

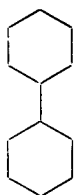
Contents

PART III

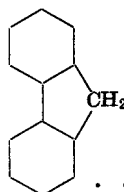
peri-Condensed Hydrocarbons consisting only of Six-membered Rings
and derived from Fundamental Systems with Two Benzenoid Rings

CHAPTER 28. Hydrocarbons derived from Diphenyl:

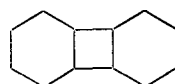
I. Diphenyl

	3
---	---

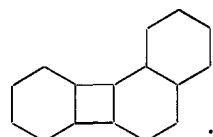
II. Fluorene

	6
--	---

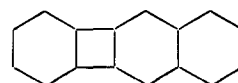
III. Biphenylene

	11
---	----

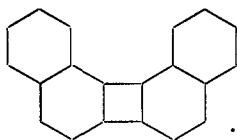
IV. 1.2-Benzobiphenylene

	15
---	----

V. 2.3-Benzobiphenylene

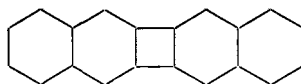
	17
---	----

VI. 1,2,7,8-Dibenzobiphenylene



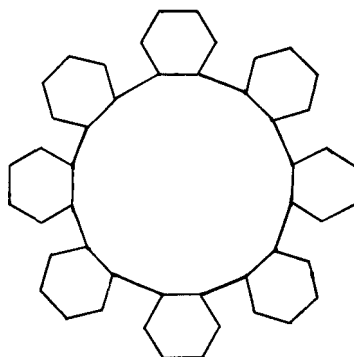
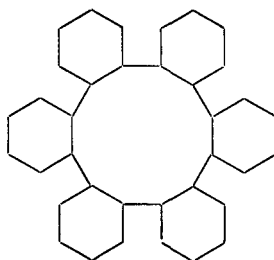
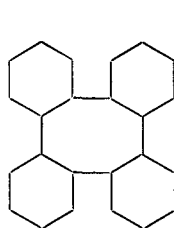
18

VII. 2,3,6,7-Dibenzobiphenylene



19

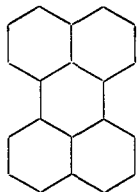
VIII. Tetraphenylene, Hexaphenylene and Octaphenylene



22

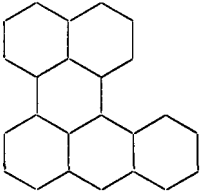
CHAPTER 29. Hydrocarbons derived from Perylene:

