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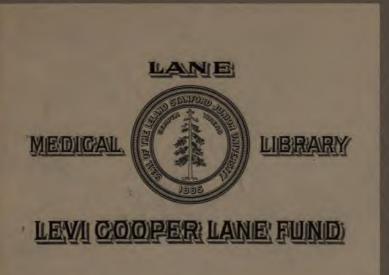
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Johns Hookins university. Anstoniosi laboratory.

Catalogue of the collection of human embryos in the anatomical laboratory of the Johns Hopkins university.



CATALOGUE

OF THE

OLLECTION OF HUMAN EMBRYOS

IN THE

NATOMICAL LABORATORY OF THE JOHNS HOPKINS UNIVERSITY

BY FRANKLIN P. MALL

BALTIMORE 1904 ,vp

NORMAL EMBRYOS WHICH HAVE BEEN CUT INTO SERIAL SECTIONS.

Most of the embryos have been stained with alum carmine. They are arranged in groups according to their quality and according to their age. The good embryos of the third week, for instance, include them between 14 and 22 days.

The age of an embryo in days equals $\sqrt{100 \text{ Years}}$ or an embryo of a given age is $\frac{\text{age}^3}{100}$ millimeters long. This rule

p in applies to millimeter

									201			
upplies to embryos less than 100 mm. long:In embryos from 100 to 200 mm. long the length from crown to rump	nbryos le	ss than	100	mm. lon	ne ulgi	nbryos fron	a 100 to	200 mm.	long the l	length from	crown to	rump
nillimeters equals the age in	quals the	age in	days.									
2nd week.	က	41	φ.	9	_	80	6	10	11	13	13	14
0-2 mm.	24%	41%-8	8-13		12-17% 17%-34		24-814 314-394	39%-49	49-581/	2814-7014	701/4-82	82-96
					:	Good	70					
	13	C3	109		9	45	145	92	84	23	172	:
	92	80	163	106	22	. 75	211	96	184	34	2348	:
	148	116	:	144	• •74	98	:	224	:	44	:	:
	186	:	:	175	f28	227	:	:	:	230	:	:
	:	:	:	:	828	:	:	:	:	:	:	:
						1						
						Fair	. .					
	87	4	88	6	,	:	:	:	:	:	:	146
	164	18	114	:	Q.	:	199	:	:	:	:	:
	508	113	221	:	108	:	:	:	:	:	:	:
	239	:	:	:	:	:	:	:	:	:	:	:
	220	:	:	:	:	:	:	:	:	:	:	:
						Poor	_					
	-	808	:	œ	t ~	22	:	:	:	:	:	:
	အ	248	:	231	17	:	:	:	:	:	:	:
	18	:	:	:	22	:	:	:	:	:	:	:
	112	:	:	:	:	:	:	:	:	:	:	:

LIST OF EMBRYOS.

The following list of human embryos, with the names and addresses of the physicians from whom they were obtained, is printed for the convenience of those who are interested in my collection. The data collected have all been filed in order, but they have become so bulky that a list like this is needed for reference. A number is given to each embryo which is entered upon all of the glass slides photographic negatives and all other records of the specimen. Sometimes the notes and illustrations of a single embryo are so numerous that they alone fill a whole album.

The figures following the names refer to the publications based wholly or in part upon this collection. According to present prospects the bibliography will be extended greatly within a few years. The collection is now almost unique and we shall prove ourselves unworthy if we do not add something to our knowledge of human embryology.

The abbreviations in parentheses are as follows:

The first figure indicates the length of the embryo from vertex to breech in millimeters.

The sign following indicates the direction of the section; + means transverse, = means sagittal, and | means coronal.

