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JJ CHEVALLIER



COURS

DE

MINÉRALOGIE.

Atlas.

COURS
DE
MINERALOGIE

Par M. **DELAFOSSÉ.**

EXPLICATION DES PLANCHES.

ATLAS

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EXPLICATION DES PLANCHES

DU PREMIER VOLUME

DE LA

MINÉRALOGIE.

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DE LA

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Fig. 25. *Idem*, forme secondaire : $pmg^1h^1e^3b^2a^1$.
Fig. 26. Antimoine sulfuré (stibine), en octaèdre orthorhombique : b^1 .

- Fig. 27. Prisme orthorhombique : noyau hypothétique de la stibine :
 $pm\bar{m}$.
- Fig. 28. Stibine sexoctonale (H^v) : mh^1b^1 .
- Fig. 29. Le même genre de forme, avec un sommet plus surbaissé :
 mh^1b^3 .
- Fig. 30. Stibine sexoctonale, plus les faces i, i produites par un décroissement intermédiaire : mh^1b^1i .
- Fig. 31. Bournonite primitive : $pm\bar{t}$.
- Fig. 32. Bournonite secondaire : $pm\bar{t}g^1b^1/2c^1/2$.
- Fig. 33. Étain oxydé (cassitérite) en prisme quadratique, $pm\bar{m}$.
- Fig. 34. Cassitérite dodécaèdre, b^1g^1 .
- Fig. 35. Cassitérite quadrioctonale (H^v) : a_1g_1 .
- Fig. 36. Cassitérite dioctaèdre (H^v) : a^1g^1m .
- Fig. 37. Cassitérite récurrente (H^v) : b^1g^1i .
- Fig. 38. Cassitérite distique (H^v) : $a^1b^1g^1i$.
- Fig. 39. Cassitérite bissexdécimale (H^v) : $a^1b^1mg^1g^2$.
- Fig. 40. Cassitérite annulaire (H^v) : $pmg^1a^1b^1$.
- Fig. 41. Cassitérite hémitrope.
- Fig. 42. Tantalite de Bavière, en prisme orthorhombique, $pm\bar{m}$.
- Fig. 43. *Idem*, forme secondaire.
- Fig. 44. Fergusonite primitive, en prisme quadratique, $pm\bar{m}$.
- Fig. 45. *Idem*, forme secondaire hémihédrique.

EXPLICATION DES PLANCHES

DU SECOND VOLUME

DE LA

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Fig. 48. Rutile bissexdécimal (Hy) : $mh^1 h^2 a^1 b^1$.
Fig. 49. Rutile géniculé simple.
Fig. 50. Rutile géniculé double.
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Fig. 55. Anatase dioctaèdre (Hy) : $b^1 b^2$.
Fig. 56. Anatase prominule (Hy) : $b^1 i$.
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Fig. 58. La variété basée, émarginée sur les arêtes obliques : $pb^1 a^2$.
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Fig. 60. *Idem*, forme secondaire, d'après G. Rose : $pxyl$.
Fig. 61. *Idem*, forme secondaire : $pxys$.
Fig. 62. Sphène ditétraèdre (Hy) : pyn .
Fig. 63. Autre forme de la variété dite titanite : $pxynr$.
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Fig. 70. *Idem*, forme secondaire : $mg^2 g^1 b^1 e^1$.

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- Fig. 71. Molybdénite, en prisme hexagonal régulier : pm .
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 Fig. 77. Hausmannite octaèdre : b^1 .
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 Fig. 79. Braunite octaèdre : b^1 .
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 Fig. 83. Combinaison de l'octaèdre b^1 et d'un scalénoèdre i .
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 Fig. 85. *Idem*, en prisme droit octogone : pmg^1 .
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- Fig. 95. Mispickel unibinaire (H^v) : $me^1 e^2$.
 Fig. 96. Mispickel quadrioctonal (H^v) : $me^1 e^3$.
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 Fig. 101. Pyrite cubo-icosaèdre.
 Fig. 102. Pyrite quadriépointée (H^v) : $pa^1 i$.
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- Fig. 112. Marcassite orthorhombique : $pm\bar{m}$.
 Fig. 113. Marcassite quaternaire (H^v) : $m\bar{e}^4$.
 Fig. 114. Marcassite quadrihexagonale (H^v) : $pm\bar{e}^4$.
 Fig. 115. Marcassite quadrioctonale (H^v) : $ma^4e^5/4$.
 Fig. 116. Marcassite bisunitaire (H^v) : $pm\bar{a}^4e^4$.

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- Fig. 117. Marcassite équivalente (H^v) : $pm\bar{a}^4e^4b^4/2$.
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 Fig. 119. Marcassite péritome (H^v).
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 Fig. 126. Oligiste uniternaire (H^v) : pa^4e^3 .
 Fig. 127. Oligiste binoternaire (H^v) : pa^2e^3 .
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 Fig. 133. Oligiste basé lamelliforme : a^4pz .
 Fig. 134. *Idem*, en lames hémitropes.
 Fig. 135. Craïtonite primitive : p .
 Fig. 136. Craïtonite basée (H^v) : a^4p .
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 Fig. 138. Craïtonite basée lamelliforme : a^4p .
 Fig. 139. Autre forme secondaire, basée : $a^4d^4pe^4/2$.
 Fig. 140. Fer titané de Gastein : a^4pe^3 .

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- Fig. 141. Forme secondaire de l'ilménite : $pa^4e^4b^4e^3$.
 Fig. 142. Gœthite primitive : $pm\bar{m}$.
 Fig. 143. Gœthite (forme secondaire) : $gm\bar{h}^3b^4e^3$.
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 Fig. 145. Mélantérite épointée : $pm\bar{t}$.
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 Fig. 147. Vivianite en prisme oblique rectangulaire : pg^4h^4 .
 Fig. 148. Vivianite (forme secondaire) : $pg^4m\bar{h}^4e^3$.
 Fig. 149. Sidérose primitive : p .
 Fig. 150. Sidérose basée (var. mixte, de H^v) : $a^4e^3/2$.
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 Fig. 152. Liévrite primitive : $pm\bar{m}$.
 Fig. 153. Liévrite en prisme cunéiforme : ma^2 .

- Fig. 154. Liévrîte quadrioctonale (H^r) : $m b^1$.
 Fig. 155. Liévrîte quadriduodécimale (H^r) : $m a^2 b^1$.
 Fig. 156. La même, plus le prisme vertical g^3 .
 Fig. 157. Liévrîte monostique (H^r) : $p m h^3 a^2 b^1 e^1$.
 Fig. 158. Autre forme secondaire, d'après Naumann.
 Fig. 159. Achmite primitive : $p m m$.
 Fig. 160. Achmite (forme secondaire).
 Fig. 161. Scorodite primitive : $p m m$.
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- Fig. 164. Wolfram primitif : $p m m$.
 Fig. 165. Le même, en prisme oblique rectangulaire : $p h^1 g^1$.
 Fig. 166. La forme primitive, plus les faces h^3 .
 Fig. 167. Autre forme secondaire, plus compliquée : $p m h^3 h^1 a^2 e^3 i$.
 Fig. 168. Allanite, forme secondaire d'après Mohs.
 Fig. 169. Blende tétraèdre : $1/2 (a^1)$.
 Fig. 170. Blende cubo-octaèdre alterne (H^r) : $p a^1$.
 Fig. 171. Blende biforme : $1/2 (a^1) b^1$.
 Fig. 172. Blende triforme : $1/2 (a^1) b^1 p$.
 Fig. 173. Blende didodécaèdre (H^r) : $1/2 (a^3) b^1$.
 Fig. 174. Zinc silicaté primitif : $p m m$.
 Fig. 175. Zinc silicaté trapézien : $m g^1 e^1$.
 Fig. 176. Zinc silicaté bisunitaire : $m g^1 h^1$.
 Fig. 177. Forme secondaire à hémiedrie polaire : $m g^1 a^{1/3} a^1 e^{1/3} e^1$.
 Fig. 178. Willémitte primitive : p .
 Fig. 179. Willémitte secondaire, d'après Lévy : $p e^2$.
 Fig. 180. Uranite primitive : $p m m$.
 Fig. 181. La même, en quadroctaèdre basé : $p b^{1/2}$.
 Fig. 182. Autre forme, de même genre, plus surbaissée : $p b^2$.
 Fig. 183. Le prisme fondamental, émarginé sur ses bases : $p m b^{3/2}$.