I. Perylene

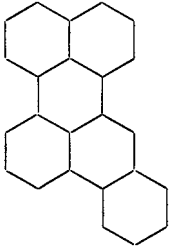


24

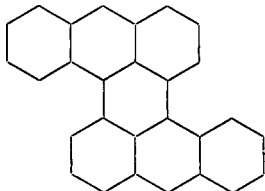
II. 1,2-Benzoperylene

	36
---	----

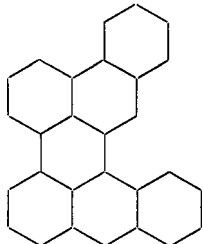
III. 2,3-Benzoperylene

	40
---	----

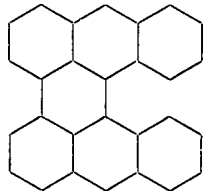
IV. 1,2,7,8-Dibenzoperylene

	42
---	----

V. 1,2,10,11-Dibenzoperylene

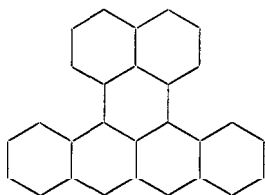
	46
---	----

VI. 1,2,11,12-Dibenzoperylene

	47
---	----

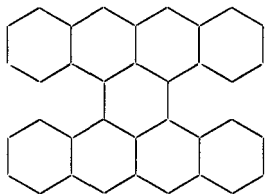
II—*a**

VII. 1,2,5,6-Dibenzoperylene



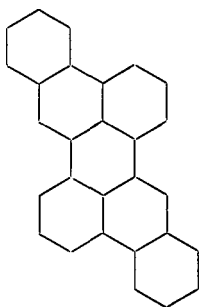
51

VIII. 1,2,5,6,7,8,11,12-Tetrabenzoperylene



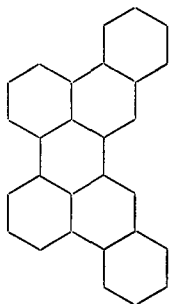
52

IX. 2,3,8,9-Dibenzoperylene

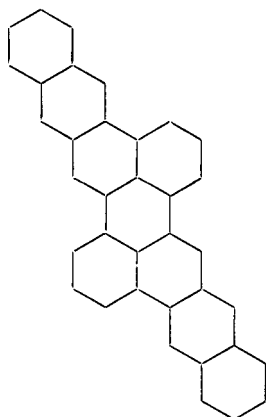


53

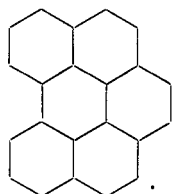
X. 2,3,10,11-Dibenzoperylene



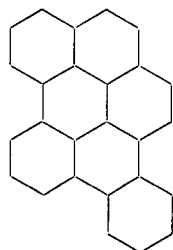
56

XI. Dinaphtho-(2'.3':2.3);(2".3":8.9)-perylene

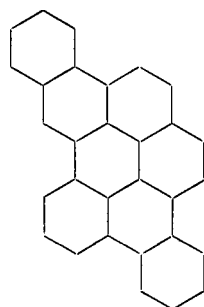
. 59

XII. 1.12-Benzoperylene

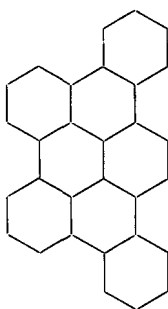
. 60

XIII. 1.12,2.3-Dibenzoperylene

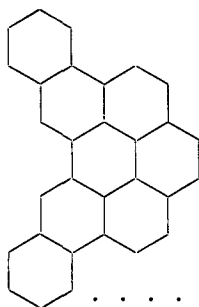
. 63

XIV. 1.12,2.3,8.9-Tribenzoperylene

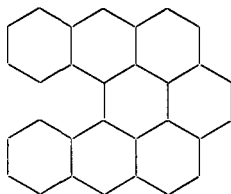
. 65

XV. 1.12,2.3,10.11-Tribenzoperylene

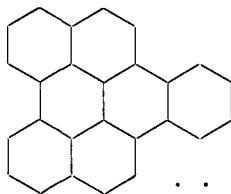
. 66

XVI. 1.12,4.5,8.9-Tribenzoperylene

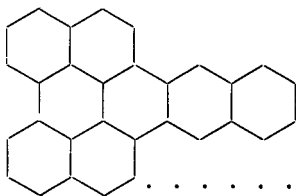
. 69

XVII. 1.12,5.6,7.8-Tribenzoperylene

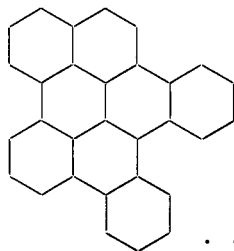
. 71

XVIII. 1.12-*o*-Phenyleneperylene

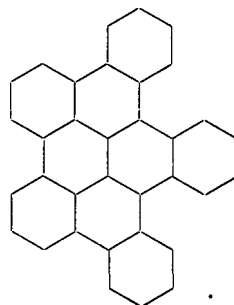
. 72

XIX. Anthraceno-(1'.4':1.12)-perylene

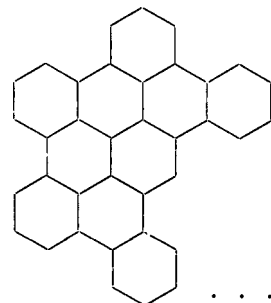
73

XX. 1.12-*o*-Phenylene-2.3-benzoperylene

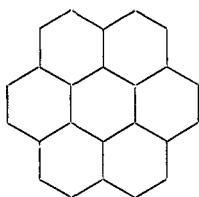
75

XXI. 1.12-*o*-Phenylene-2.3,10.11-dibenzoperylene

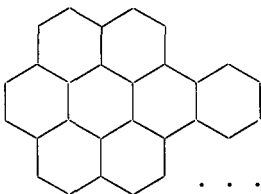
76

XXII. 1.2,3.4,5.6,10.11-Tetrabenzanthanthrene

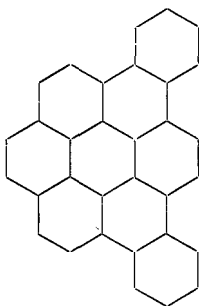
78

XXIII. Coronene

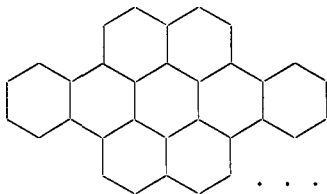
79

XXIV. 1,2-Benzocoronene

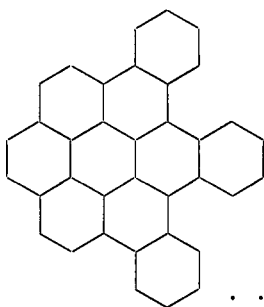
86

XXV. 1,2,5,6-Dibenzocoronene

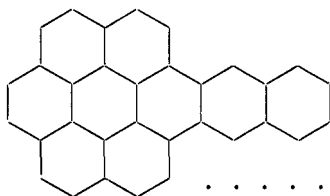
88

XXVI. 1,2,7,8-Dibenzocoronene

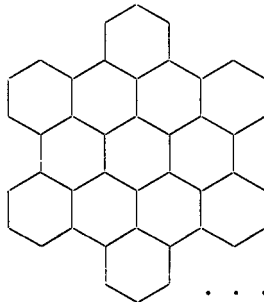
90

XXVII. 1,2,3,4,5,6-Tribenzocoronene

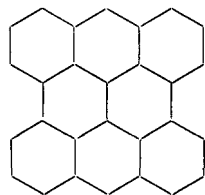
. 92

XXVIII. Naphtho-(2'.3':1.2)-coronene

. 94

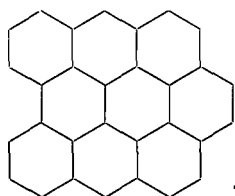
XXIX. 1,12,2,3,4,5,6,7,8,9,10,11-Hexabenzocoronene

. 95

CHAPTER 30. Hydrocarbons derived from Bisanthene:**I. Bisanthene**

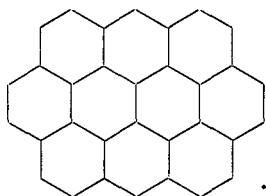
. 98

II. 1,14-Benzobisanthene



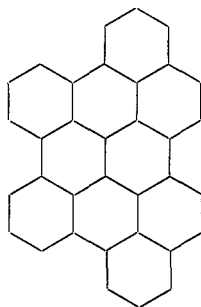
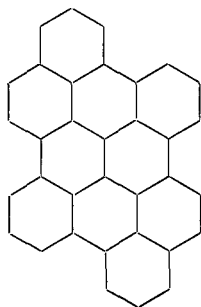
..... 100

III. Ovalene



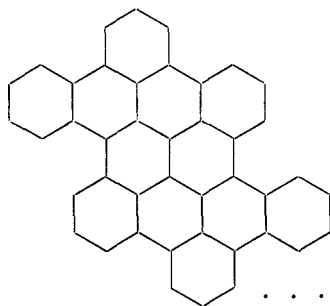
..... 103

IV. 3,4,10,11-Dibenzobisanthene and 3,4,11,12-Dibenzobisanthene



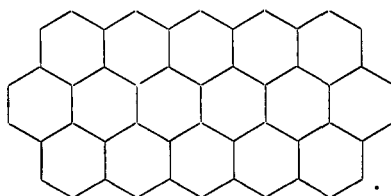
..... 104

V. 1,2,3,4,8,9,10,11-Tetrabenzobisanthene



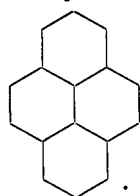
..... 107

VI. Circumanthracene

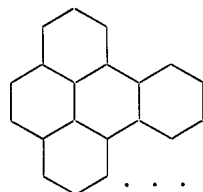
	108
---	-----

CHAPTER 31. Hydrocarbons derived from Pyrene:

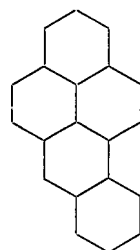
I. Pyrene

	110
---	-----

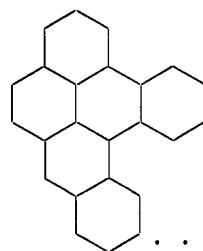
II. 1,2-Benzopyrene

	127
---	-----

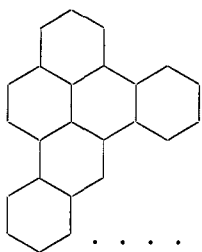
III. 3,4-Benzopyrene

	130
--	-----

IV. 1,2,3,4-Dibenzopyrene

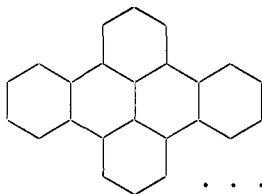
	141
---	-----

V. 1,2,4,5-Dibenzopyrene



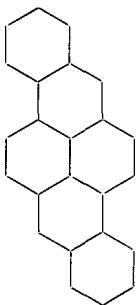
145

VI. 1,2,6,7-Dibenzopyrene



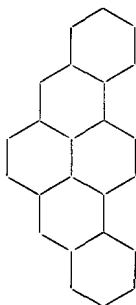
148

VII. 3,4,8,9-Dibenzopyrene



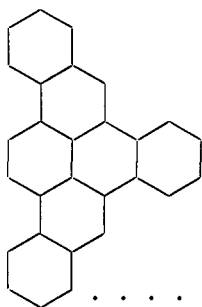
151

VIII. 3,4,9,10-Dibenzopyrene

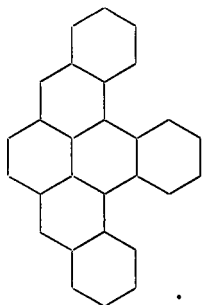


153

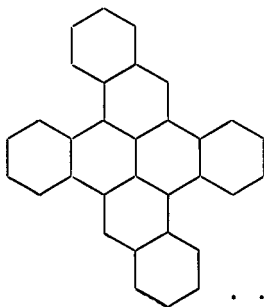
IX. 1,2,4,5,8,9-Tribenzopyrene

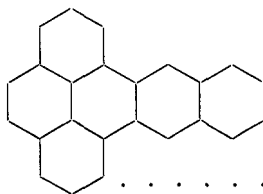


X. 1,2,3,4,9,10-Tribenzopyrene

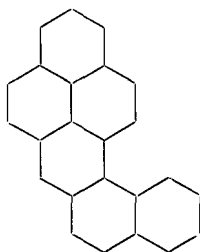


XI. 1,2,3,4,6,7,8,9-Tetrabenzopyrene

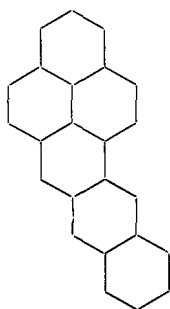


XII. Naphtho-(2'.3':1.2)-pyrene

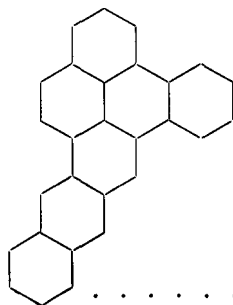
163

XIII. Naphtho-(1'.2':3.4)-pyrene

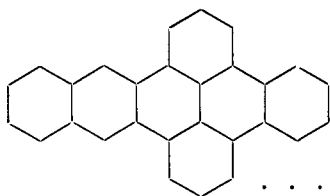
165

XIV. Naphtho-(2'.3':3.4)-pyrene

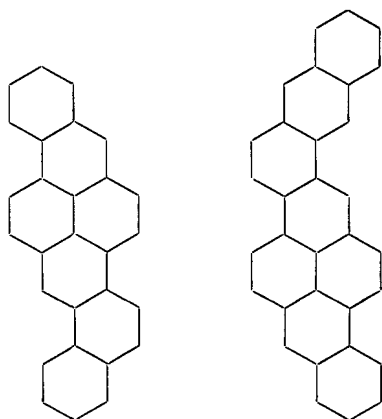
166

XV. 1.2-Benzonaphtho-(2''.3'':4.5)-pyrene

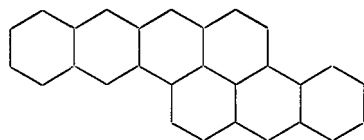
169

XVI. 1,2-Benzonaphtho-(2".3":6.7)-pyrene

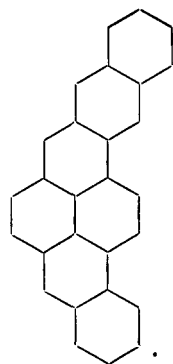
. 171

XVII. 8,9-Benzonaphtho-(2".1":3.4)-pyrene and 3,4-Benz-anthraceno-(2".1":8.9)-pyrene

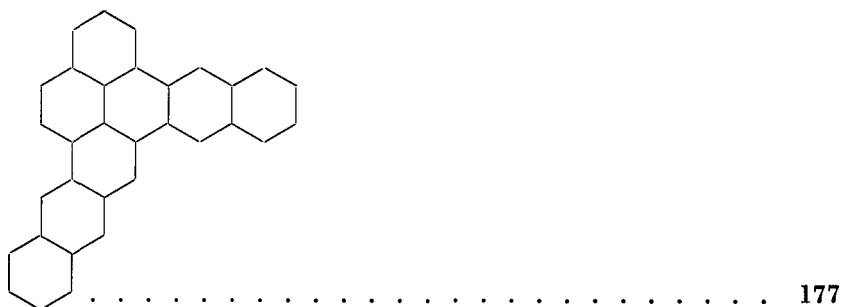
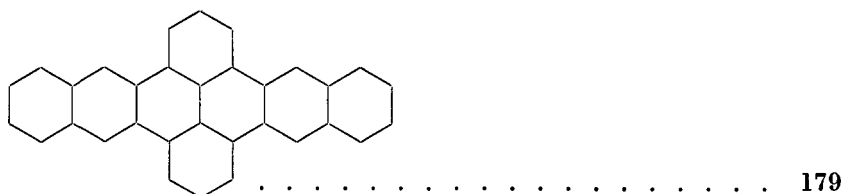
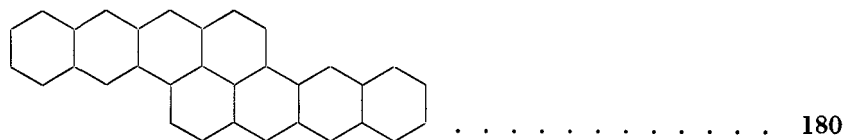
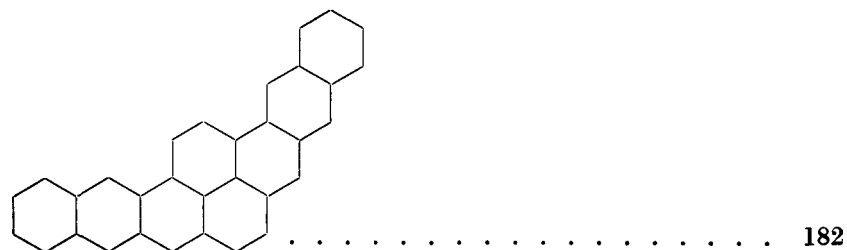
. 173

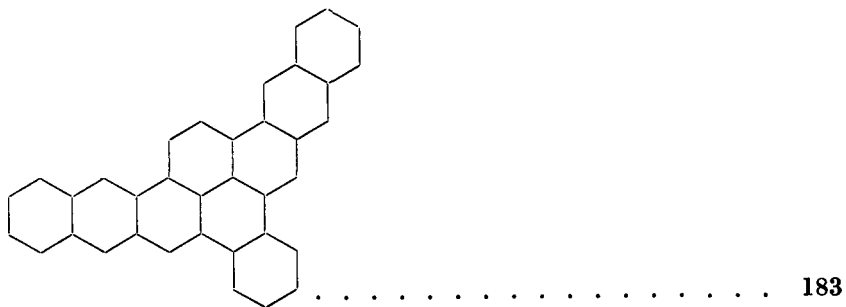
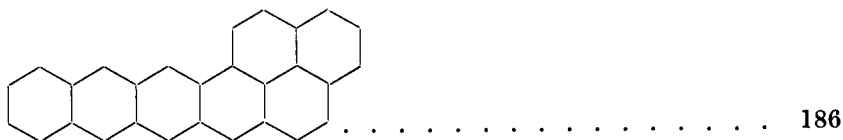
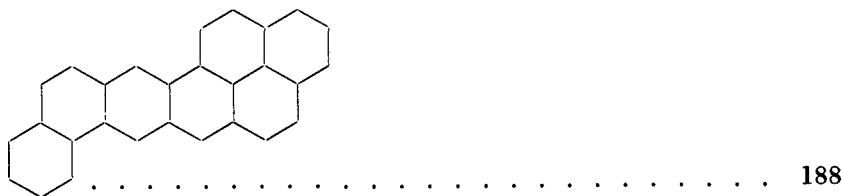
XVIII. 3,4-Benzonaphtho-(2".3":8.9)-pyrene

. 174

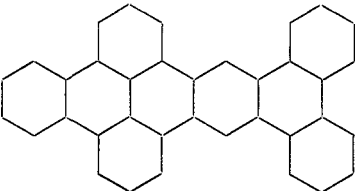
XIX. 3,4-Benzonaphtho-(2".3":9.10)-pyrene

. 175

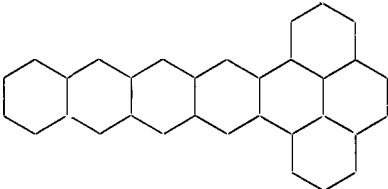
XX. Dinaphtho-(2'.3':1.2);(2".3":4.5)-pyrene**XXI. Dinaphtho-(2'.3':1.2);(2".3":6.7)-pyrene****XXII. Dinaphtho-(2'.3':3.4);(2".3":8.9)-pyrene****XXIII. Dinaphtho-(2'.3':3.4);(2".3":9.10)-pyrene**

XXIV. 1.2-Benzodinanaphtho-(2".3":4.5); (2".3":8.9)-pyrene**XXV. 1.14,4.5-Dibenzopentacene****XXVI. Naphtho-(1'.7':2.14)-pentacene****XXVII. Phenanthreno-(2'.3':3.4)-pyrene****XXVIII. 1.2-Benzophenanthreno-(9'.10':6.7)-pyrene**

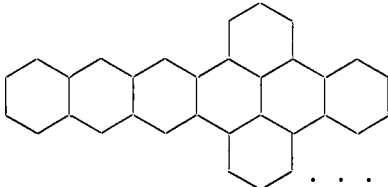
XXIX. 1.2,3.4,6.7,12.13-Tetrabenzopentacene