The words good, fair or poor indicate the quality of the series. In case the specimen is pathological it is marked [p] in brackets.

```
31. (24). Dr. Ballard, Baltimore. 13, 21, 27, 40.
32. (9 = 50 good [p]). Dr. Booker, Baltimore. 10, 21, 33, 37, 40.
33. (17). Dr. Robb, Cleveland, Ohio.
34. (60 + 50 good). Dr. Ellis, Elkton, Md. 10, 11, 13, 15, 18, 21, 22, 27, 40, 40, 42, 54.
35. (13). Dr. C. O. Miller, Baltimore. 13, 21, 40.
36. ( ). Dr. Gould, Philadelphia.
37. (2 + 50 poor [p]). Dr. Gould, Philadelphia. 10, 21, 35, 40.
38. (53).
39. (40).
40. (42). Dr. Williams, Paintenance.
   30,
35.
   39. (40).
40. (22).
41. (42). Dr. Williams, Baltimore.
42. (18). Dr. Willis, Los Angeles, Cal. 10, 13, 21, 27, 30, 40.
43. (16 = 50 good). Dr. Booker, Baltimore. 10, 12, 14, 19, 24, 25, 26, 28, 32, 36, 40, 41, 52, 53, 57, 44. (70+100 good). Dr. Snively, Waynesboro, Penn. 42, 54, 58. 45. (28 + 50 good). Dr. Douglas, Baltimore. 10, 11, 13, 15, 18, 21, 22, 27, 30, 51, 40, 41, 42, 54, 56, 57, 58.
46. (135). Dr. Taylor, Baltimore. 13, 21, 27, 40, 54.
47. (65).
48. (130 + 100 good). Dr. Wilson, Worcester, Mass. 10, 11, 15, 22, 30, 40, 41, 42, 54.
49. (70).
50. (120). Dr. Cullen, Baltimore.
51. (65). Dr. Gavin, Baltimore.
52. (33). Dr. Gavin, Baltimore.
53. (16). Dr. McMorris, Belle Plaine, Ia. 10, 40.
54. (11 + 50 & 100 fair [p]). Dr. McMorris, Belle Plaine, Ia. 21, 33, 37, 40.
   40.
55. (
                       55. ( = 50 good [p]). Dr. Watson, Baltimore. 10, 21, 38, 37, 40. 56. (24). Dr. Flexner, Baltimore. 57. (23 = 50 poor). Dr. Howard, Cleveland, Ohio. 10, 13, 21, 27, 30, 40, 1, 56, 57.
56. (24). Dr. Flexner, Baitimore.
57. (23 = 50 poor). Dr. Howard, Cleveland, Ohio. 10, 13, 21, 27, 30, 40,
41, 56, 57.
58. (6+50 & 100 good [p]). Dr. Howard, Cleveland, Ohio. 21, 30, 33, 40.
59. (10). Dr. Neale, Baltimore.
60. (8 = 100 fair [p]). Dr. Dobbin, Baltimore. 21, 33, 40.
61. (+20 fair). Dr. Williams, Baltimore.
62. (130). Dr. Gibbs, Baltimore.
63. (5 weeks). Dr. Zimmerman, Baltimore.
64. (75). Dr. Zimmerman, Baltimore.
65. (120). Dr. Zimmerman, Baltimore.
66. (130). Dr. Zimmerman, Baltimore.
67. (150). Dr. Zimmerman, Baltimore.
68. (160). Dr. Zimmerman, Baltimore.
69. (13 = 50 & 100 good [p]). Dr. Chabot, Baltimore, 21, 33, 37, 40.
70. (good [p]). Dr. Ellis, Elkton, Md. 21, 33, 37, 40.
71. (+20 good [p]). Dr. Whitcomb, Greenwich, N. Y. 21, 37, 40.
72. (23). Dr. Arthur, Baltimore. 13, 21, 27, 33, 40.
73. (30). Dr. Irving Miller, Baltimore.
74. (19+50 good). Dr. Irving Miller, Baltimore.
75. (30 = 50 good). Dr. Ferguson, Berwick, Me. 31, 34, 40, 41, 54, 56, 57.
76. (4½ + 20 good). Dr. Mitchell, Chicago. 12, 13, 14, 21, 24, 27, 28, 32, 34, 40, 41, 48, 52, 53, 58.
77. (=20 good [p]). Dr. Horn, Baltimore. 21, 33, 37, 40.
78. (1 = 50 fair [p]). Dr. Stoner, Harlan, Ia. 21, 33, 40.
79. (33 = 100 good [p]). Dr. Briggs, Blackville, S. C. 13, 18, 21, 27, 33, 40, 56, 57, 58.