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- Fig. 184. Smaltine triforme : $p a^1 b^1$.
 Fig. 185. Chalkosine primitive : $p m m$.
 Fig. 186. Chalkosine en prisme hexagonal : $p m g^1$.
 Fig. 187. Chalkosine trapézienne : $p b^2 e^{1/3}$.
 Fig. 188. Chalkosine, en prisme hexagonal, modifié sur les arêtes des bases : $p m g^1 e^1 b^1 b^3$.
 Fig. 189. Chalkosine, en prisme octogone, semblablement modifié.
 Fig. 190. Chalkosine en cristaux croisés.
 Fig. 191. Chalkopyrite octaèdre : b^1 .
 Fig. 192. La même, sous l'aspect d'un tétraèdre épointé.
 Fig. 193. Chalkopyrite en octaèdre émarginé : $a^1 b^1$.
 Fig. 194. La même, avec l'aspect tétraédrique.

- Fig. 195. Tétrahédrite triépointé : $\frac{1}{2}(a^1), \frac{1}{2}(a^2/3)$.
 Fig. 196. Tétrahédrite triforme : $p b^1, \frac{1}{2}(a^1)$.
 Fig. 197. La même, avec le dodécaèdre pour forme dominante.
 Fig. 198. Tétrahédrite apopane (H^v) : $b^1, \frac{1}{2}(a^1), \frac{1}{2}(a^2)$.
 Fig. 199. Autre combinaison ternaire : $b^1, \frac{1}{2}(a^2/3), \frac{1}{2}(a^2)$.
 Fig. 200. Cuprite cubo-dodécaèdre : $p b^1$.
 Fig. 201. Cuprite triforme : $p b^1 a^1$.
 Fig. 202. Azurite primitive : $p m m$.
 Fig. 203. La même, modifiée sur les arêtes inférieures des bases :
 $p m d^{1/2}$.
 Fig. 204. Azurite sexoctonale (H^v) : $p m d^{1/2} e^3$.
 Fig. 205. Azurite dihexaèdre (H^v) : $p m g^1 e^2$.
 Fig. 206. Autre forme secondaire : $p m h^1 b^1 a^2 d^{1/2}$.

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- Fig. 207. Azurite (forme secondaire) : $p m h^1 a^1 a^2 a^3 b^1 d^{1/2}$.
 Fig. 208. La même; autre forme plus compliquée.
 Fig. 209. Malachite primitive : $p m m$.
 Fig. 210. Malachite, forme secondaire, hémitrope, d'après Lévy.
 Fig. 211. Atacamite primitive : $p m m$.
 Fig. 212. *Idem*, forme secondaire : $m h^1 a^1$.
 Fig. 213. Cyanose primitive : $p m t$.
 Fig. 214. Cyanose péridécaèdre (H^v) : $p m t h^1 g^1$.
 Fig. 215. Cyanose triunitaire (H^v) : $p m t h^1 g^1 c^1$.
 Fig. 216. Cyanose sous-triple : $p m t h^1 g^1 a^2 e^2 i^2 g^3$.
 Fig. 217. Cyanose complexe (H^v) : $p m t g^1 h^1 b^1 e^2 e^2/3 i$.
 Fig. 218. Brochantite primitive : $p m m$.
 Fig. 219. *Idem*, forme secondaire, d'après Lévy : $p m a^1 e^{1/4}$.
 Fig. 220. Libéthénite primitive : $p m m$.
 Fig. 221. *Idem*, forme secondaire : $m b^1 e^{1/2}$.
 Fig. 222. Hypoleimite, forme secondaire : $p m h^1 b^1$.
 Fig. 223. Olivénite, forme secondaire : $m h^1 e^{1/2}$.
 Fig. 224. Euchroïte, forme secondaire : $p m g^1 g^3 g^3 e^1$.
 Fig. 225. Aphanèse, forme primitive : $p m m$.
 Fig. 226. *Idem*, forme secondaire, d'après Lévy : $p m o^1 a^3/4$.
 Fig. 227. Chalkophyllite primitive : p .
 Fig. 228. *Idem*, basée : $p a^1$.
 Fig. 229. Liroconite, forme secondaire : $m a^1$.

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- Fig. 230. Dioptase primitive : p .
 Fig. 231. *Idem*, forme secondaire : $p e^1 d^1$.
 Fig. 232. Galène primitive : p .
 Fig. 233. Galène uniternaire (H^v) : $p a^1 a^3$.
 Fig. 234. Galène pentacontaèdre (H^v) : $p b^1 a^{1/2} a^1$.
 Fig. 235. Céruse primitive : $p m m$.

- Fig. 236. Céruse octaèdre : me^4 .
 Fig. 237. Céruse dodécaèdre : e^4b^4 .
 Fig. 238. Céruse quadrihexagonale (H_v) : mg^1e^2 .
 Fig. 239. Céruse trihexaèdre (H_v) : $mg^1e^4b^4$.
 Fig. 240. Céruse ambi-annulaire (H_v) : $pmg^1e^4b^2$.
 Fig. 241. Céruse sexoctonale (H_v) : $mg^1e^2a^4$.
 Fig. 242. Céruse trioctonale (H_v) : $mh^1g^1e^4b^4$.
 Fig. 243. Céruse octovigésimale (H_v) : $pmg^1e^4e^2b^4$.
 Fig. 244. Anglésite primitive : pm .
 Fig. 245. *Idem*, en octaèdre rectangulaire : $ma^{1/2}$.
 Fig. 246. La même, plus les faces verticales g^1 .
 Fig. 247. Anglésite, forme secondaire, d'après Naumann : $mg^1a^{1/2}b^4e^{1/2}$.
 Fig. 248. *Idem*, autre forme plus compliquée : $mh^1g^1b^4e^{1/2}i^2$.
 Fig. 249. Leadhillite hexagonale : pmh^1 .
 Fig. 250. Calédonite, forme secondaire : mti .
 Fig. 251. Linarite, forme secondaire : $mtacb$.
 Fig. 252. Pyromorphite primitive : pm .
 Fig. 253. Pyromorphite trihexaèdre : mb^4 .

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- Fig. 254. Pyromorphite annulaire (H_v) : $pm b^4$.
 Fig. 255. Pyromorphite basée (H_v) : $p b^4$.
 Fig. 256. Crocoïse primitive : $pm m$.
 Fig. 257. La même, terminée par un klinodome : md^2 .
 Fig. 258. La précédente, avec un second klinodome : $md^2d^{1/2}$.
 Fig. 259. Crocoïse quadrioctonale : md^2e^4 .
 Fig. 260. Autre forme secondaire, d'après Naumann : $mg^3d^2a^3/4$.
 Fig. 261. Mélinose octaèdre : b^4 .
 Fig. 262. Mélinose basée (H_v) : b^4p .
 Fig. 263. Mélinose biforme (H_v) : b^4a^2 .
 Fig. 264. Mélinose sexoctonale (H_v) : $pm b^4$.
 Fig. 265. Mélinose épointée (H_v) : b^4h^4p .
 Fig. 266. Mélinose décioctonale (H_v) : pa^4b^4 .
 Fig. 267. Mélinose péridodécagone (triunitaire, H_v) : pmh^2 .
 Fig. 268. Mélinose triforme (H_v) : $ph^4a^4b^4$.
 Fig. 269. Schéelitine primitive : $pm m$.
 Fig. 270. *Idem*, forme secondaire : $b^{1/2}b^4a^2$.
 Fig. 271. Mercure argental triforme (H_v) : pb^4a^2 .
 Fig. 272. Autre variété triforme, d'après G. Rose : b^4a^2s .
 Fig. 273. Mercure argental sextiforme (H_v) : $pb^4a^4a^2st$.
 Fig. 274. Cinabre primitif : p .
 Fig. 275. Cinabre octoduodécimal (H_v) : $pa^4a^2a^3/2$.
 Fig. 276. Cinabre progressif (H_v) : $pa^4a^3e^2$.

