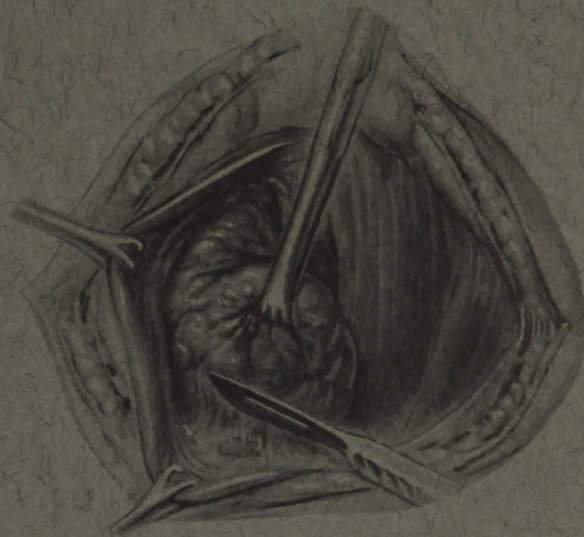
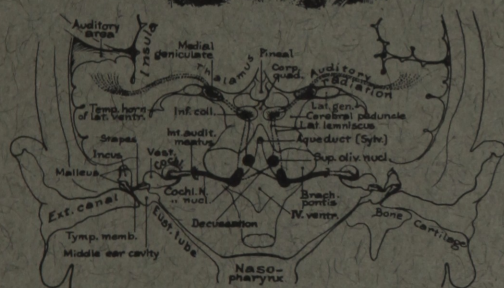
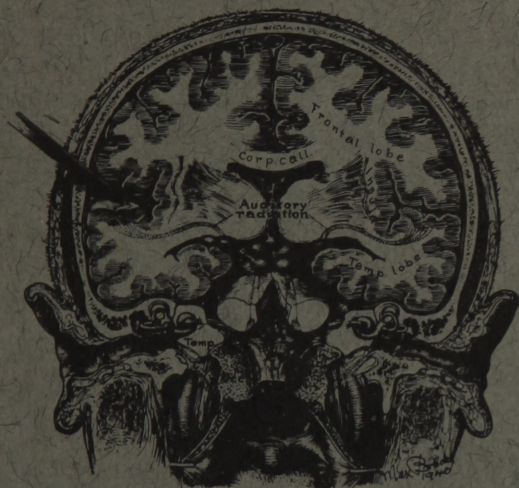


MEDICAL ILLUSTRATION

AN EXHIBIT OF ART AS APPLIED TO MEDICINE



NATIONAL LIBRARY OF MEDICINE
SEPT. 15 - DEC. 19, 1969

Cover: Top left — Sagittal section of brain and auditory apparatus
by Max Brödel.

Lower right — Thyroidectomy: traction on the lower pole, by
Tom Jones.



This exhibit features the work of two the world's outstanding medical illustrators, Max Brödel and Tom Jones, as well as drawings of some of their students. Working at the Schools of Medicine of the Johns Hopkins University and the University of Illinois, respectively, Brödel and Jones founded and directed the two most notable schools of medical illustration in this country. While of differing temperament and background, and employing individual illustration techniques, each man was a master of his profession, with high standards of performance that his students were inspired to emulate.

Brödel was a research scientist as well as an artist. In addition to his art, Jones expounded a broad concept of medical communication through visual media. The work of both men, as well as that of their students, has been featured in important medical texts and journals. Each contributed importantly to medical research and education through the excellence, clarity, and volume of his illustrations. The medical world is greatly indebted to them for demonstrating so effectively the communication of scientific information through art.

The National Library of Medicine acknowledges with deep appreciation the loan of medical illustrations by many organizations and individuals in assisting to organize this exhibit. Particular recognition is due Mr. Biagio Melloni, Department of Medical and Dental Communications, Georgetown University, Mrs. Ranice Crosby, Department of Art as Applied to Medicine, Johns Hopkins University; The Archive of Medical Visual Resources of the Harvard Medical Library, and the Armed Forces Medical Museum.

