Planta,&' Vetiguan, iplius și internu latus "Concauŭ, fuperior uero Tarfus nuncupetur.

FIGVRAE

THE 'EPITOME' OF VESALIUS ON VELLUM

which support the body. II. On the Ligaments of the Bones and Cartilages, and of the Muscles which are the instruments of Voluntary Movement. III. On the Organs subserving the Nutrinent which is made out of food and drink. IV. On the Heart and on the Organs which minister to the function of the same. V. On the Brain and on the Organs which are counted among those in the service of the brain. — VI. On the Organs which subserve the propagation of the Species.

The lower half of G. recto is occupied by the Portrait of Vesalius, the same as in the 'Fabrica'.

The male and female nude figures on K. verso and L. recto (Figs. 1 and 2) challenge comparison from an artistic point of view with earlier woodcut engravings, such as Dürer's "Adam" and "Eve", — but they are integral parts of the plan of the book, being designed both in general and in particular to conform to the other figures. The position of the head, trunk and extremities of the male figure are calculated to throw into action the respective muscles, and so to produce the contours on the surface. The figure is 430 mm. in height, a reduction to one fourth, i. e. it represents a man of the average height of 1720 mm. Among muscles giving rise to contours one may note the frontalis, orbicularis palpebrarum, levator anguli oris, deltoid, trapezius, biceps humeri and the bulge on each side of the brachialis anticus. In the lower limbs are seen the tensor vaginae femoris, the sartorius, the vastus internus just above the inner side of the knee, the gastrocnemius and, between it and the inner edge of the tibia, the prominence resulting from the contraction of the soleus.— One foot is arched with the tendon of the tibialis posticus tense behind the malleolus, and with the soft projection on the dorsum of the contracting extensor brevis digitorum pedis. The other foot bearing the weight has the arch flat and the tendon of the peroneus longus is prominent.

Vesalius laughed at the palmists of his day; the supinated right hand of the figure shows the prominences and furrows of the palm including cross-hatching suggesting the contraction of the palmaris brevis to produce the characteristic human hollow in the hand e. g. when dipping up water, instead of stooping to drink with the mouth as animals do. The superficial veins are shown on the flexor aspect of the arm, and on the inner side of the leg; one need but recall the *Epistola docens venam secandam* in which Vesalius, claiming to make a correction of Galen's Anatomy as to the junction of the vena azygos with the superior vena cava, had argued in favour of the method of relieving

III. RENAISSANCE

plethora by derivation of blood through the vein at the elbow, over that of revulsion by bleeding from the leg as recommended by the Arabic physicians. Supplementary figures of the brain, eye, larynx etc. in this and the following figures are reductions of drawings in the 'Fabrica'.

The female nude figure has the right upper extremity and the two lower limbs, in the same position as the Aphrodite of Praxiteles of Knidos, but the contours of the breast and front of the abdomen and also the position of the head and left arm are quite different. In fact the figure is designed to serve as a contrast to the male nude — in the male the right arm is in supination, in the female in pronation, the head of the female is turned to exhibit the contour of the neck, hidden in the male by the beard. The female has the breasts of a young adult woman and is in strong contrast to the companion figure. The male shows the digitations of the serratus magnus, the recti abdominis stand out, and exhibit the lineae transversae, below the umbilicus there is almost a depression along the linea alba between the recti. The female nude on the other hand has not the muscular prominences, and the cross-hatching below the umbilicus depicts the contour of the hypogastrium in the young adult female. The male rests on the left foot, the female on the right. In one respect convention is followed. the figure is drawn above the middle height. A muliplication by 4 of 420 mm., equals 1,680 mm., whereas the average height of a woman; is about 1,600 mm. The figure is further adapted, so that the diagrams to be mentioned below could be superimposed on it.

The contours of these nude figures are not blurred by lettering, but the width of the page permitted of a brief enumeration of superficial positions being printed alongside each.

There are five Tabulae or plates which display the muscles together with parts of the skeleton. They are all special to the 'Epitome', measuring about 430 mm. in height, i. e. reductions to 1/4, as compared with the muscle Tabulae in the 'Fabrica' which are reduced to 1/5 and measure about 340 mm. in height. The figures are drawn upright, with the muscles as if in action in the position assumed. For the sake of economy and the avoidance of repetition, each figure differs on the two sides, the left side representing the exposure of a deeper layer of muscles than that on the right. The index of the letters placed on the figures is printed alongside the right and left respectively. — There is the difficulty to the present-day reader that, following Galen, Vesalius used a number and descriptive sentence, instead of the names of the muscles which subsequently came to be adopted.