SUITE DE L'EXPLICATION DES PLANCHES

DÉS II^e ET III^e VOLUMES

DE LA

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- Fig. 277. Forme primitive du Calomel : pm .
Fig. 278. Forme secondaire : mg^4b^4 .
Fig. 279. Forme primitive du discrasé : $pm m$.
Fig. 280. Forme secondaire, variété anulaire : $pmg^4b^4e^2$.
Fig. 281. Forme primitive de la pyrargyrite : p .
Fig. 282. Pyrargyrite prismée (Hy) : pd^4 .
Fig. 283. Pyrargyrite prismatique (Hy) : ad^4 .
Fig. 284. Forme hémédrique : $pd^{4\frac{1}{2}}(e^2)$.
Fig. 285. Autre forme, du même genre : $d^4b^4\frac{1}{2}(e^4)$.
Fig. 286. Pyrargyrite disjointe (Hy) : $pd^4d^2b^4$.
Fig. 287. Autre forme composée : $d^4d^4/3d^2b^3$.
Fig. 288. Pyrargyrite apophane (Hy) : $d^4/3b^3$.
Fig. 289. Forme secondaire de Proustite : $a^4d^2e^4/5$.
Fig. 290. Psathurose, forme primitive : p .
Fig. 291. *Idem*, forme secondaire : pb^4e^4 .
Fig. 292. Autre forme, plus compliquée : $pmg^4e^4b^4b^3$.
Fig. 293. Cristal de miargyrite : pmo .
Fig. 294. Quartz primitif : p .
Fig. 295. Quartz dodécaèdre : $pe^4/2$.
Fig. 296. Quartz prismé pyramidé : $pe^4/2e^2$.
Fig. 297. Le prisme, avec le rhomboèdre primitif : pe^2 .
Fig. 298. Variété rhombifère (Hy) : $pe^4/2e^2s$.

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- Fig. 299. Quartz plagio-rhombifère droit.
Fig. 300. Quartz plagio-rhombifère gauche.

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- Fig. 301. Forme secondaire du quartz : $p e^{1/2} e^2 e^3 x$.
 Fig. 302. Quartz : forme secondaire fusiforme : $p e^{1/2} e^3 e^{7/8} e^2 s$.
 Fig. 303. Autre forme, avec plusieurs plagiédres : $p e^{1/2} s x y u v d e^2$
 $a m b$.
 Fig. 304. Forme de la Haytorite : $p m h^4$.
 Fig. 305. Corindon primitif : p .
 Fig. 306. Forme secondaire du corindon : $p a^4 d^4 e_3$.
 Fig. 307. Corindon fusiforme : $e_3 d^4 e^4 l$.
 Fig. 308. Fluoriné octaèdre : a^4 .
 Fig. 309. Variété hordée (Hv) : $p x$.
 Fig. 310. Variété hexatétraèdre : x .
 Fig. 311. Apatite primitive : $p m$.
 Fig. 312. Apatite émarginée : $p m g^4 r$.
 Fig. 313. Apatite unibinaire (Hv).
 Fig. 314. Forme secondaire hémiedrique.
 Fig. 315. Nitre primitif : $p m$.
 Fig. 316. Forme secondaire, en table rectangle.
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 Fig. 318. Nitre dodécaèdre.
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- Fig. 320. Spinnelle octaèdre : p .
 Fig. 321. *Idem* transposé.
 Fig. 322. Cymophane primitive : $p m m$.
 Fig. 323. Cymophane hexagonale : $p m g^4$.
 Fig. 324. Cymophane annulaire (Hv) : $p m g^4 b^{1/2} e^{1/2} a^4$.
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 Fig. 326. Groupement ordinaire des cristaux de Haddam.
 Fig. 327. Groupement des cristaux de l'Oural.
 Fig. 328. Cordiérite primitive : $p m m$.
 Fig. 329. Cordiérite émarginée : $p m h^4 g^4 g^2 b^2 e^2$.
 Fig. 330. Topaze primitive : $p m m$.
 Fig. 331. Topaze quadrioctonale (Hv) : $m g^3 b^2$.
 Fig. 332. Topaze sexoctonale (Hv) : $m g^3 b^2 e^2$.
 Fig. 333. Topaze trédécioctonale (Hv) : $p m g^3 e^4 e^2 b^2 b^3$.
 Fig. 334. Axinite primitive : $p m t$.
 Fig. 335. *Idem*, forme secondaire : $p m t h^4 f^2 i^2$.
 Fig. 336. Tourmaline primitive : $p p'$.
 Fig. 337. Tourmaline isogone (Hv) : $1/2(e^2) d^4 p p'^{1/2}(e^4)$.
 Fig. 338. Autre forme secondaire : $p b^4 p'^{1/2}(e^4) 1/2(e^2) d^4$.
 Fig. 339. Forme des cristaux d'indicolithe : $d^4 b^4 a^4 p'$.
 Fig. 340. Forme des cristaux de rubellite : $1/2(e^2) d^4 a^4 p' d^2$.
 Fig. 341. Phénakite de l'Oural : $p d^4$.
 Fig. 342. Phénakite des Vosges : $d^4 b^2$.

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- Fig. 343. Phénakite rhombifère : $d^1 b^2 p$.
 Fig. 344. Phénakite en cristaux croisés : $p d^1 p'$.
 Fig. 345. Émeraude primitive : pm .
 Fig. 346. Émeraude rhombifère : $pm b^2 a^2$.
 Fig. 347. Forme secondaire plus compliquée : $pm h^1 b^1 b^2 a^2$.
 Fig. 348. Euclase primitive : $pm m$.
 Fig. 349. *Idem*, forme composée : $g^1 m h^5 h^3. d^1 b^1 i' i''$.
 Fig. 350. Zircon primitif : $pm m$.
 Fig. 351. Zircon octaèdre : b^1 .
 Fig. 352. Zircon prismé (Hy) : mb^1 .
 Fig. 353. Zircon dodécaèdre (Hy) : $h^1 b^1$.
 Fig. 354. Autre forme, plus compliquée : $mh^1 b^1 b^1/3 a_2$.
 Fig. 355. Grenat dodécaèdre triémarginé : $a^2 b^1 (b^1 b^1/2 b^1/3)$.
 Fig. 356. Grenat épointé : $pa^1 b^1$.
 Fig. 356 bis. Idocrase primitive : pm .
 Fig. 357. *Idem*, forme secondaire : $pm b^2 b^1 b^1/3 h^2 h^1 a_3 a^1 i$.
 Fig. 358. Macle polygramme (Hy).
 Fig. 359. Staurotide unibinaire : $pm g^1 a^1/2$.
 Fig. 360. Disthène primitif : $pm t$.
 Fig. 361. Epidote primitive : $pm m$.
 Fig. 362. *Idem*, forme secondaire : $pm h^1 b^1/2 a^1$.
 Fig. 363. *Idem*, combinaison : $ph^1 a^1 b^1/2$.
 Fig. 364. *Idem*, combinaison : $pm o^1 h^1 a^1/2 a^1 b^1/2 e^1$.

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- Fig. 365. Forme primitive du triphane.
 Fig. 366. *Idem* de l'orthose.
 Fig. 367. Orthose bibinaire (Hy) : $pm g^1$.
 Fig. 368. Orthose imitatif (Hy) : ma^1 .
 Fig. 369. Orthose unitaire (Hy) : $pm g^1 a^2$.
 Fig. 370. Orthose ditétraèdre (Hy) : $pm a^1$.
 Fig. 371. Forme secondaire composée : $pm g^2 g^1 b^1/2 e^1/2 a^1/2 a^1 a^3/2$.
 Fig. 372. Groupement des cristaux de Baveno.
 Fig. 373. Forme primitive de l'albite : PMT .
 Fig. 374. Forme secondaire de l'albite : $PMT lo$.
 Fig. 375. Groupement des cristaux d'albite du Dauphiné : $PMT e^1/2$.
 Fig. 376. Cristaux de la variété dite périkline : $PMT l x$.
 Fig. 377. Cristal d'oligoclase : $PMT l x y$.
 Fig. 378. Groupement des cristaux de lévyne.
 Fig. 379. Chabasie trirhomboidale : $pe^1 b^1$.
 Fig. 380. Harmotome partiel (H').
 Fig. 381. Harmotome cruciforme, avec les stries caractéristiques.
 Fig. 382. Heulandite, variété anamorphique (Hy).

- Fig. 383. Mésotype sexoctonale (Hy) : $m h^1 b^1$.
 Fig. 384. Forme primitive du Péridot.
 Fig. 385. Péridot quadruplant (Hy) : $p m g^1 g^3 h^1 a^1 e^1 e^{1/2} b^{1/2}$.
 Fig. 386. Forme primitive de la Humite.
 Fig. 387. Représentant l'un des types de la Humite.

PLANCHE XXXVI.