MEDICAL ILLUSTRATION

1

ANATOMIC RELATION OF STRUCTURES IN SUBLABIAL
TRANSSPHENOIDAL APPROACH TO THE PITUITARY GLAND
by Max Brödel

2

SAGITTAL SECTION OF BRAIN AND AUDITORY APPARATUS by
Max Brödel

3

BLADDER AND KIDNEY STONES by Max Brödel.

4

EARLY PREGNANCY IN A FALLOPIAN TUBE by Max Brödel.

5

A CASE OF FOOT AND MOUTH DISEASE IN MAN by Max Brödel.

6

SQUAMOUS CELL CANCER OF THE CERVIX by Max Brödel.

7

OBTAINING BLOOD FROM DONOR by Max Brödel.

-
- 8** DIRECT BLOOD STREAM INFECTION THROUGH THE TONSILS
by Max Brödel.
-
- 9** DISEASES OF THE BILIARY TRACT by Tom Jones.
-
- 10** SAGITTAL SECTION OF THE HUMAN BODY by Tom Jones.
-
- 11** RENAL CALCULI by Tom Jones.
-
- 12** THE ANATOMY OF THE LARGE INTESTINE by Tom Jones.
-
- 13** THYROIDECTOMY: ENDERMIC INFILTRATION OF A LINE A
FINGERBREADTH ABOVE THE CLAVICLES. RADIATING LINES
SHOW DIRECTION OF INJECTIONS TO BLOCK THE CERVICAL
NERVES by Tom Jones.
-
- 14** THYROIDECTOMY: THE NEEDLE IS BEING PASSED BETWEEN
THE TRACHEA AND THE UPPER POLE OF THE THYROID
GLAND by Tom Jones.
-
- 15** THYROIDECTOMY: TRACTION OF THE LOWER POLE EXPOSES
THE VEINS COVERED BY A THIN FASCIA. THE PARATHYROID
IS SHOWN BELOW, by Tom Jones.
-
- 16** THYROIDECTOMY: THE INFERIOR THYROID VEINS ARE
EXPOSED ABOVE THE PARATHYROID. INSERT: THE VEINS
BEING GRASPED WITHOUT INCLUDING ANY OTHER TISSUE, by
Tom Jones.
-
- 17** THYROIDECTOMY: THE RIGHT POLE IS ELEVATED ON A
SMALL FORCEPS PREPARATORY TO PULLING THROUGH A
LIGATURE. THE LEFT POLE IS SECURED BY CARRYING A
LIGATURE THROUGH ON A NEEDLE. THE UPPER POLE HAS
BEEN SEVERED AND THE GLAND IS DRAWN MEDIALY AND
DOWNWARD, by Tom Jones.
-
- 18** THYROIDECTOMY: OPERATION FOR OLD COLLOID GOITER.
INSERT: THE INCISION EXTENDS UPWARD ALONG THE
STERNOMASTOID MUSCLE, by Tom Jones.
-
- 19** BATHING TRUNK NEVUS by Max Brödel.
-
- 20** THE EFFECT OF OCCLUSION OF THE VARIOUS HEPATIC
VESSELS ON THE LIVER by Max Brödel.
-
- 21** BIOLOGY OF THE STREPTOCOCCUS ERYSIPELAS by Max
Brödel.
-
- 22** LEUKEMIA OF THE FOWL: SPONTANEOUS AND
EXPERIMENTAL by Max Brödel.
-
- 23** TRANSFER DRAWING FOR ANATOMY OF THE HUMAN EAR by
Max Brödel.
-
- 24** ANATOMY OF THE HUMAN EAR by Max Brödel.
-

25

THE FINER STRUCTURES OF THE INNER EAR by P.D. Malone (Brödel)

26

YOUNG PROBOSCIS MONKEY by Max Brödel

27

LOWER CRANIAL NERVES AND THEIR GANGLION AND ANASTOMOSIS by Max Brödel

28

VENOUS THROMBOSIS DURING MYOCARDIAL INSUFFICIENCY by Max Brödel

29

SURGICAL EXPOSURE OF STOMACH AND CONTRACTED PORTION OF ESOPHAGUS by Ralph Sweet (Brödel)

30

UTERUS, LEIOMYOMA by Ralph Sweet (Brödel)

31

SHOULDER GIRDLE MUSCULATURE OF A BAT by Ralph Sweet (Brödel)

32

HYDROCEPHALIC CHILD by Ralph Sweet (Brödel)