	191
---	-----

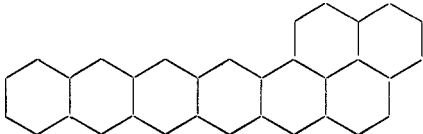
XXX. 1.16,4.5-Dibenzohexacene

	192
---	-----

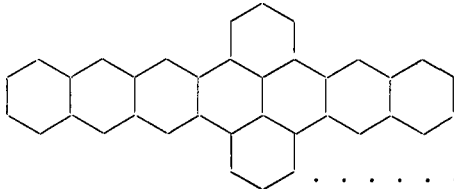
XXXI. 5.6,15.16-Dibenzohexacene

	194
---	-----

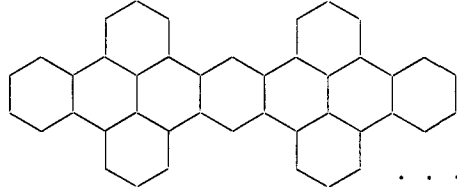
XXXII. Naphtho-(1'.7':2.16)-hexacene

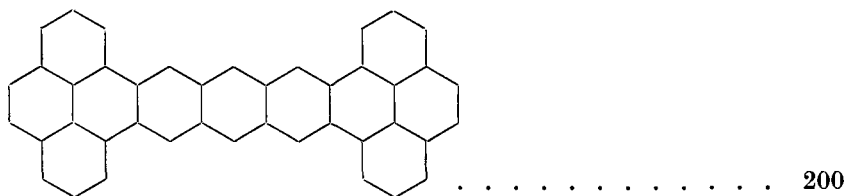
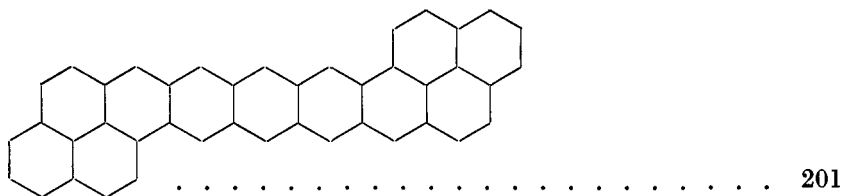
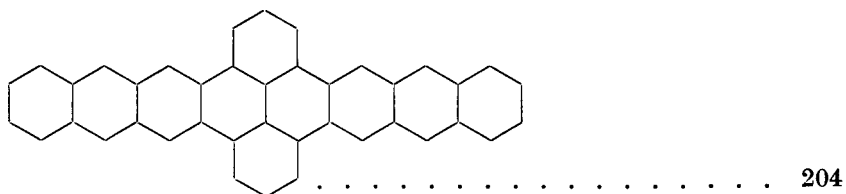
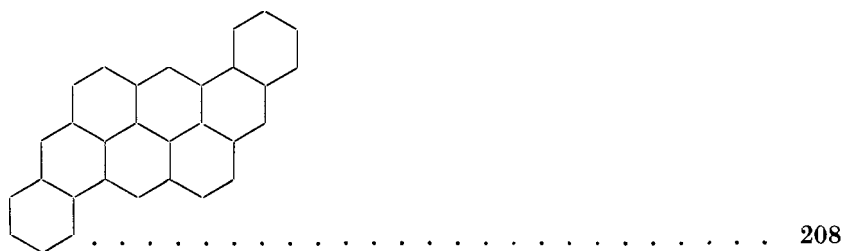
	195
--	-----

XXXIII. 6.7,16.17-Dibenzoheptacene

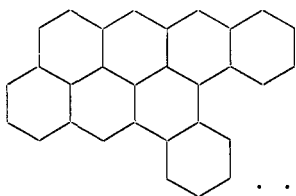
	197
---	-----

XXXIV. 5.6,8.9,14.15,17.18-Tetrabenzoheptacene

	198
---	-----

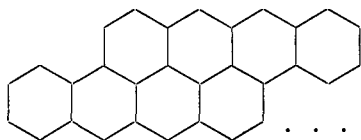
XXXV. 1.18,4.5,9.10,13.14-Tetrabenzoheptacene**XXXVI. Dinaphtho-(1'.7':2.18);(7".1":9.11)-heptacene****XXXVII. 7.8,17.18-Dibenzooctacene****CHAPTER 32. Hydrocarbons derived from Anthanthrene:****I. Anthanthrene****II. 1.2,7.8-Dibenzanthanthrene**

III. 2,3,4,5-Dibenzanthanthrene

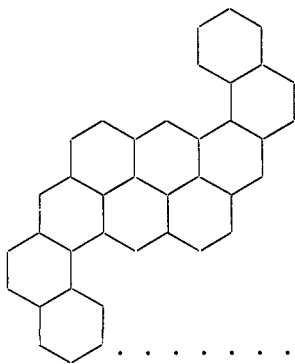
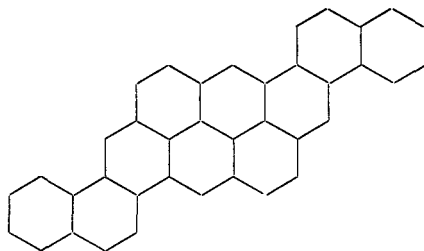
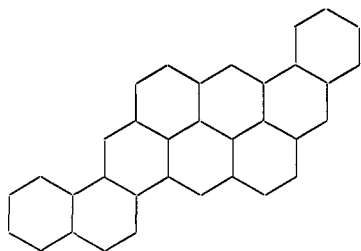


211

IV. 2,3,8,9-Dibenzanthanthrene

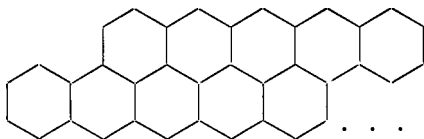


213

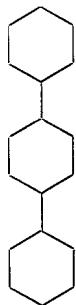
V. 1,2-Benzonaphtho-(2'',1'':7.8)-anthanthrene,
Dinaphtho-(2'.1':1.2);(2'',1'':7.8)-anthanthrene and
Dinaphtho-(1'.2':1.2);(1'',2'':7.8)-anthanthrene

215

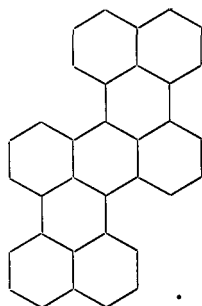
VI. 1,2-Benzophenanthreno-(10'',2'':8.10)-anthanthrene



217

CHAPTER 33. Hydrocarbons derived from *p*-Terphenyl:I. *p*-Terphenyl

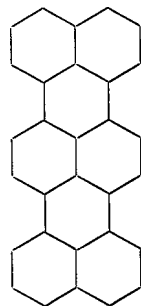
. 221

II. 1,9,5,10-Di-(*peri*-naphthylene)-anthracene

. 224

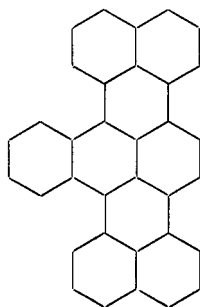
CHAPTER 34. Hydrocarbons derived from Terrylene:

I. Terrylene



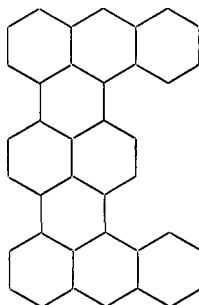
. 226

II. 7.8-Benzoterrylene



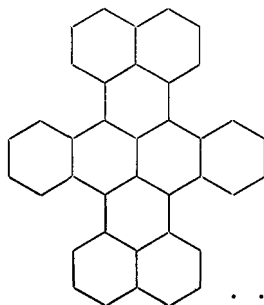
. 230

III. 1.2,13.14-Dibenzoterrylene

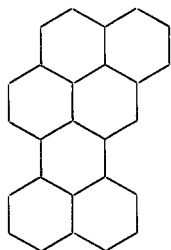


. 232

IV. 7.8,15.16-Dibenzoterrylene

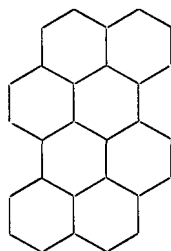


. 233

CHAPTER 35. Hydrocarbons derived from 2,3-*peri*-Naphthylenepyrene:I. 2,3-*peri*-Naphthylenepyrene