- Fig. 388. Pyroxène primitif : $p m m$.
 Fig. 389. Pyroxène périocétaèdre : $p m h^1 g^1$.
 Fig. 390. Pyroxène triunitaire (Hy) : $m h^1 g^1 e^1$.
 Fig. 391. Le même, hémitrope.
 Fig. 392. Pyroxène séno-bisunitaire (Hy) : $p m h^1 g^1 b^{1/6}$.
 Fig. 393. Pyroxène soustractif (Hy) : $m h^1 g^1 e^1 a^2$.
 Fig. 394. Pyroxène sténonome (Hy) : $p m h^1 g^1 e^3 e^1 a^1 a^3$.
 Fig. 395. Amphibole primitif : $p m m$.
 Fig. 396. Amphibole ditétraèdre : $m e^1$.
 Fig. 397. Amphibole dihexaèdre (Hy) : $p m h^1 e^1$.
 Fig. 398. Amphibole dodécaèdre (Hy) : $p m g^1 b^{1/2}$.
 Fig. 399. Le même, hémitrope.
 Fig. 400. Amphibole trioctonal (Hy) : $p m g^1 b^{1/2} d^{1/2} e^{1/2} i$.
 Fig. 401. Babingtonite, forme primitive : $p m t$.
 Fig. 402. Boracite primitive, avec sa notation particulière.
 Fig. 403. Boracite déficiente (Hy) : $p b^{1/2} a^1$.
 Fig. 404. Boracite surabondante (Hy) : $p b^1 a^1 d^{1/2} a^2$.
 Fig. 405. Calcaire spathique, forme primitive : p .
 Fig. 406. Le rhomboèdre de même angle, en position inverse : $e^{1/2}$.
 Fig. 407. Calcaire équiaxe : b^1 .
 Fig. 408. Calcaire en rhomboèdre aigu (*inverse* de Haüy) : e^1 .
 Fig. 409. Calcaire contrastant (Hy) : e^3 .

PLANCHE XXXVII.

- Fig. 410. Calcaire mixte (Hy) : $e^{3/2}$.
 Fig. 411. Calcaire contracté (Hy) : $e^{3/4} b^1$.
 Fig. 412. Calcaire cuboïde (Hy) : $e^{4/5}$.
 Fig. 413. Calcaire prismatique : $e^2 a^1$.
 Fig. 414. Le prismé alterne : $d^1 a^1$.
 Fig. 415. Calcaire scalénoèdre (variété métastatique, Hy) : d^2 .
 Fig. 416. Calcaire axigraphe (Hy) : $d^{3/4}$.
 Fig. 417. Calcaire paradoxal (Hy) : $e^{1/2} d^2 e^1$.
 Fig. 418. Calcaire leptomorphique (Hy) : $(d^2 d^{1/5} b^{1/4})$.
 Fig. 419. Calcaire sténonome (Hy) : $b^2 b^3 d^2 e^2 e^{1/2}$.
 Fig. 420. Calcaire trihexaèdre (Hy) : $p e^{1/2} e^2$.
 Fig. 421. Calcaire imitatif (Hy) : $e^{7/5} b^3 e^3 d^1 (d^{1/2} d^{1/8} b^{1/7})$.
 Fig. 422. Calcaire ambigu (Hy) : $e^1 e^2 (d^{1/2} d^{1/5} b^{1/4})$.

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- Fig. 423. Calcaire dodécaèdre (Hy) : $e^2 b^1$.
 Fig. 424. Calcaire analogique (Hy) : $e^2 d^2 b^1$.
 Fig. 425. Le métastatique transposé.
 Fig. 426. La variété analogique, hémitrope (spath en ce)
 Fig. 427. Arragonite primitif : $p m m$.
 Fig. 428. Arragonite en prisme à sommets dièdres : $m e^1/2$.
 Fig. 429. Arragonite quadrihexagonal (Hy) : $m g^1 e^1$.
 Fig. 430. La variété précédente, plus l'octaèdre : $b^1/2$.

PLANCHE XXXVIII.

- Fig. 431. Arragonite apotome : $e^1/12 b^1/12$.
 Fig. 432. Macle de deux cristaux, de la variété quadrihexagonale.
 Fig. 433. Macle de deux cristaux semblables à ceux de la figure 428.
 Fig. 434. Macle composée de trois cristaux complets.
 Fig. 435. Macle symétrique, composée de deux cristaux complets, et de deux demi-cristaux.
 Fig. 436. La coupe de la variété symétrique basée de Haiiy.
 Fig. 437. Withérite primitive : $p m m$.
 Fig. 438. Withérite dodécaèdre : $b^1/2 e^1/2$.
 Fig. 439. Withérite triannulaire (Hy) : $p m g^1 b^1/2 b^1 b^2 e^1/2 e^1 e^2$.
 Fig. 440. Macle de cristaux de Withérite.
 Fig. 441. Apatite didodécaèdre : $m h^1 b^1$.
 Fig. 442. Apatite quadratifère (Hy) : $p m a^1 b^1$.
 Fig. 443. Apatite triémarginée : $p m g^1 b^1/2 b^1 b^2 a^1 1/2 (a^2)$.
 Fig. 444. Autre forme secondaire, compliquée.
 Fig. 445. *Idem*.
 Fig. 446. Forme secondaire de Wolfram, d'après Descloizeaux.
 Fig. 447. Autre forme, d'après le même savant.
 Fig. 448. *Idem*.
 Fig. 449. Forme primitive du gypse, d'après Descloizeaux.
 Fig. 450. Forme secondaire de gypse, d'après le même.
 Fig. 451. Autre forme dérivée, de la même espèce.

PLANCHE XXXIX.

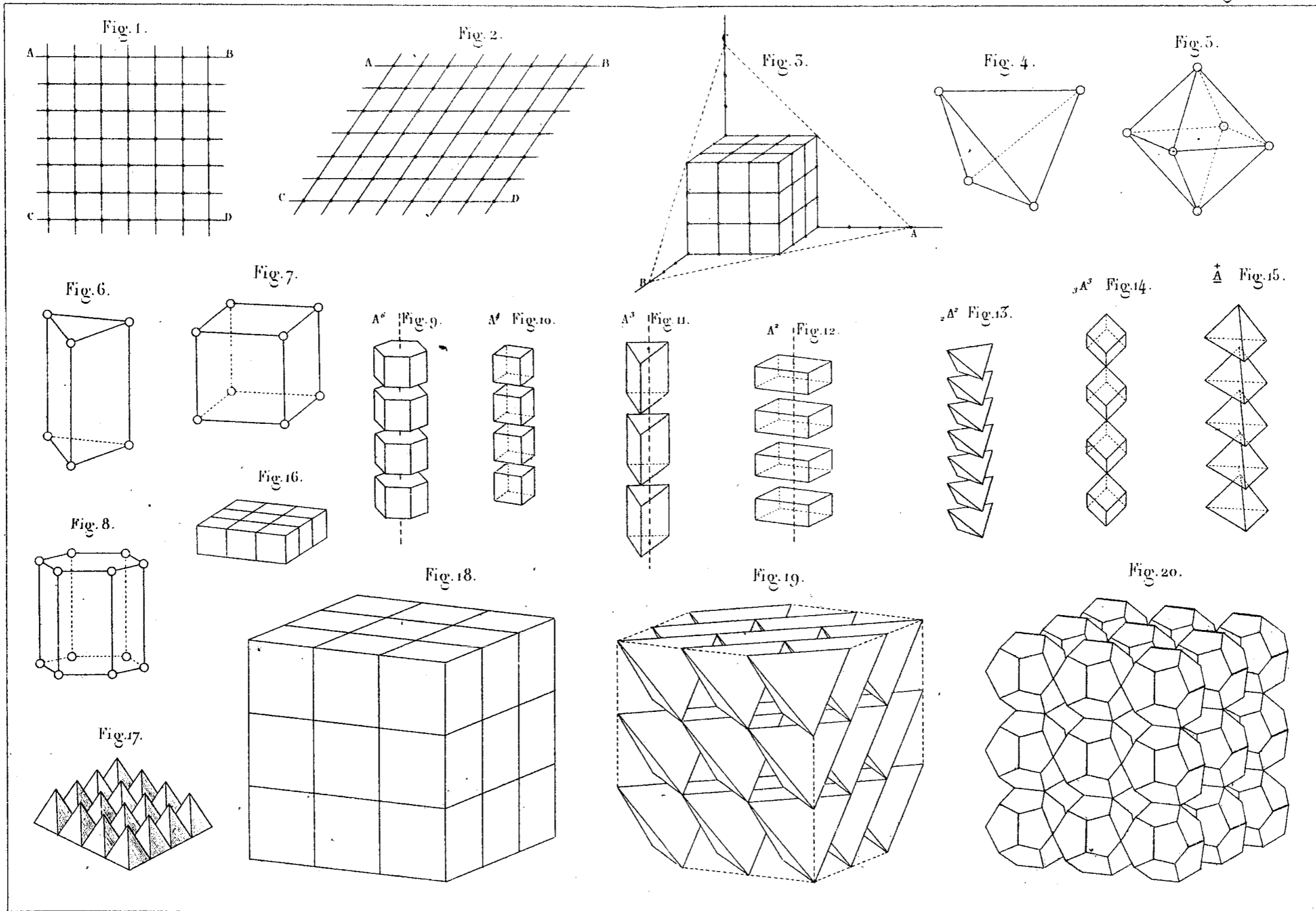
- Fig. 452. Epsomite primitive : $p m m$.
 Fig. 453. Epsomite pyramidée : $m b^1$.
 Fig. 454. La même, hémédrique, à sommets dièdres croisés.
 Fig. 455. Epsomite équivalente (Hy) : $m b^1 g^1 h^1 a^2 e^2$.
 Fig. 456. Epsomite dioctaèdre : $m h^1 b^1$.
 Fig. 457. Autre forme d'epsomite : $m g^1 g^3 h^1 b^1$.
 Fig. 458. Gypse en prisme oblique rectangulaire : $T M P$.
 Fig. 459. Gypse trapézien (Hy) : $P f l$.
 Fig. 460. Gypse équivalent (Hy) : $P l f$.
 Fig. 461. Autre forme secondaire du gypse : $P o f l e$.