33

ABDOMINAL AND THORACIC VISCERA, ANTERIOR VIEW by A. Hooker Goodwin (Jones)

34

RENAL ANOMALY (CONNECTING URETERS), by A. Hooker Goodwin (Jones)

35

SURGICAL TREATMENT OF ESOPHAGEAL ATRESIA WITH TRACHEO-ESOPHAGEAL FISTULA, by A. Hooker Goodwin (Jones)

36

KIDNEY NEPHRON UNITS by Gladys McHugh (Brödel)

37

PELVIC CARCINOMATOSIS WITH HYDRONEPHROSIS, RENAL ABSCESES, HORSESHOE KIDNEY AND THREE URETERS by Melford Diedrick (Brödel)

38

SYNOVIAL CAVITIES OF KNEE JOINT by Gladys McHugh (Brödel)

39/46

ANATOMY OF THE EYE by Arnold Ryan Chalfant, in consultation with Tom Jones (Jones)

47

RUPTURE OF UTERUS CAUSED BY HYDROCEPHALIC HEAD by Elizabeth H. Broedel (Brödel)

48

CALCIFICATION OF TRICUSPID VALVE by Kathleen Mackay Powell (Brödel)

49

RUPTURE OF THE RIGHT CORNU OF A BICORNUATE UTERUS WITH ESCAPE OF THE FETUS by August Horn (Brödel)

50

APPROACH TO RADIOHUMERAL JOINT, RADIAL COLLATERAL LIGAMENT AND OLECRANON BURSA by Kathleen Mackay Powell (Brödel)

51

SURGICAL EXPOSURE OF MITRAL VALVE by Vincent Destro (Jones)

52

DEFECT IN BASE OF SKULL by Jane Allen Destro (Jones)

53

BIRTH OF HEAD, MOUTH APPEARING OVER PERINEUM by Elizabeth H. Broedel (Brödel)

54

BIRTH OF HEAD, EXTERNAL ROTATION by Elizabeth H. Broedel (Brödel)

55

SALPINGITIS (GONORRHEAL) by Tom Jones

56

CARCINOMA OF THE MOUTH by Tom Jones

57

RENAL TUBERCULOSIS by Tom Jones

58

BENIGN PROSTATIC HYPERTROPY by Tom Jones

59

OSTEOGENIC CARCINOMA by Tom Jones

60

VARICOSE VEINS by Tom Jones

61

THE ANATOMY OF SMELL by Tom Jones

62

TOTAL GASTRECTOMY by Kay Bell Wahl (Brödel)

63

BUNNEL'S TECHNIQUE OF TENDON SUTURE by Helen Lorraine (Brödel)

64

ANATOMY OF KIDNEY by Orville A. Parkes (Brödel)

65

PARTIAL GASTRECTOMY by Kay Bell Wahl (Brödel)

66

SUTURING OF STENT TO INCOMPETENT MITRAL VALVE by Orville A. Parkes (Brödel)

67

PAPILLOMATOUS CYST OF THE OVARY by Jessie W. Phillips (Brödel)

68

INCISION FOR ADENOMA OF THE PANCREAS by Kay Bell Wahl (Brödel)

69

POSTERIOR GASTROENTEROSTOMY by Kay Bell Wahl (Brödel)

70

TENDONS OF WRIST AND HAND by Carl T. Linden (Jones)

71

MUSCLES OF THE FEMALE BACK by Tom Jones

72

VAGINAL REPAIR by Natt C. Jacobs (Brödel)

73

PATHOLOGIC KIDNEY SPECIMENS by Natt C. Jacobs (Brödel)