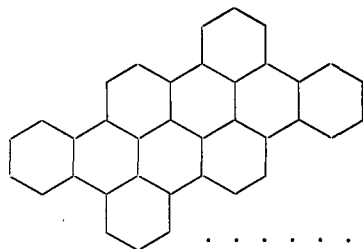
. 236

II. Pyreno-(1'.3':10'.2')-pyrene



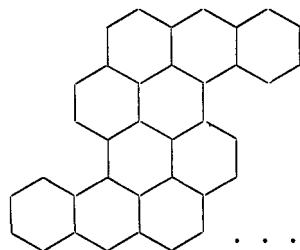
. 237

III. 1,12,2,3,6,7,8,9-Tetrabenzanthanthrene



. 239

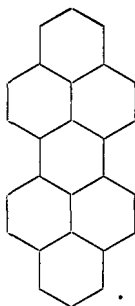
IV. 9,10,3',4'-Dibenzopyreno-(1,3:10'.2')-pyrene



. 240

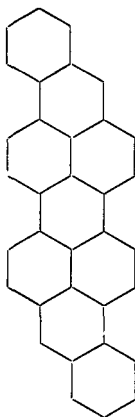
CHAPTER 36. Hydrocarbons derived from Peropyrene:

I. Peropyrene



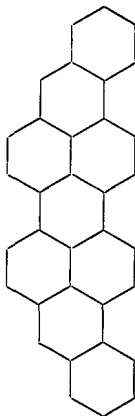
242

II. 1,2,8,9-Dibenzoperopyrene



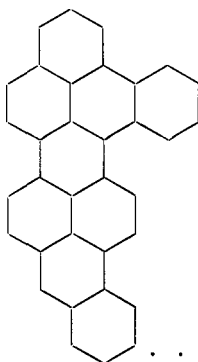
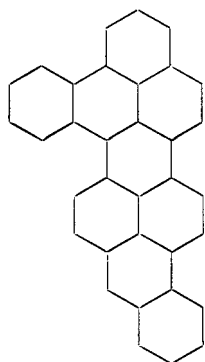
246

III. 1,2,9,10-Dibenzoperopyrene



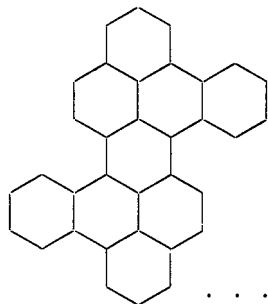
251

IV. 1,2,6,7-Dibenzoperopyrene and
1,2,11,12-Dibenzoperopyrene



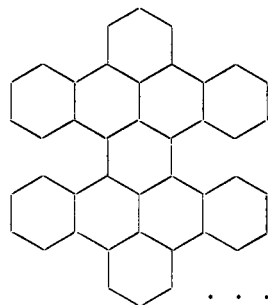
. 255

V. 4,5,11,12-Dibenzoperopyrene



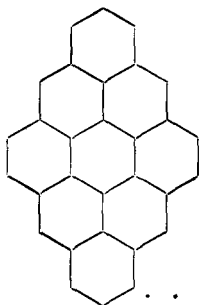
. 257

VI. 4,5,6,7,11,12,13,14-Tetrabenzoperopyrene



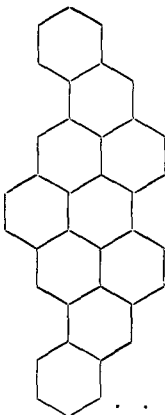
. 258

VII. 5,6,12,13-Dibenzoperopyrene



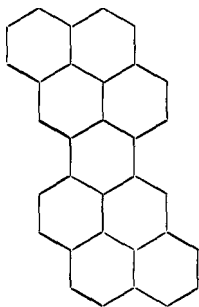
260

VIII. 2,3,5,6,8,9-Tribenzoperopyrene

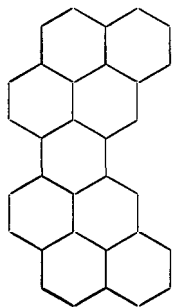


263

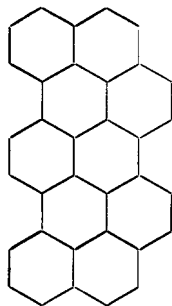
IX. 1,14,7,8-Dibenzoperopyrene



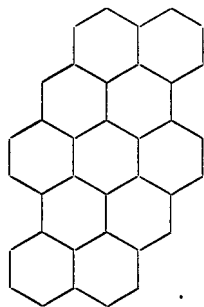
265

X. 1.14,10.11-Dibenzoperopyrene

. 266

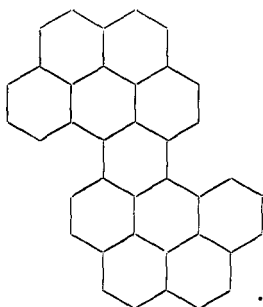
XI. 3.4,5.6,7.8-Tribenzoperopyrene

. 268

XII. 3.4,5.6,10.11,12.13-Tetrabenzoperopyrene

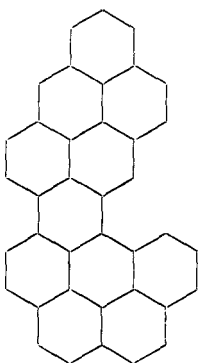
. 269

XIII. Dinaphtho-(7'.1':1.13); (1".7":6.8)-peropyrene

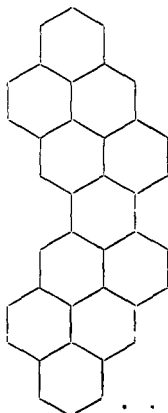
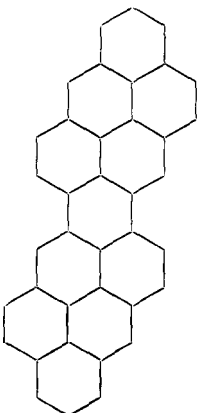


271

XIV. Dinaphtho-(7'.1':1.13); (1".7":9.11)-peropyrene

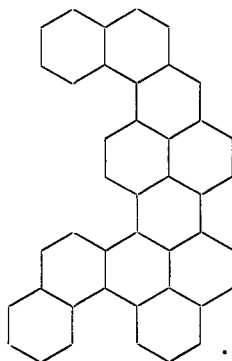
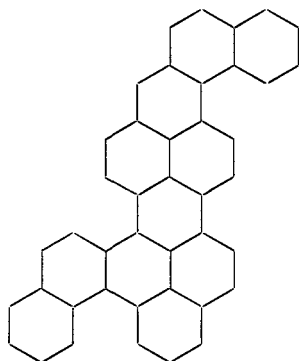
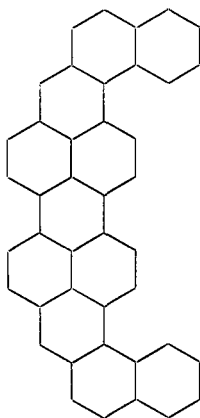
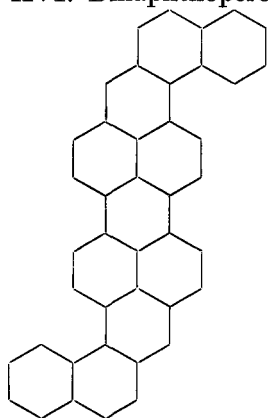


273

XV. Dinaphtho-(1'.7':2.4); (1".7":9.11)-peropyrene and
Dinaphtho-(1'.7':2.4); (2".8":7.9)-peropyrene

274

XVI. Dinaphthoperopyrenes



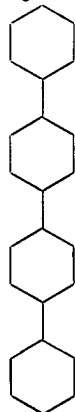
. 275

PART V

peri-Condensed Hydrocarbons consisting only of Six-membered Rings
and Derived from Fundamental Systems with Four Benzenoid Rings