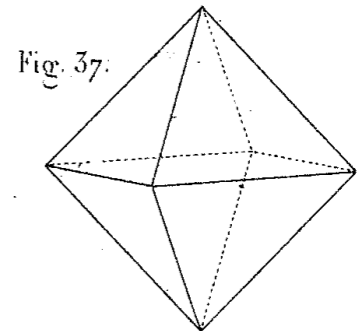
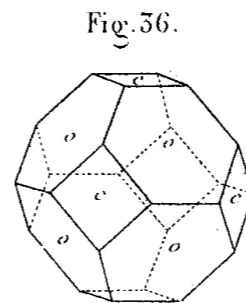
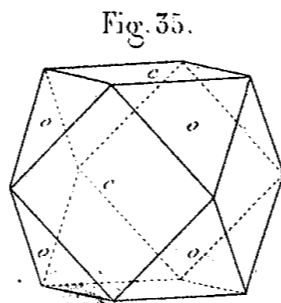
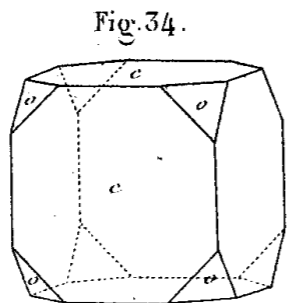
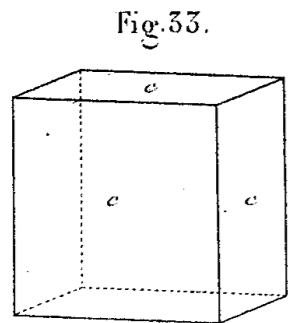
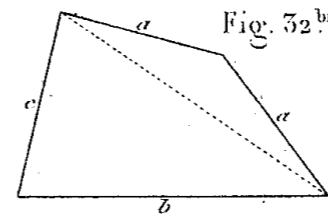
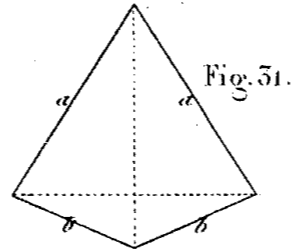
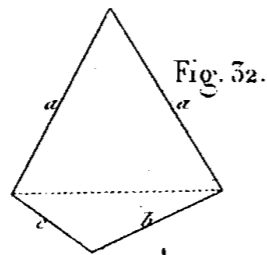
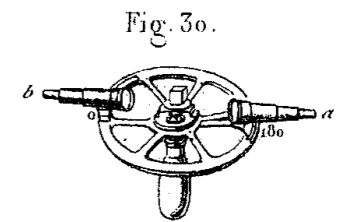
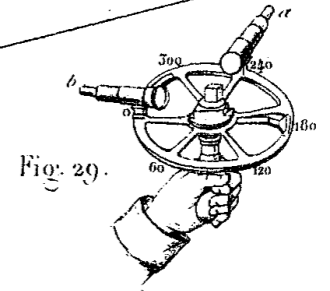
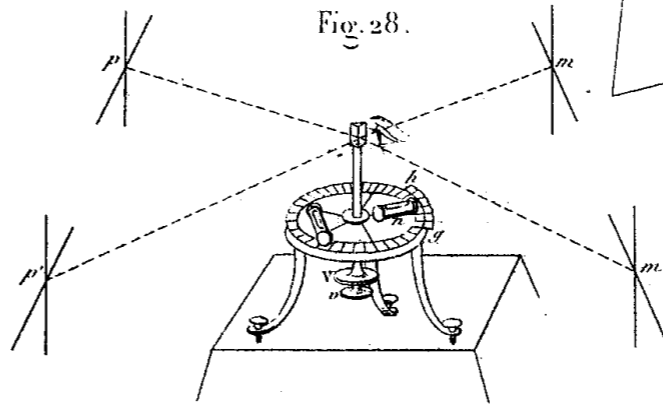
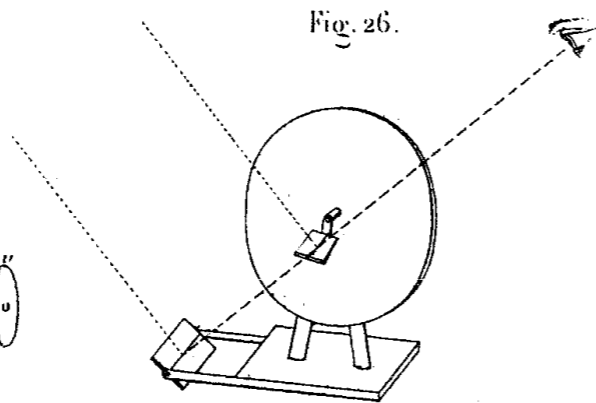
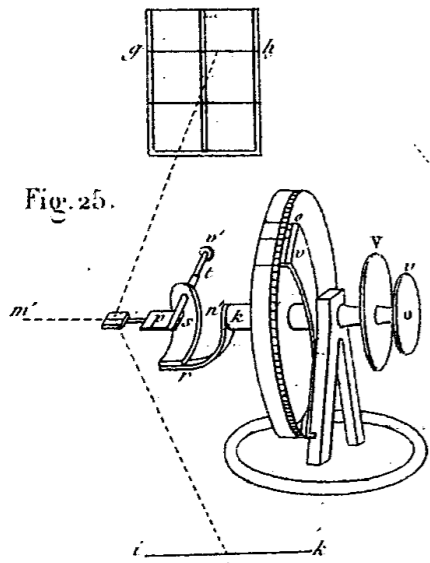
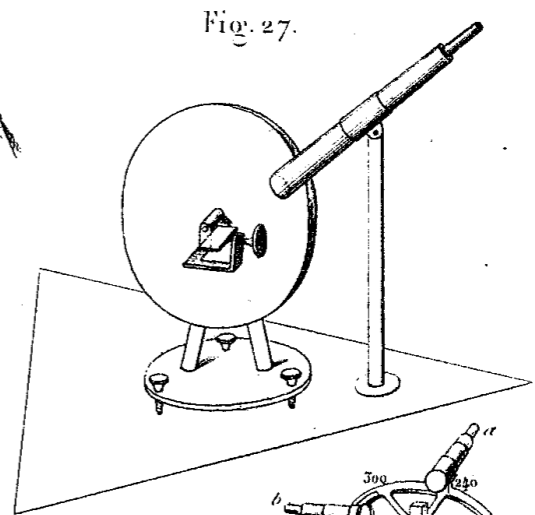
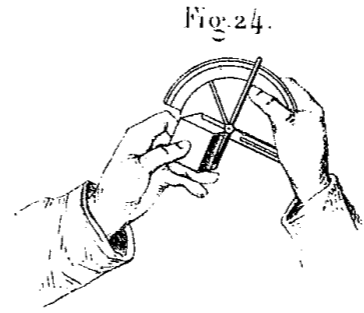
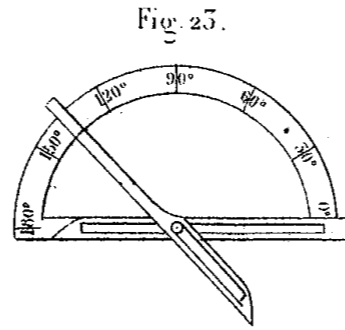
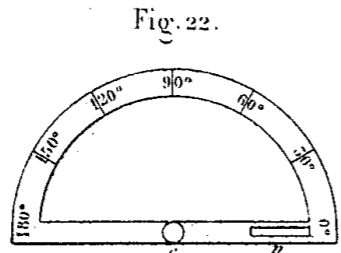
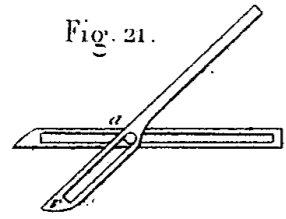
- Fig. 462. *Idem*, combinaison : $P f o i r l \varepsilon$.
 Fig. 463. *Idem* : $P f l \varepsilon$.
 Fig. 464. La variété précédente, hémitrope.
 Fig. 465. Gypse bilenticulaire, en fer de lance.
 Fig. 466. Karsténite primitive : $p m t$.
 Fig. 467. Karsténite progressive (Hy) : $p m t o n f$.
 Fig. 468. Célestine primitive : $p m$.
 Fig. 469. Célestine unitaire : $m e^1$.
 Fig. 470. Célestine émoussée (Hy) : $p m e^1$.
 Fig. 471. Célestine dodécaèdre (Hy) : $m e^1 a^2$.
 Fig. 472. Célestine époincée (Hy) : $p m e^1 a^2$.
 Fig. 473. Célestine entourée (Hy) : $p m e^1 a^2 b^1/2$.
 Fig. 474. Célestine anamorphique (Hy) : $p h^1 e^1 a^2 b^1/2$.