Fig. 6

THE 'EPITOME' OF VESALIUS ON VELLUM

Fig. 3 on *I. verso* is a front view. Except for the left hand, the position corresponds with that of the male nude. — On the right are shown the muscles immediately beneath the skin, on their left side the muscles exposed by the removal of the foregoing. — On the right the platysma, on the left the buccinator, sternomastoid, omohyoid; on the right the pectoralis, on the left, the subclavius, serratus magnus, external intercostals; on the right the deltoid, on the left the two heads of the biceps humeri; on the right the palmaris longus, on the left the flexor sublimis digitorum, the flexor carpi radialis; on the right the tensor vaginae femoris with the edge of the sheath raised, also the sartorius and gracilis, on the left the quadriceps femoris and adductors.

Besides this method of exposition, special note was made in this and the subsequent figures of corrections made in Galen's descriptions. The flexors and extensors of the thumb and great toe are repeatedly illustrated because Galen had merely noted slips from the muscles common to the fingers and toes. The same remark applies to the plantaris and its insertion into the os calcis on the inner side of the tendo Achillis because Galen had continued the tendon into the plantar fascia, as in the monkey. The popliteus is drawn in the deepest layer of muscles to show its relative unimportance in man, whereas Galen had made it the chief flexor of the leg.

Fig. 4 on *I. recto* exhibits the back muscles; the superficial on the right, the underlying layer on the left. On the right the trapezius, on the left the complexus, levator anguli scapulae and rhomboids; on the right the latissimus dorsi and gluteus maximus, on the left the serratus posticus inferior, internal oblique, gluteus medius, pyriformis, etc.

Both the Nude figures and the 3rd and 4th Muscle figures would be specially useful to medical and art students, but recalling the point of view of Vesalius, the deeper muscles and their action were considered of equal importance. The deep muscles are concerned with the mobility of the spine and of the shoulder and hip joints in the highly finished structure of Man, as compared with the rigid spine and restricted movements of the limbs of animals.

Figure 3 on *H. verso* a front view, Fig. 6; on *H. recto* a back view, exhibit the third and fourth layers of the deep muscles; some are shown raised from their origin and hanging by their tendon of insertion, with the belly of the muscle contracted to show its shape when in action. Throughout great ingenuity is apparent in the

III. RENAISSANCE

adaptation of the positions of the figures to exhibit particular muscles. Thus in Fig. 6, the obturator internus with the gemelli is shown on one side in position. On the other side it is turned down exposing the inner aspect of the obturator membrane, at the same time that the obturator externus, its origin and insertion, is demonstrated.

Fig. 7 on *G. verso* seen from the front is almost bared of muscle, except for the longus colli, and psoas. The sternum has been turned to one side to expose the triangularis sterni and all the viscera have been removed from the thorax and abdomen, ready for the superposition of the diagrams to be presently noted. — For the rest the figure depicts points not exhibited in the following skeleton. Through the gap made by removing the pubes, the sacrum and coccyx are shown, — also the lesser trochanter of the femur is seen.

Leaf K. recto has the reproduction of the 2nd skeleton from the 'Fabrica', which was selected because its side view displays practically all the bones, including their anterior as well as their posterior aspects, except for the points just noted under Fig. 7. All three skeleton figures in the 'Fabrica' were drawn from that of a youth aged 18, and the epiphyseal lines appear, that of the acromion, the head of the humerus, the lower end of the radius, the upper and lower ends of the femur and tibia. — Among small points are represented the sesamoid bones, including the pisiform bone and the Os Vesalianum. — The skeleton leans on the monument on which are the drawings as in the 'Fabrica' of the base of the skull, the hyoid bone and auditory ossicles.

Only in the 'Epitome' the epitaph is changed to: -

'Solvitur omne decus leto, niveosque per artus

It Stygius color, et formae populatur honores'.

Miss Joyce Lowe's rendering is as follows: -

All fairness fades with death; o'er limbs once white The Stygian colour creeps and wastes the beauty bright.

It replaces that on the monument in the 'Fabrica':

Vivitur ingenio. Caetera mortis erunt.

Man's Spirit lives: all else death's hand shall claim. This latter seems obviously more fitting because it counters

the prejudice to the examination of the human body after death. There follow on three pages diagrams supplied with lettering

and indexes which have, when superficially looked at, been termed rough and poor, but attention should be given to the objects Vesalius had in view and concerning which he supplies explanations.