-
- 74** SURGICAL EXPOSURE OF THE CEREBELLUM by Natt C. Jacobs (Brödel)
-
- 75** PRIMARY CARCINOMA OF THE VAGINA by Natt C. Jacobs (Brödel)
-
- 76** HYPOSPADIA by Natt C. Jacobs (Brödel)
-
- 77** PRELIMINARY SKETCH OF HYPERNEPHROMA by Natt C. Jacobs (Brödel)
-
- 78** ARTERIAL ANASTOMOSIS by Jean McConnell (Jones)
-
- 79** EXPOSURE FOR RENAL TRANSPLANTATION TO THE RIGHT ILIAC FOSSA by Jean McConnell (Jones)
-
- 80** ANEURYSM OF SUBCLAVIAN ARTERY by Susan H. Wilkes (Brödel)
-
- 81** AORTIC ANEURYSM AT LEVEL OF DIAPHRAGM by Orville A. Parkes (Brödel)
-
- 82** LUMBAR AND PELVIC HERNIAS by Lucille C. Innes (Jones)
-
- 83** ANOMALOUS BLOOD VESSELS IN THE RIGHT LUNG by Emily Freret (Brödel)
-
- 84** SAGITTAL SECTION THROUGH A FULL-TERM PREGANT UTERUS BEFORE ONSET OF LABOR by Dorothy Peters (Brödel)
-
- 85** GAUZE PACK FOR TEMPORARY HEMOSTASIS DURING SPLENECTOMY by Eleanor Fry (Brödel)
-
- 86** ASTROCYTOMA IN REGION OF THE THIRD VENTRICLE by Dorcas Hager Padget (Brödel)
-
- 87** HYDROCEPHALUS. INFANT HEAD IN SECTION TUMOR. REMOVAL OF LATERAL VENTRICLE TUMOR by Dorcas Hager Padget (Brödel)
-
- 88** HYDROCEPHALUS. INFANT HEAD IN BANDAGE by Dorcas Hager Padget (Brödel)
-
- 89** MYOMATOUS UTERUS PRIOR TO REMOVAL by August Horn (Brödel)
-
- 90** UTERUS DISSECTED FREE FROM THE BLADDER by Hermann Becker (Brödel)
-
- 91** TUBERCULOSIS PERIPHLEBITIS ACTIVE by Annette S. Burgess (Brödel)
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- 92** ACANTHOSIS NIGRICANS by Annette S. Burgess (Brödel)
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93	MUTTON-FAT KERATIC DEPOSITS IN SYMPATHETIC OPTHALMIA by Annette S. Burgess (Brödel)
94	AGRANULOCYTOSIS by Annette S. Burgess (Brödel)
95	MARFAN'S DISEASE OF THE AORTA by Leon Schlossberg (Brödel)
96	DOWNES' METHOD FOR APPENDECTOMY by Max Brödel
97	MUSCLES OF THE SHOULDER by Russell Drake (Brödel)
98	SOME MUSCLES OF THE JAW AND NECK by Russell Drake (Brödel)
99	HERNIATION OF STOMACH INTO THE POSTERIOR MEDIASTINUM ASSOCIATED WITH OBSTRUCTING DUODENAL ULCER by Russell Drake (Brödel)
100	SKELETON AND LIGAMENTS OF THE HUMAN BODY by Willard C. Shepard (Brödel)
101	MEDIAN LONGITUDINAL SECTION OF THE HEAD AND NECK by Willard C. Shepard (Brödel)
102	SKIN AND DIAPHRAGM INCISIONS FOR TRANSTHORACIC RESECTION OF CARDIAC END OF STOMACH by Gladys McHugh (Brödel)
103	TOTAL GASTRECTOMY by Helen Lorraine (Brödel)
104	TECHNIQUE OF PORTACAVAL ANASTOMOSIS by Helen Lorraine (Brödel)
105	INCISIONS FOR EXPOSURE OF THE HEART by Kay Bell Wahl (Brödel)
106/107	ANATOMY OF THE BRAIN by Arnold Ryan Chalfant (Jones)
108	PATENT DUCTUS ARTERIOSIS by Kathleen Mackay Powell (Brödel)
109	WATER DOG USED IN LABORATORY EXPERIMENTS by Susan H. Wilkes (Brödel)
110	THE HAMSTRING MUSCLES by Carl T. Linden (Jones)
111	DEEPER STRUCTURES OF POSTERIOR ASPECT OF THIGH by Carl T. Linden (Jones)
112	THE THIGH by Carl T. Linden (Jones)
113	A COMPOSITE DRAWING OF THE PLACENTA TO SHOW ITS STRUCTURE AND CIRCULATION by Ranice W. Crosby (Brödel)
114	SKIN FLAP by Natt C. Jacobs (Brödel)