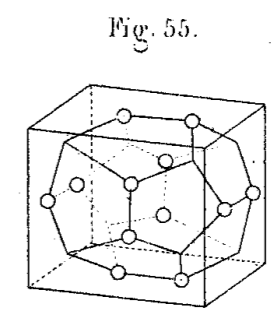
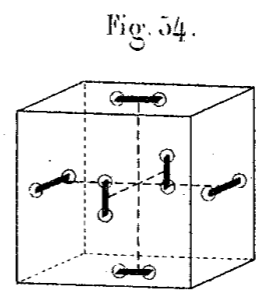
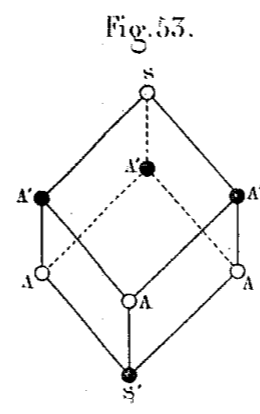
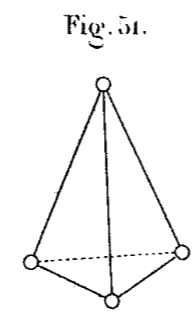
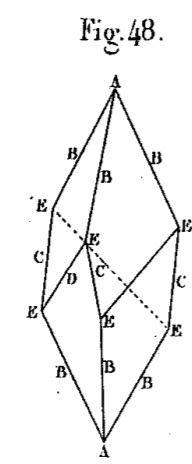
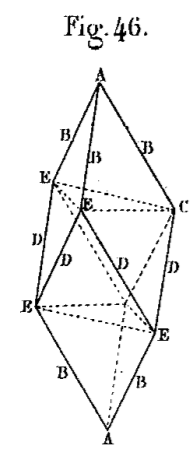
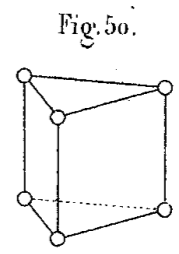
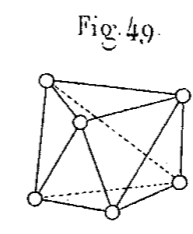
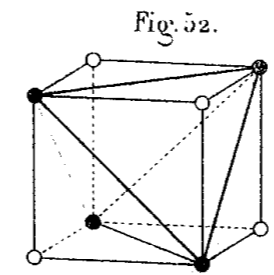
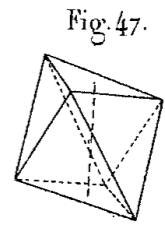
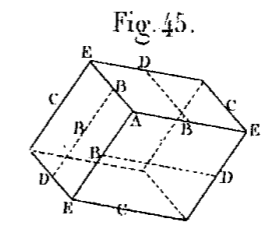
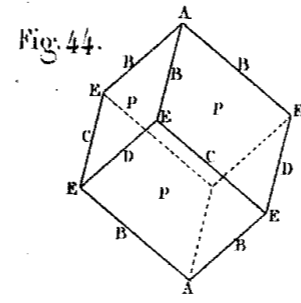
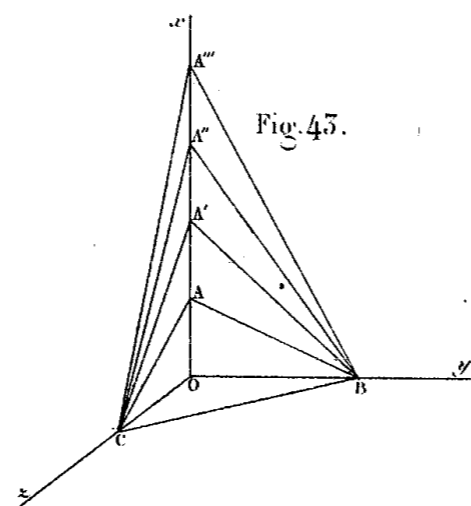
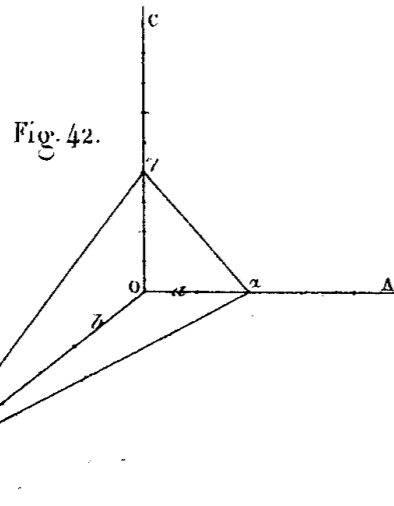
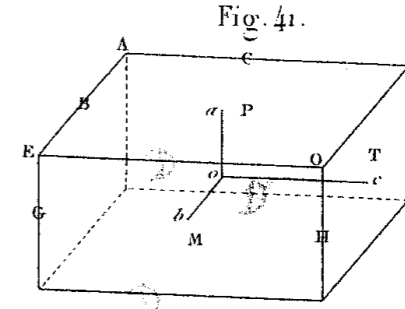
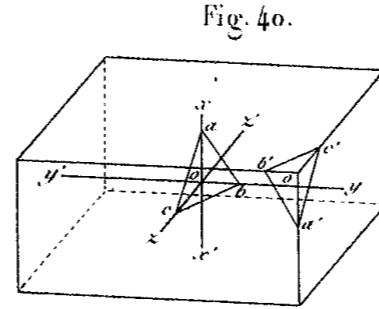
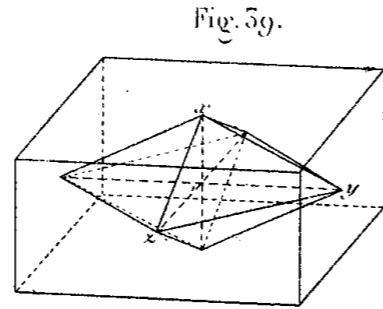
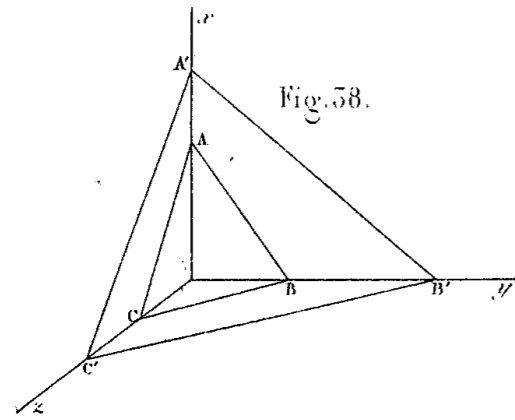
PLANCHE XL.