VENARVM, ARTERIARVM, NERVORVMQVE OMNIVM INTEGRA DELINEATIO. SIMVL CVM NVTRITIONIS QVAE CIBO POTVQVE FIT ORGANORUM: ET CORDIS PVLMONISQVE et demum muliebrium generationi fubferuientium instrumento-

6.0

-6

V K AE H VIC CHARTAE IM PRESSAE, cuig alia agglutinatur, ac que peculiariter neruis oftenden. dis parata eff.characterum Index. FIGVKAE

¹Gu parata efficharacherum Index.
CER, EBR, VM ma'eun condeila consing score du can in no lan hie de noumen pach à calaera madram no film baltas conficemente se agrant me fiquerendu copa a pollerone pais marme fideren. Se agrant de nois efferen la pollerone pais marme fideren d'anne construction a pollerone pais marme fideren. Se agrant de nois efferen se pollerone pais marme fideren de nois estatemente parte de la calaera en de nois de la companya de la calaera estatemente de nois faire estatemente de nois faire estatemente de la constante de nois faire estatemente de la constante de nois estatemente de la constante de nois estatemente estatemente de la constante de la constante de nois de la constante de la

- N. Que an period period or node.
 Que no period operation redet.
 P. Ministrane, in guess guession per in endiate engenes previped received re-ceede tor.
 R. M. M. down quession per in audients engenes previped received re-centrals on framme, illu and period period programs. New years of the period of the program is the second of the period of the program.
 S. Stetem menuments period period of the program these period of the program.
 S. Stetem menuments period period of the program the period of the period of

- Terrig nemus radio raporre dine, as dein politei O indei O medio forculas offerens.

- Quent nera fress in majoritas al interda baachy offa calore pro-merci.
 Quent nera ingenes dae exportectus, or interna field persidigial or underes alequenda or medig namefoldas differegres.
 Diffa medi name index est persona means field medicate est est serme para degin field or antidenis or medig forculas differegres.
 Serme banch germann, field or fail de serve sensit define forci. Oran anti baschy intransma fie exposed, person person gap bezah, align anti baschy intransma file exposed, que can califie autore for medicate degin force.
 Serme lan intervendides, tile processi, que can califie autore for methodas and persona file exposed.
 Russi an opolleriore dedaelle dei estorea califie autore for methodas and cantar for the processi of data influence.
 Propagnes and cantar for the person.
 Topogines materiam fails adores nerversas coliciences deman or hain influences and for estoreas.
 Desposed for anticipation descriptions and cantar for a deman or de data esposer for an exposed.
 Topogines metaring fails aufore a califier estar ad deman or hains field material or ad definition of the second.
 Propagines indicates aufore for anticipations.
 Topogines metariam fails califier estar definitions.
 Propagines indicates aufore an addition of the second and a stelland for anticipation of the second and approximation.
 To reas famos for anticipation metaration advector material fails.

- Drimi nerni propago enti edicae.
 Drimi nerni propago eltint inter muficulas al-fampae.
 Secondas fonor potent nerus.
 A Seconda fonor potent nerus.
 A Seconda nerui fodoles per incernaen fonoria re asine federa ad poles ufg faperiora fub cuteres-coverna.
- anne poem na poar siją juperiora fak cute ex-carrena. Socandi neruš propago nuficule anteriorem fi moris falen occapanalist deprompa. Tereisi propago sinternam fenoris cuten in-Terisi propago sinternam fenoris cuten in-.

- 4.4
-
- .
- .
- Tening information areas.
 Tening 1
- 2.0
- .

- 0.0
- x

FINIS.

Prima columna in Eyerfu vy. lege promit col Fyurfu n. glandula nucis pinen inflar effigiata s col, in Gyurfu 9, perficientur,

SERIES CHARTARVM.

A B C D E F G M I K L M, præter duas chartas nullo charactere infignitas: é quarum una figuram parare licebit, figu-ræ in pagina fecunda folij G depichæ agglutinandā, ex altera ue-rò, figura parabitur, ad figuram quæ huicpaginæ imprefía eit, figenda. Reliqua uerò duodecim folia ex cuiufque arbitratu funt inuicem nectenda: quiuis magis conueniat A cum M, & B cum L, & C cum K, & ita deinceps iungere, ur uniuer fa Epi tome quodammodo fexternion e conftituat, modò in libri formam hæc concinnare lubeat,

BASILEAE, EX OFFICINA Josnnis Oporini, Anno M D XLIII. Menfe Iunio.

M

CHARTA, EX QVA FIGVRAM PARARE CONVENIT. ILLI QVAE NERVORVM SERIEM EXPRIMIT UPPENDENDUM.