115	THE GALLBLADDER AND COMMON BILE DUCT by Carl T. Linden (Jones)
116	ANATOMY OF INGUINOFEMORAL REGION by Lucille C. Innes (Jones)
117	TECHNIQUE FOR LIVER TRANSPLANTATION by Jean McConnell (Jones)
118	MUSCULOAPONEUROTIC FIBERS OF TRANSVERSE ABDOMINIS AND DIAPHRAGM by Lucille C. Innes (Jones)
119	EPIDERMOID CYST by Dorcas Hager Padget (Brödel)
120	APPENDIX DENSELY ADHERENT TO FIBROID TUMOR, UNDERGOING SARCOMATOUS DEGENERATION by August Horn (Brödel)
121/123	THREE DRAWINGS SHOWING DEVELOPMENT OF THE EMBRYONIC HEART by James F. Didusch (Brödel)
124	TETRALOGY OF FALLOT by Leon Schlossberg (Brödel)
125	CLOSURE OF ANO-RECTAL DEFECT by Vincent Destro (Jones)
126	ILEOILEAL INTUSSUSCEPTION by Russel Drake (Brödel)
127	ANTERIOR GASTROENTEROSTOMY by Russell Drake (Brödel)
128	MUSCLES OF PERINEUM by Russell Drake (Brödel)
129/130	CARDIAC SURGERY by Virginia Samter (Jones)
131	AUTOPSY SPECIMEN SHOWING SOLITARY CYST IN RIGHT KIDNEY by William P. Didusch (Brödel)
132	TUMOR OF TESTIS by William P. Didusch (Brödel)
133	HYPERTROPHY OF THE UTERINE GLANDS, MICROSCOPIC DRAWING by Hermann Becker (Brödel)
134	TUBERCULOSIS OF THE ENDOMETRIUM, MICROSCOPIC DRAWING by Hermann Becker (Brödel)
135	PROCEDURE FOR RELIEVING GAS AND INTRACOLONIC PRESSURE FOLLOWING COLON RESECTION by Eleanor Fry (Brödel)
136	GYNECOLOGIC OPERATION by Willard C. Shepard (Brödel)
137	A PIGMENTED NEVUS IN A CHILD by Willard C. Shepard (Brödel)
138	EXTENSIVE THROMBOPHLEBITIS IN VARICOSE VEINS by Willard C. Shepard (Brödel)

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- 139** MUSCLES OF THE KNEE by Muriel Mclatchie Miller (Brödel)
-
- 140/142** THREE ILLUSTRATIONS SHOWING SURGICAL REPAIR OF PROLAPSE OF UTERUS WITH CYSTOCELE by Helen Lorraine (Brödel)
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- 143** RETROCECAL APPENDIX by Ralph Sweet (Brödel)
-
- 144** ADENOCARCINOMA OF THE SIGMOID COLON by Ralph Sweet (Brödel)
-
- 145** HYPERNEPHROMA OF LOWER PORTION OF DOUBLE KIDNEY by William P. Didusch (Brödel)
-
- 146** COMMON BLOOD SUPPLY AND LYMPHATIC DISTRIBUTION OF THE COLON by Kay Bell Wahl (Brödel)
-
- 147** SEGMENTAL ANATOMY OF THE LUNGS by Jessie W. Phillips (Brödel)
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- 148** SEGMENTAL ANATOMY OF THE LUNGS by Jessie W. Phillips (Brödel)
-
- 149** KIDNEY CALCULI by William P. Didusch (Brödel)
-
- 150** TOTAL GASTRECTOMY. A TUBE IS PASSED THROUGH ESOPHAGOJEJUNOSTOMY STOMA by Helen Lorraine (Brödel)
-
- 151** INSERTION OF MITRAL VALVE PROSTHESIS by Vincent Destro (Jones)
-
- 152** THE PLACENTATION OF THE BOTTLENOSED PORPOISE by Etta Piotti (Brödel)
-
- 153** SURGERY OF THE ADRENALS by Mildred Coddling (Brödel)
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- 154** ANATOMY OF THE NECK, AXILLA AND THORACIC CAVITY by Mary Dixon Elder (Jones)
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- 155/156** TRANSPARENT OVERLAYS SHOWING SEQUENTIAL LAYERS IN ANATOMY by Ernest W. Beck (Jones)
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