- Fig. 475. Célestine apotome (Hy) : $e^1 i$.
 Fig. 476. Célestine dioxynite (Hy) : $a^2 e^1 i$.
 Fig. 477. Barytine primitive : $p m m$.
 Fig. 478. Barytine rétrécie (Hy) : $p m h^1$.
 Fig. 479. Barytine raccourcie (Hy) : $p m g^1$.
 Fig. 480. Barytine apopane (Hy) : $p m a^2$.
 Fig. 481. Barytine binaire (Hy) : $m a^2$.
 Fig. 482. Barytine unitaire (Hy) : $m e^1$.
 Fig. 483. Forme donnée par Lévy : $e^1/2 e^1 a^2$.
 Fig. 484. Barytine dodécaèdre (Hy) : $m a^2 e^1$.
 Fig. 485. Barytine trapézienne (Hy) : $p e^1 a^2$.
 Fig. 486. Barytine sexoctonale (Hy) : $p e^1 a^1 a^2$.
 Fig. 487. Barytine progressive (Hy) : $p m e^1 a^2 a^4 b^1/2$.
 Fig. 488. Glaubérite primitive : $p m m$.
 Fig. 489. Glaubérite secondaire, autre prisme clinorhombique : $p f$.
 Fig. 490. *Idem* : $p m f$.
 Fig. 491. Alunite primitive : p .
 Fig. 492. Alunite basée : $p a^1$.
 Fig. 493. Giobertite primitive : p .
 Fig. 494. *Idem*, variété basée : $p a^1$.
 Fig. 495. *Idem*, variété uniternaire.

FIN DE L'EXPLICATION DES PLANCHES.







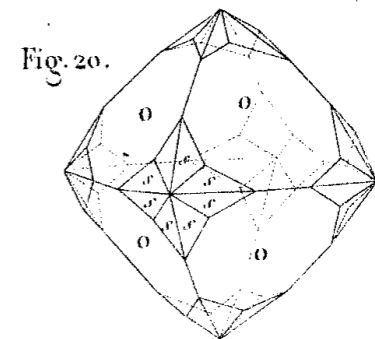
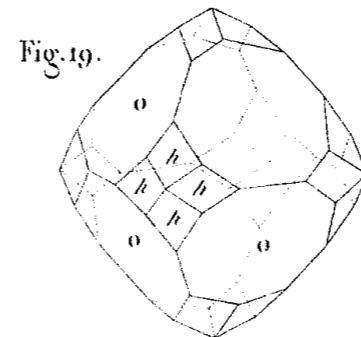
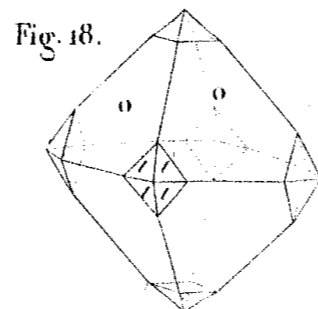
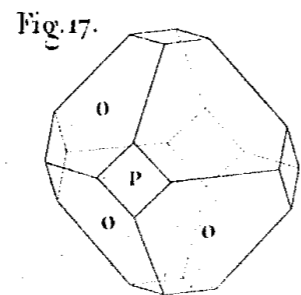
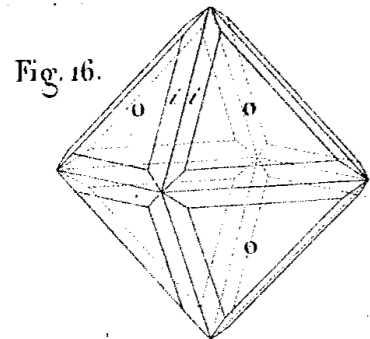
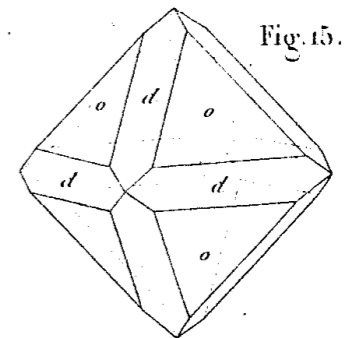
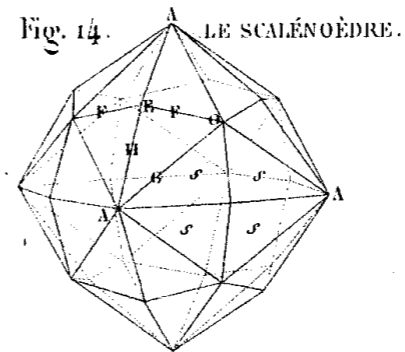
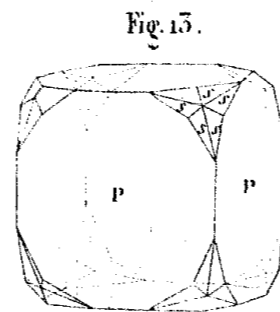
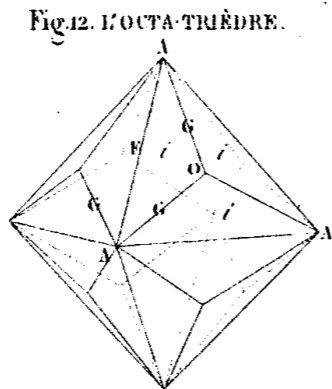
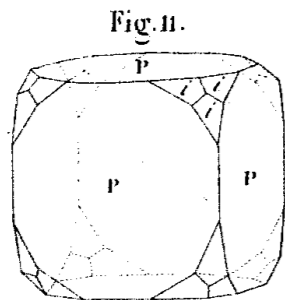
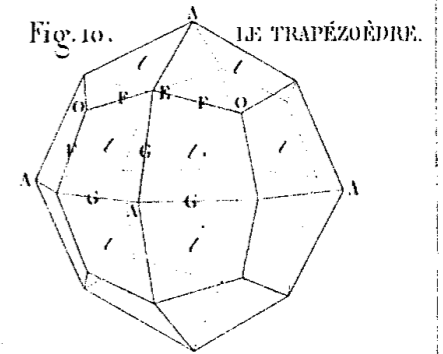
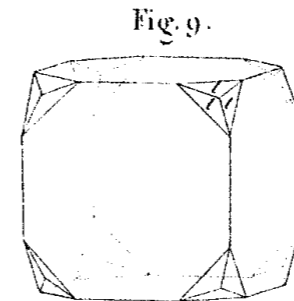
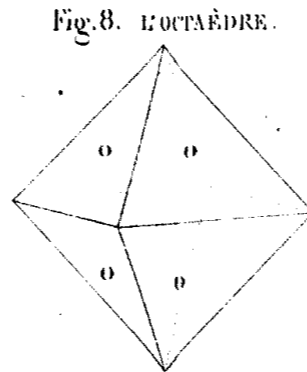
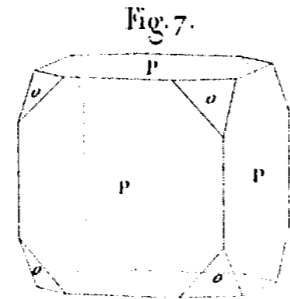
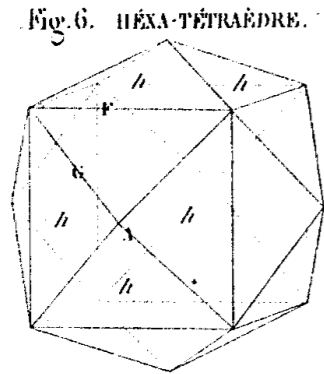
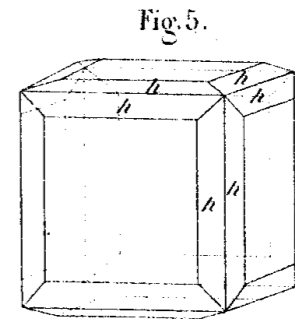
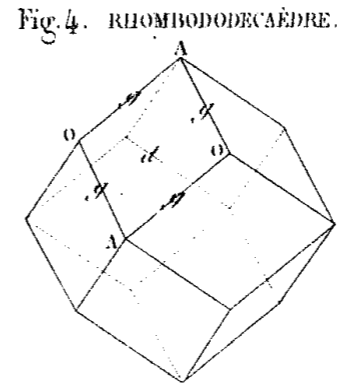
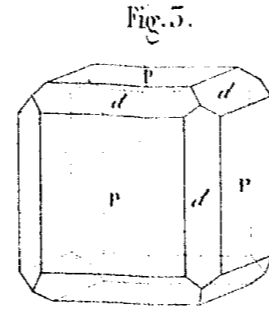
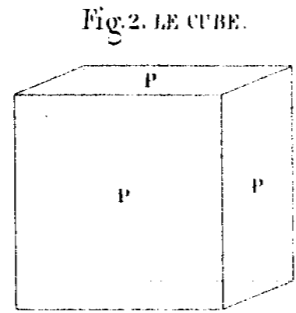
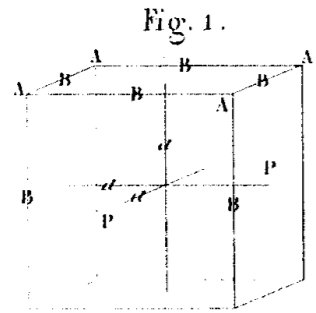


Fig. 21.