80. (5 + 20 good). Dr. Branham, Baltimore. 13, 21, 24, 27, 28, 32, 34, 40, 41,
 78. (1 = 50 fair [p]). Dr. Stoner, Haffan, Ar. 21, 30, 40.
79. (33 = 100 good [p]). Dr. Briggs, Blackville, S. C. 13, 18, 21, 27, 33, 40, 56, 57, 58.
80. (5 + 20 good). Dr. Branham, Baltimore. 13, 21, 24, 27, 28, 32, 34, 40, 41, 48, 52, 53, 58.
81. (20 = 50 + 100 fair[p]. Dr. Branham, Baltimore. 13, 21, 27, 33, 40.
82. (good [p]). Dr. Cassidy, Baltimore. 21, 33, 37, 38, 40.
83. (18). Dr. McGraw, Pittsburg, Penn.
84. (50 + 50 good). Dr. Duval, Baltimore. 41, 54, 56, 58.
85. (80). Dr. Jump, Dlamond, Cal. 56.
86. (30 || 50 good). Dr. Billingslea, Baltimore. 31, 40, 41, 54, 56, 57.
87. (4 + 20 fair). Dr. Cole, Peru, Ill. 13, 21, 27, 30, 33, 40.
88. (10 + 50 & 100 poor). Dr. Brumme, Detroit. 13, 21, 27, 40, 41, 53.
89. (25). Dr. Brumme, Detroit.
90a. (36). Dr. Brumme, Detroit.
90b. (25). Dr. Brumme, Detroit.
90b. (25). Dr. Brumme, Detroit.
90c. (22). Dr. Brumme, Detroit.
90d. (18). Dr. Brumme, Detroit.
91. (20). Dr. Haynes, Brooklyn, N. Y.
92. (70). Dr. Ballard, Baltimore. 13, 27, 40.
93. (|| 50 & 100 [p]). Dr. Cassidy, Baltimore. 21, 33, 37, 40.
94. (20 = 50 fair [p]). Dr. Knill, Detroit. 13, 21, 27, 33, 40, 57.
95. (48 = 100 good). Dr. Watson, Baltimore. 13, 21, 27, 31, 40, 41, 54, 57, 58.
   90. (17 = 100 gccs).

97. (7 = 50 good [p]). Dr. Goldman, Baltimore. 21, 33, 40, 56.

98. (125). Dr. Atkinson, Baltimore. 13, 16, 21, 40.

99. (27). Dr. Carr, Durham, N. C. 13, 21, 27, 40.

100. (27 = 50 poor). Dr. Pole, Baltimore. 41, 57.
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101. Dr. Pole, Baltimore.
102. Dr. Pole, Baltimore.
103. Dr. Pole, Baltimore.
104. (12 = 50 fair [p]). Dr. West, Bellaire, Ohio. 21, 33, 40.
105. (48). Dr. Watson, Baltimore. 13, 21, 27, 40, 41.
106. (17+50 good). Dr. Gardner, Baltimore. 13, 21, 27, 28, 36, 40, 41, 57,

37, 40.

181. (95). Dr. Watson, Baltimore.

182. (15 + 50 good [p]). Dr. Lamb, Washington. 21, 33, 37, 40.

183. (12 || 100 fair [p]). Dr. Hundley, Baltimore. 21, 33, 40.

184. (9 good [p]). Dr. Sommer, Trenton, N. J. 21, 30, 33, 37, 40.

185. (9 + 50 good [p]). Dr. Mosely, Baltimore. 21, 33, 37, 40.

186. (5 || 50 good [p]). Dr. Campbell, Halifax. 21, 24, 33, 37, 40.

187. (16 = 50 fair [p]). Dr. Watson, Baltimore. 21, 30, 30, 33, 40.

188. (112). Dr. Watson, Baltimore. 21, 27, 40, 41.

189. (55). Dr. Boldt, New York. 41.

140. (40). Dr. Johnson, Washington.

141. (8 = 50 fair [p]). Dr. West, Bellaire, Ohio. 21, 33, 37, 40.

142. (20 = 50 good [p]). Dr. Sommers, Trenton, N. J. 21, 33, 37, 40.

143. (25 = 50 poor [p]). Dr. Stick, Glenville, Pa. 21, 30, 38, 37, 40.

144. (44 = 40 good). Dr. Watson, Baltimore. 21, 24, 26, 27, 28, 34, 36, 40,

41, 49, 50, 52, 53, 56, 57, 58.

145. (33 = 50 & 100 good). Dr. Watson, Baltimore. 21, 27, 40, 48, 50, 54, 56, 57, 58.