CHAPTER 37. Hydrocarbons derived from Quaterphenyl:

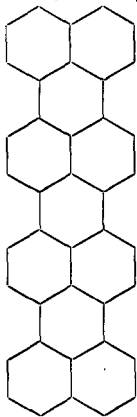
Quaterphenyl



. 281

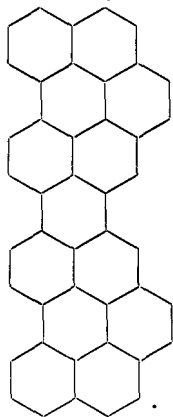
CHAPTER 38. Hydrocarbons derived from Quaterrylene

I. Quaterrylene

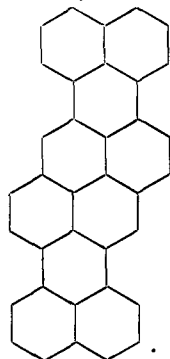


283

II. 1,20,16,17-Dibenzoquaterrylene

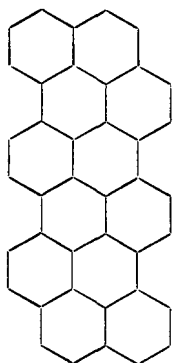


284

CHAPTER 39. Hydrocarbons derived from 2,3,7,8-Di-(*peri*-naphthylene)-pyrene:I. 2,3,7,8-Di-(*peri*-naphthylene)-pyrene

286

II. Dipyreno-(1'3':10.2);(1".3":5.7)-pyrene



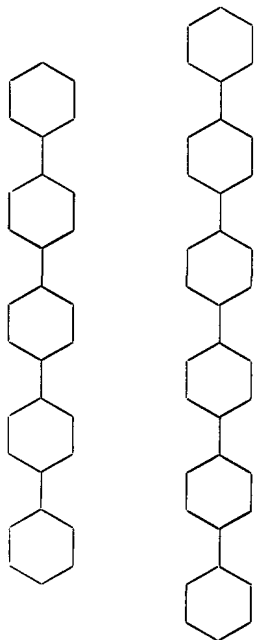
. 287

PART VI

peri-Condensed Hydrocarbons consisting only of Six-membered Rings
and Derived from Fundamental Systems with Five and Six Benzenoid
Rings

CHAPTER 40:

Quinquiphenyl and Sexiphenyl



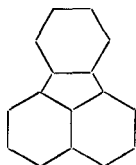
. 291, 292

PART VII

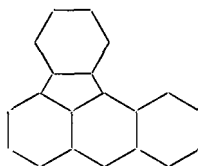
peri-Condensed Hydrocarbons consisting of Six- and Five-membered Rings in which no Carbon Atom Is Linked with more than One Hydrogen Atom

CHAPTER 41. Hydrocarbons containing one Five-membered Ring:

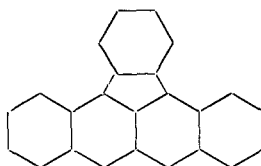
I. Fluoranthene

	295
---	-----

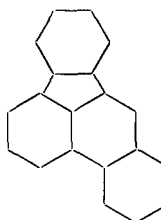
II. 2,3-Benzofluoranthene

	303
---	-----

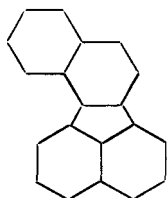
III. 2,3,6,7-Dibenzofluoranthene

	306
---	-----

IV. 3,4-Benzofluoranthene

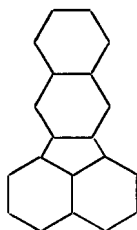
	309
---	-----

V. 10.11-Benzofluoranthene



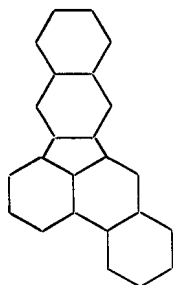
312

VI. 11.12-Benzofluoranthene



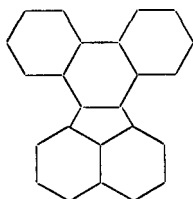
315

VII. 3.4,11.12-Dibenzofluoranthene



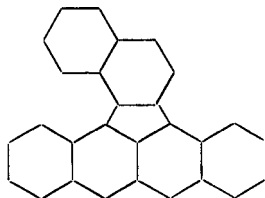
317

VIII. 9.10,11.12-Dibenzofluoranthene



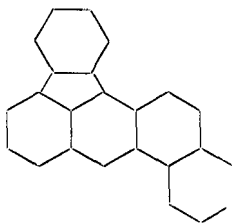
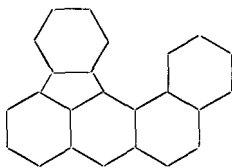
319

IX. 2.3,6.7,10.11-Tribenzofluoranthene



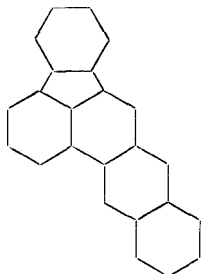
320

**X. Naphtho-(1'.2':2.3)-fluoranthene and
Naphtho-(2'.1':2.3)-fluoranthene**



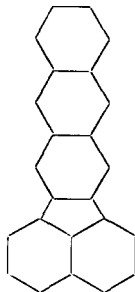
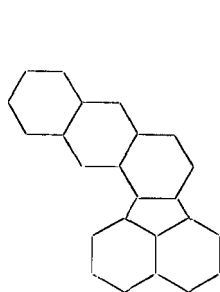
. 321

XI. Naphtho-(2'.3':3.4)-fluoranthene



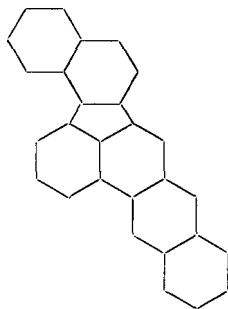
. 322

**XII. Naphtho-(2'.3':10.11)-fluoranthene and
Naphtho-(2'.3':11.12)-fluoranthene**

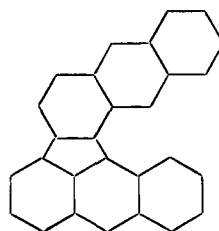
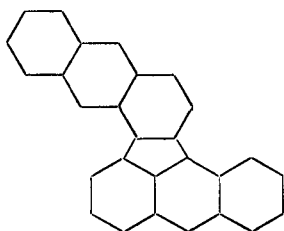
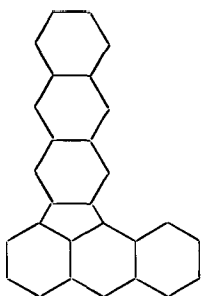


. 324

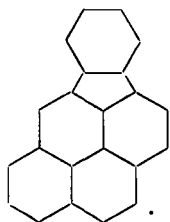
XIII. 10,11-Benzonaphtho-(2'.3':3.4)-fluoranthene



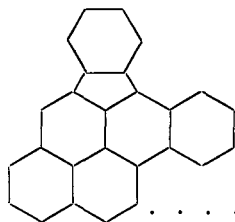
. 327

XIV. 2.3-Benzonaphthofluoranthenes

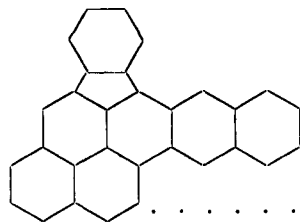
..... 327

XV. 2.3-*o*-Phenylenepyrene

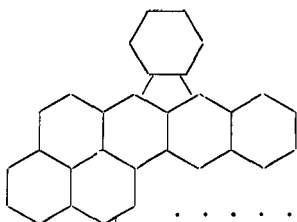
..... 329

XVI. 2.3-*o*-Phenylene-4.5-benzopyrene

..... 331

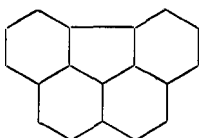
XVII. 2.3-*o*-Phylenenaphtho-(2".3":4.5)-pyrene