OMMES As a children in profile for a data on the follow pare is open an an interfollow provide the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the profile of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the profile of the observation of the observation of the observation of the profile of the observation of the observ

senercedarg fresheder enkilder. Nerven arter here here here and here figures are gone matter support dellam from an advent. O VINT A here explored dellam from an adventer and figures are supported and a figures and figures are figures and the hereas are supported for an arter part of the rest and and a figures are supported and a figure are supported and a figure are supported and a figure are supported and a figures are supported and a figure and a figure are supported and a figure and a figure are supported and an are supported and and figure are supported and and figure are supported and a figure and figure are supported and and are supported figures are supported figures and a figure and figure are supported figures and a figure and figure are supported figures are supported figures and a figure and figure are supported figures and figures are supported figures are supported

B haven D R C I M A. que deus peres, als é form as fayres référés en coult san l'horevon febranes es connues de seu barras d'areas d'areas es conserve que fob politica en afré donting en pous l'horevon a delemane febra prési H es fue chavallere q mademana faine print Har far charactere y ngole al prime figure y glannelesser e se al remain print figure y and better that the experimental figure y and better that the second second second second second gene per suge of second second figure for internel and the second second second figure for and better filtering a generalist that figure figure a second second second that figure figure a second second second terms from figure a second second second figure resta figure figure second second second figure terms from figure a second second second figure terms for the second second second second second terms for the second second second second second terms for the second second second second second second terms for the second second second second second second terms for the second sec



Fig. 9



THE 'EPITOME' OF VESALIUS ON VELLUM

The Nerve diagram Fig. 8 on *M. recto* was included in the 'Fabrica', but having been drawn for the 'Epitome' and so of greater length, its lower part was infolded, see Fab: 1543. IV. end pp. 353, 354. Explanations are given in Fab: 1543. IV: 338. 86. i. 1. 14., and Fab: 1555. IV. 532. 87. 1.

The diagram was made to be cut out and superimposed on the female nude. — This is readily demonstrated by placing one over the other the corresponding lantern slides in the epidiascope. The same remark applies to the combined vein and artery diagrams reproduced both on *N. recto* and *O. recto*, and which also was included in the 'Fabrica' with the lower edge doubled over, see Fab: 1543. p. 313.

Additional light is thrown on these diagrams by comparing them with the Tabulae Evelynianae preserved in the Museum of the Royal College of Surgeons, of which an account is given by Evelyn in his Diary. Before the means of preserving from putrefaction and of injecting were known, blood vessels and nerves were rapidly dissected out before decomposition had occurred, and were then laid out on boards for drawing, and when varnished over could be preserved. A century after Vesalius, his successor in the professorship of Anatomy at Padua, Vesling, supervised the preparation of the Blood-vessels and Nerves for Evelyn, by the same procedure as was adopted by Vesalius for making these diagrams.

On N. recto and O. recto are a number of diagrams Fig. 9 reproduced from the 'Fabrica', which Vesalius advised should be first backed by pasting the page on to a sheet of vellum. - They could then be cut out and superimposed upon the preceding figures, the viscera in particular being put over the empty thoracic and abdominal cavities of Fig. V. The combined vein and artery figure is repeated twice for then it could be applied as a whole over the Female Nude, or part of the heart and lungs could be inserted into the thorax of Fig. 7. In the same way there were figures of the oesophagus, stomach and omentum, the free portion of the omentum covering the intestines, the intestines from the duodenum to the anus, the portal vein and tributaries with the spleen, the vena cava and liver, the male and female urinary and genital organs, as also the pubes to fit in the gap in Fig. 7., and a representation of the anastomosis of the blood vessels on the abdominal wall, the superior epigastric with the deep epigastric arteries and veins.

Unfortunately in England as well as on the Continent an acquaintance with the 'Epitome' was prevented by the lower price

III. RENAISSANCE

of the inferior reproductions by Geminus. — The 1st Edition o Geminus was published in 1545 with copper plate illustrations dedicated to Henry VIII. — The 2nd Edition with the English Translation by Udall, dedicated to Edward VI, was published in 1553 The 3rd Edition, published in 1559, after revision by Richard Eden is dedicated to Queen Elizabeth, and is rendered valuable by containing the portrait of the queen, immediately after he accession. The Copper plates made by Geminus were taken to Paris and used for the edition by Jacobus Grevinus Claramontanus which was printed in 1564 by Andreas Wechelus. Further copyings and plagiarisms followed. Hence the real 'Epitome' by Vesalius has not been well known.

nd were then laid out on boards for drawing, and when var-

esentation of the anasiomosis of the blood vessels on the ab-