 140. 130 = 30 & 100 good). Dr. Watson, Baltimore. 21, 27, 40, 41. 147. (1 = 50 fair [p]). Dr. Pole, Baltimore. 21, 30, 33, 37, 40. 148. (4 3/10+10 good). Dr. Hoen, Baltimore. 21, 24, 27, 28, 40, 41, 43, 44,
148. (4 3/10+10 good). Dr. Hoen, Battimore. 21, 23, 40, 41.

150. (5 = 20 fair [p]). Dr. Oertel, Augusta, Ga. 21, 33, 40.

151. (52). Dr. Ramsey, Baltimore. 41.

152. (31 = 100 poor [p]). Dr. Boldt, New York. 21, 33, 40.

153. (good [p]). Dr. Stick, Glenville, Pa. 21, 33, 37, 40.

154. ([p]). Dr. Boldt, New York.

155. (15). Dr. Kerr, Ithaca, N. Y.

156. (12). Dr. Kerr, Ithaca, N. Y.

157. ( ). Dr. Russell, Baltimore.

158. (2 = 50 poor [p]). Dr. Howard, Cleveland. 37, 40.

159. ([p]). Dr. Golden, Elkins, W. Va. 21, 37, 40.

160. (18). Dr. MacCallum, Baltimore.

161. (10 || 50 fair [p]). Dr. Cassidy, Baltimore. 37, 40.

162. (1 + 50 fair [p]). Dr. Wanstall, Baltimore. 37, 40.

163. (9 + 20 good). Dr. Lamb, Washington. 24, 25, 28, 32, 34, 36, 39, 40, 41, 45, 46, 47, 48, 50, 52, 56, 58.

164. (3\frac{1}{2} + 20 fair). Dr. MacCallum, Baltimore. 24, 52, 34, 38, 40, 41, 52, 55.
            165. ( ). Dr. Sampson, Cambridge, Md.
166. (2½ + 50 good [p]). Dr. Cassett, Baltimore. 37, 40.
167. (14½). Dr. Ritter, Brooklyn. 28, 40, 48.
168. (17). Dr. Lamb, Washington.
169. (52). Dr. Watson, Baltimore. 41.
170. (125 + 100 poor). Dr. Watson, Baltimore. 41.
171. (60). Dr. Irving Miller, Baltimore. 48.
172. (80 + 100 good). Dr. Watson, Baltimore. 54.
173. (p]). Dr. Jump, Tesla Mines, ('al.
174. (13 + 50 & 100 good [p]). Dr. Gibbs, Baltimore. 37, 40.
175. (13 + 20 good). Dr. Boldt, New York. 28, 36, 40, 41, 46, 48, 51, 52, 53, 56.
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(38). Dr. Kerr, Ithaca, N. Y. 48.
(12 + 50 & 100 good [p]). Dr. Harrison, Baltimore. 37, 40.
(35). Dr. Cassidy, Baltimore. 57.
(70). Dr. Stone, Baltimore. 41.
(2 + 30 good [p]). Dr. Dodge, Rochester, N. Y. 37, 40.
([p]). Dr. Lamb, Washington. 37, 40.
(50 & 100 falr [p]). Dr. Lamb, Washington. 37, 40.
(28). Dr. Boldt, New York.
(50 = 50 & 100 good). Dr. Russell, Baltimore. 48, 54, 57, 58.
(good [p]). Dr. Sabin, Baltimore. 37, 40.
(3½+20 good). Dr. Boldt, New York, 58.
(9 = 20 falr [p]). Dr. Cassidy, Baltimore. 48.
(17+100 falr [p]). Dr. Cassidy, Baltimore. N. J. 37, 40, 56, 57.
(4 + 50 good [p]). Dr. Oertel, Augusta, Ga. 37, 40.
([p]). Dr. Ellis, Elkton, Md. 37, 40.
([p]). Dr. Ellis, Elkton, Md. 37, 40.
([p]). Dr. Larsen, Chicago.
(40). Dr. Fuchs, Loyal, Wis.
(21). Dr. Lamb, Washington.
([p]). Dr. Lamb, Washington. 37, 40.
([p]). Dr. Sabilling, Lonaconing, Md. (Brödel Collection).
(20+50 good [p]). Dr. Shelly, Baltimore (Brödel Collection).
                                                                  183.
                                                               186.
                                                               190.