..... 332

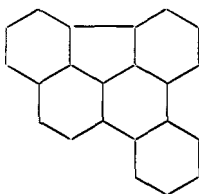
XVIII. 4".5-*o*-Phenylenenaphtho-(2".3":3.4)-pyrene

333

XIX. 2.13-Benzofluoranthene

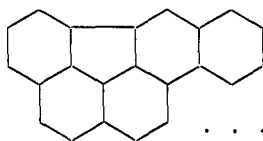


335

XX. 2.13-*o*-Phenynefluoranthene

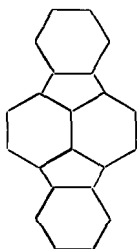
337

XXI. 2.13,11.12-Dibenzofluoranthene

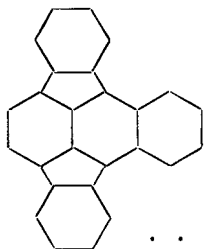


338

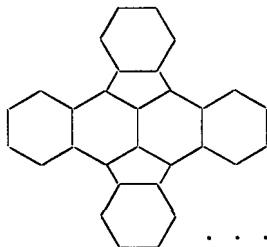
CHAPTER 42. Hydrocarbons containing Two Five-membered Rings:

I. 4.5-*o*-Phenynefluoranthene

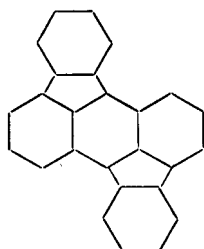
339

II. Isorubicene

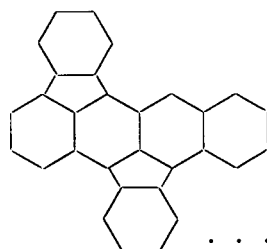
. 340

III. 5.6,11.12-Di-*o*-phenylenetetracene

. 342

IV. Rubicene

. 345

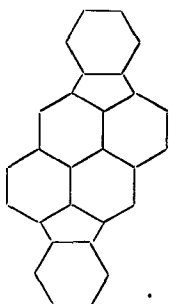
V. 2.3-Benzorubicene

. 348

VI. Dibenzorubicenes

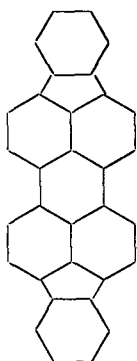
. 349

VII. 2,3,7,8-Di-(*o*-phenylene)-pyrene



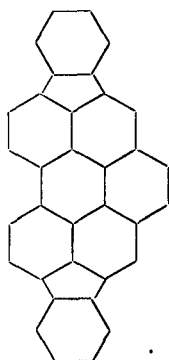
. 351

VIII. Periflanthene

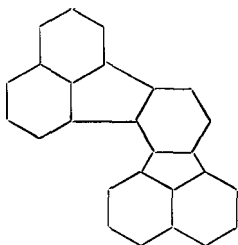


. 352

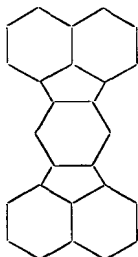
IX. 1,16-Benzoperiflanthene



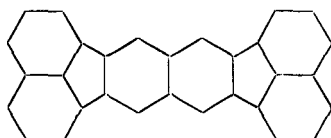
. 355

X. 10.11-(*peri*-Naphthylene)-fluoranthene

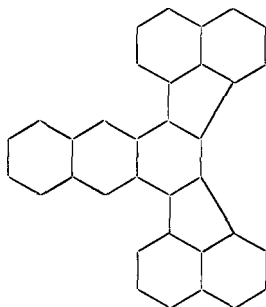
357

XI. 11.12-(*peri*-Naphthylene)-fluoranthene

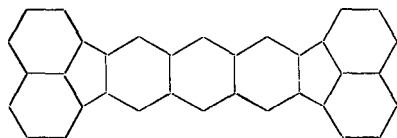
358

XII. 2.3,6.7-Di-(*peri*-naphthylene)-naphthalene

360

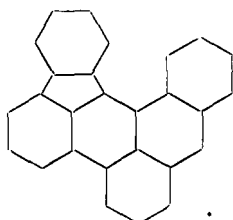
XIII. 1.2,3.4-Di-(*peri*-naphthylene)-anthracene

361

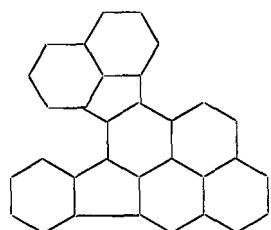
XIV. 2.3,6.7-Di-(*peri*-naphthylene)-anthracene

363

XV. Di-(*o*-phenylene)-phenanthrene

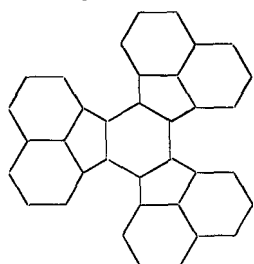
	364
---	-----

XVI. 2,3-*o*-Phenylene-4,5-*peri*-naphthylenepyrene

	365
---	-----

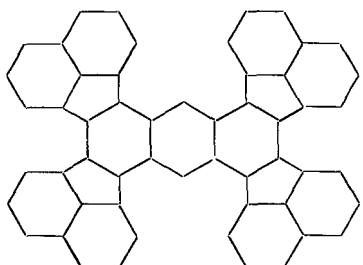
CHAPTER 43. Hydrocarbons containing Three Five-membered Rings:

Decacycene

	366
--	-----

CHAPTER 44. Hydrocarbons containing four Five-membered Rings:

1,2,3,4,5,6,7,8-Tetra-(*peri*-naphthylene)-anthracene

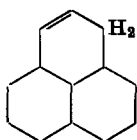
	369
---	-----

PART VIII

peri-Condensed Hydrocarbons consisting of Six-membered Rings in which One Carbon Atom Is Linked with Two Hydrogen Atoms

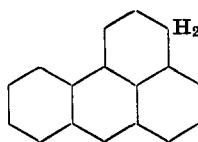
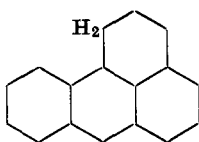
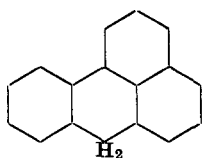
CHAPTER 45:

I. Perinaphthene



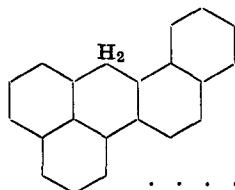
..... 375

II. Benzanthrenes



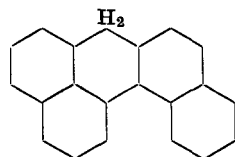
..... 385, 394, 395

III. Naphtho-(2'.1':7.8)-perinaphthene



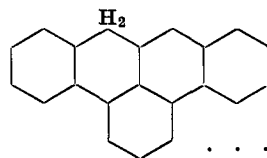
..... 400

IV. Naphtho-(1'.2':7.8)-perinaphthene



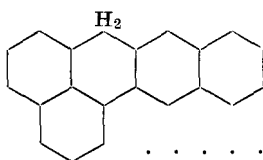
..... 401

V. 2,3,7,8-Dibenzoperinaphthene



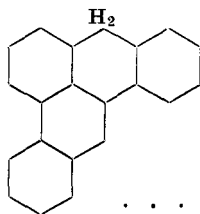
..... 404

VI. Naphtho-(2'.3':7.8)-perinaphthene



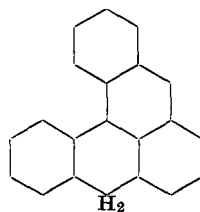
406

VII. 4.5,7.8-Dibenzoperinaphthene



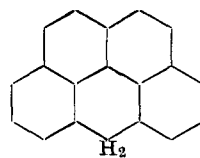
408

VIII. Coeranthrene



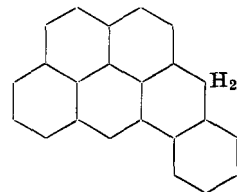
412

IX. Naphthanthrene



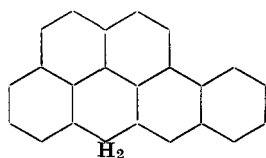
416

X. 3H-4.5-Benzonaphthanthrene

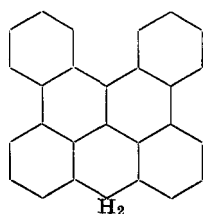


418

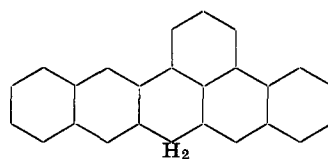
XI. 3.4-Benzonaphthanthrene

	420
--	-----

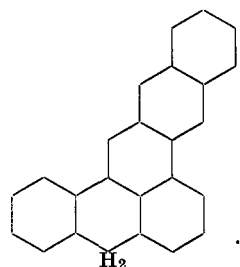
XII. 1.2,10.11-Dibenzonaphthanthrene

	422
--	-----

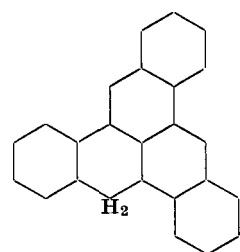
XIII. 2.3-Benzonaphtho-(2".3":7.8)-perinaphthene

	423
--	-----

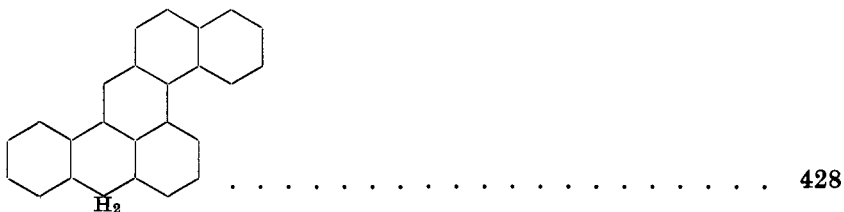
XIV. 7.8-Benzonaphtho-(2".3":4.5)-perinaphthene

	424
---	-----

XV. 1.2,4.5,7.8-Tribenzoperinaphthene

	426
--	-----

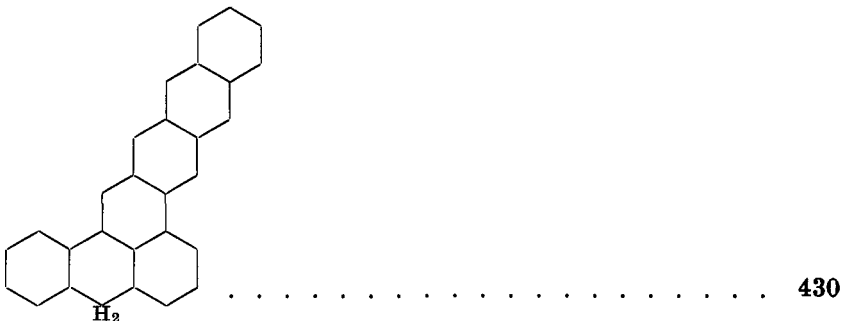
XVI. 7,8-Benzonaphtho-(1".2":4.5)-perinaphthene



XVII. Anthraceno-(2'.3':7.8)-perinaphthene



XVIII. 7,8-Benzanthraceno-(2".3":4.5)-perinaphthene



PART IX

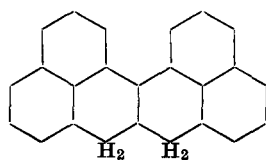
peri-Condensed Hydrocarbons consisting of Six-membered Rings in
which Two Carbon Atoms Are Linked with Two Hydrogen Atoms

CHAPTER 46:

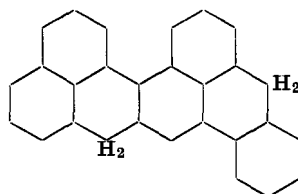
I. 4,8-Dihydrotriangulene



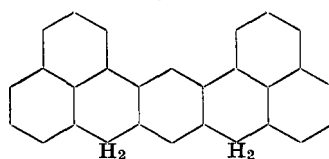
II. 5,6-Dihydro-1,12,10,11-dibenzotetracene

	440
--	-----

III. 3,11-Dihydro-1,2,4,5,6,7-tribenzotetracene

	440
--	-----

IV. 5,7-Dihydro-1,14,11,12-dibenzopentacene

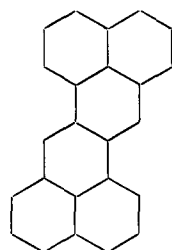
	442
--	-----

PART X

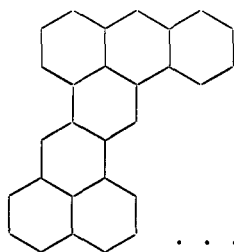
Hydrocarbons consisting of Six-membered Rings which have Formally
Fixed Double Bonds

CHAPTER 47:

I. Zethrene

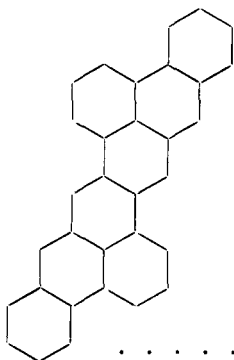
	447
--	-----

II. 5,6-Benzozethrene



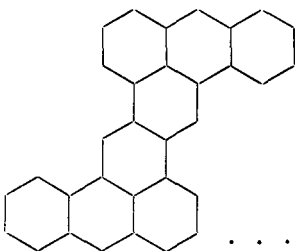
449

III. 4,5,11,12-Dibenzozethrene



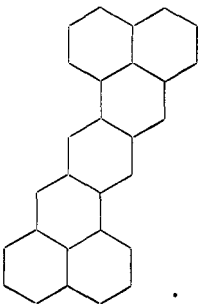
451

IV. 5,6,12,13-Dibenzozethrene



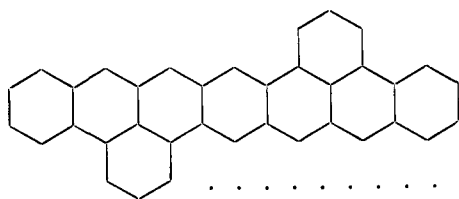
453

V. Heptazethrene



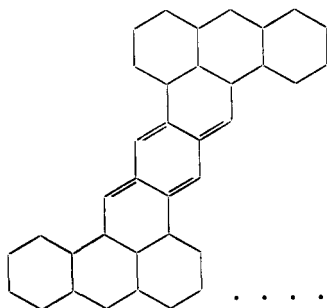
456

VI. 4,5,12,13-Dibenzoheptazethrene



458

VII. 5,6,13,14-Dibenzoheptazethrene



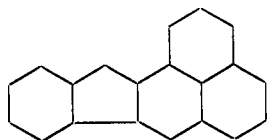
461

PART XI

Hydrocarbons consisting of Five- and Six-membered Rings which Have Formally Fixed Double Bonds

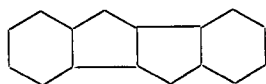
CHAPTER 48:

I. Indeno-(2'.1':1.2)-perinaphthene



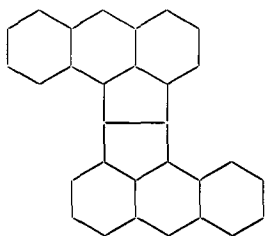
467

II. 1,2,4,5-Dibenzopentalene



468

III. Dianthraceno-(1'.9':1.3);(1''.9'':4.6)-pentalene



. 471

AUTHOR INDEX 473