191.
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196.
                                                               198.
                                                               199.
200.
                            37, 40.
201.
202.
                                                       7, 40.
201. (20+50 good [p]). Dr. Shelly, Baltimore (Brödel Collection). 37, 40.
202. (30). Dr. Ottley, Baltimore.
203. (28). Dr. Fuchs, Loyal, Wis.
204. ([p]). Dr. Lamb, Washington. 37, 40.
205. (8 || 50 good [p]). Dr. Lamb, Washington. 37, 40.
206. (40). Dr. Lamb, Washington. 41.
207. (16 = 100 fair [p]). Dr. Horn, Baltimore (Brödel Collection). 37, 40,
204. ([P]). Dr. Lamb, Washington. 37, 40.
208. (40). Dr. Lamb, Washington. 41.
207. (18 = 100 fair [p]). Dr. Horn, Baltimore (Brödel Collection). 37, 40, 57.
208. (7 = 20 poor). Dr. Dale, Lamont, Pa.
209. (3 + 50 fair). Dr. Sommer, Trenton, N. J.
210. (35). Dr. Lamb, Washington.
211. (33 = 50 & 100 good). Dr. Spencer, San Francisco. 54, 57.
212. (7 + 100 fair [p]). Dr. West, Bellaire, Ohio.
213. (37). Dr. Cassidy, Baltimore.
214. (19). Dr. Hurdon, Baltimore.
214. (19). Dr. Hurdon, Baltimore.
215. (15 [p]). Dr. Unger, Mercersberg, Pa. (Brödel Collection).
216. (15 [p]). Dr. Unger, Mercersberg, Pa. (Brödel Collection).
217. (15 [p]). Dr. Unger, Mercersberg, Pa. (Brödel Collection).
218. (42). Brödel Collection. 41.
219. (150 + 100 poor). Brödel Collection. 41.
219. (150 + 100 poor). Brödel Collection. 41.
210. (150 + 100 poor). Brödel Collection.
221. (12 = 20 fair). Dr. Perkins, Cleveland, Ohio. 52, 58.
222. ([p]). Dr. Steele, Cambridge, Md. (Brödel Collection).
223. ([p]). Dr. Steele, Cambridge, Md. (Brödel Collection).
224. (40 = 50 & 100 good). Dr. West, Bellaire, Ohio. 54, 57.
225. (46). Dr. Wegefarth, Baltimore (Brödel Collection). 50.
226. (25 + 50 & 100 good). Dr. West, Bellaire, Ohio. 56, 57.
227. (30 = 50 & 100 good). Dr. West, Bellaire, Ohio.
229. (21 = 50 good). Dr. Sandrock, Baltimore. 54.
228. (31½ = 50 fair [p]). Dr. West, Bellaire, Ohio.
231. (13 + 100 fair [p]). Brödel Collection.
232. (14 + 100 fair [p]). Brödel Collection.
233. ([p]). Dr. Preston Miller, Hagerstown, Md. (Brödel Collection). 50.
234b. (80 + 50 good). Dr. Ashby, Baltimore. (Brödel Collection). 50.
235. (59). Dr. Lintheum, Savage, Md. (Brödel Collection). 50.
236. (92). Dr. Wilson, Tilgham, Md. (Brödel Collection). 50.
237. (48). Dr. Todd, Mt. Washington, Md. (Brödel Collection).
240. (17 + 50 poor). Dr. Firen Miller, Baltimore. (Brödel Collection).
241. (6). Dr. Sandrock, Baltimore. (Brödel Collection).
242. (23 + 40 fair [p]). Dr. West, Bellaire, Ohio.
243. (17). Dr. Miller, Hagerstown, Md. (Brödel Collection).
244. (4 + 20 [p])
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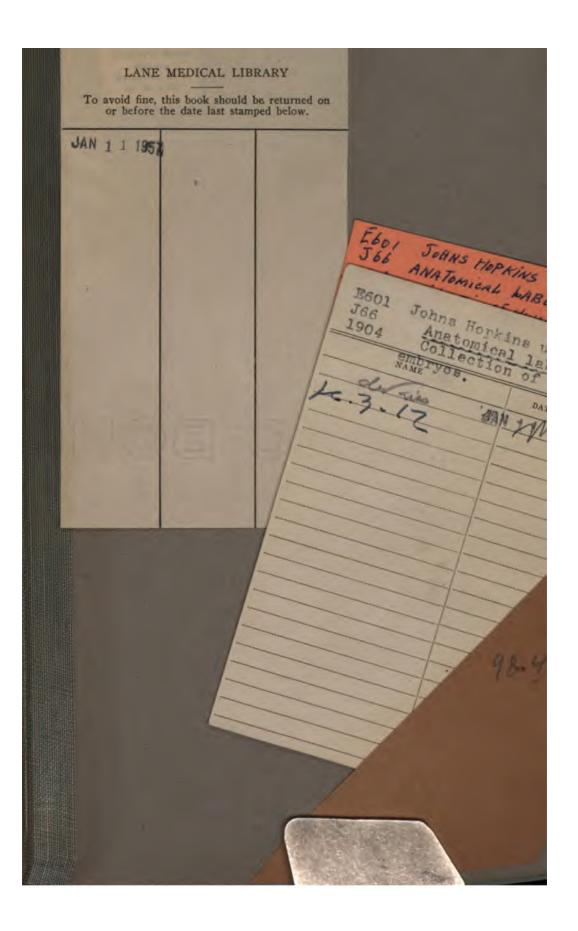
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