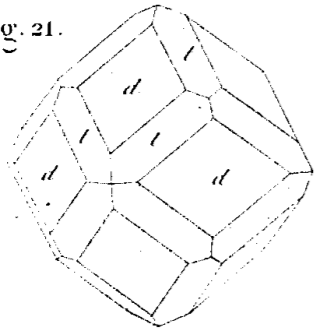


Fig. 22.

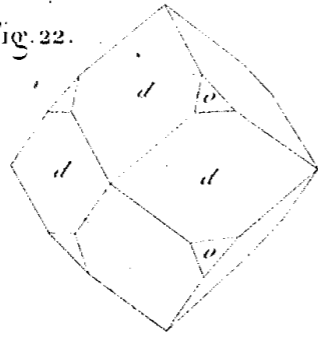


Fig. 23.

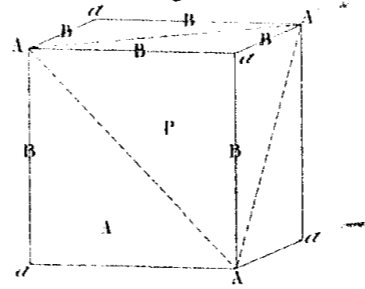


Fig. 24.

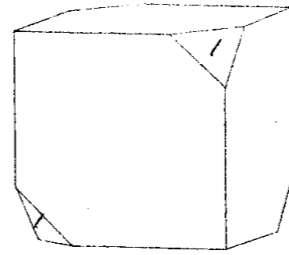


Fig. 25.

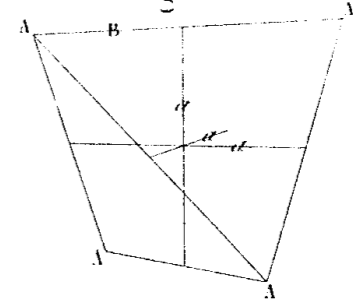


Fig. 26. LE TÉTRAÈDRE.

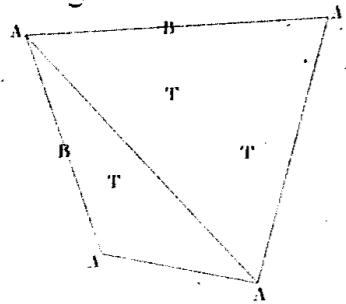


Fig. 27.

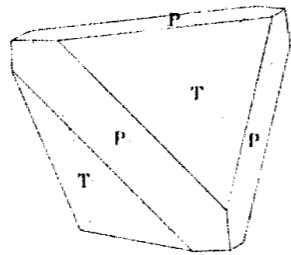


Fig. 28. LE CUBE.

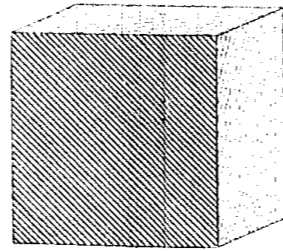


Fig. 29.

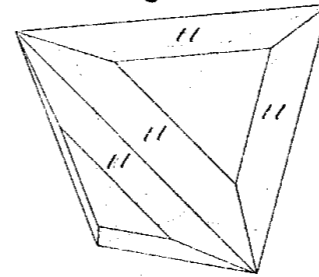


Fig. 30. LE TÉTRA-TRIÈDRE.

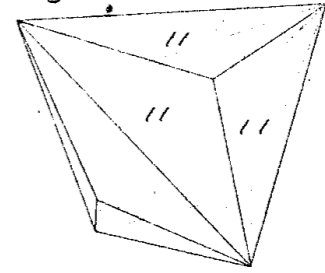


Fig. 31.

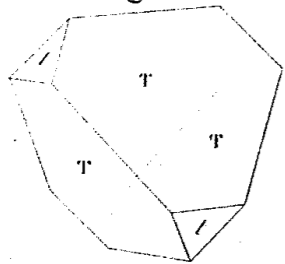


Fig. 32. L' OCTAÈDRE.

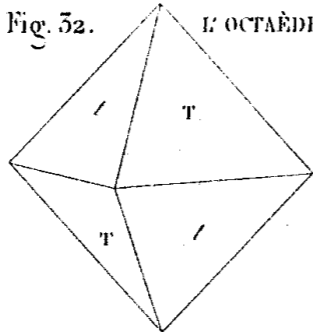


Fig. 33.

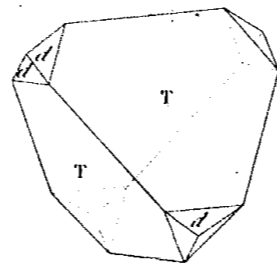


Fig. 34. LE DODÉCAÈDRE TRAPÉZOÏDAL.

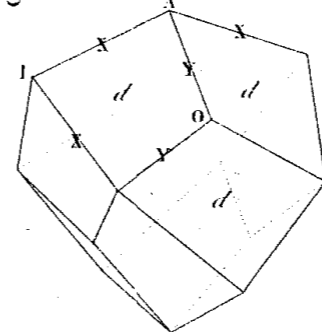


Fig. 35.

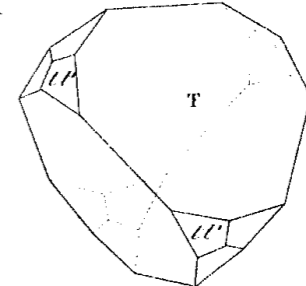


Fig. 36. LE TÉTRA-TRIÈDRE INVERSE.

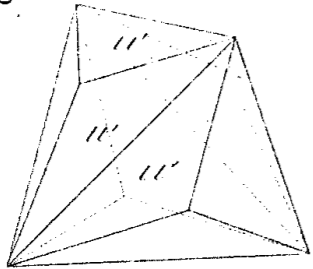


Fig. 37.

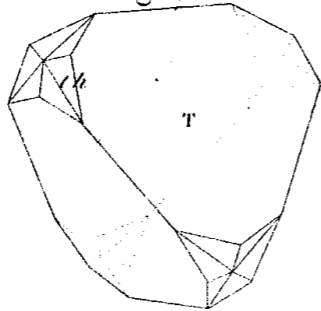


Fig. 38. LE TÉTRA-HEXAÈDRE.

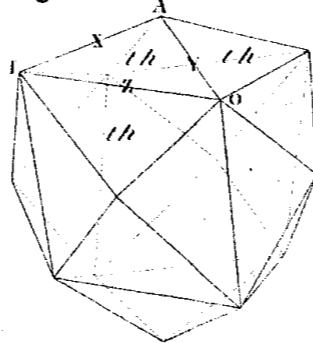


Fig. 39.

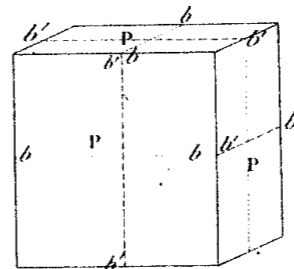


Fig. 40.

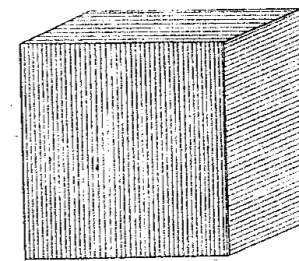


Fig. 41.

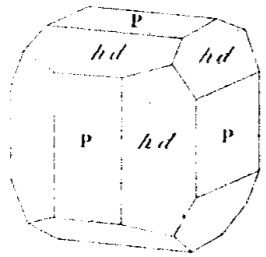


Fig. 42. L'HEXA-DIÈDRE.

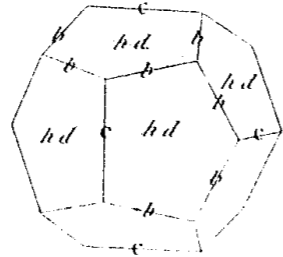


Fig. 43.

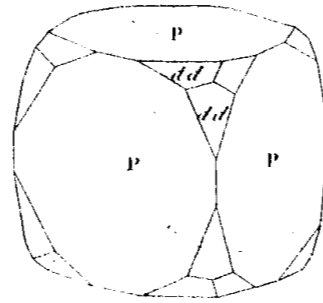


Fig. 44. LE DODÉCA-DIÈDRE.

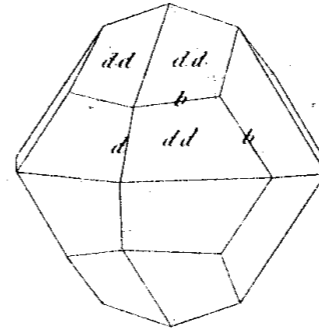


Fig. 45.

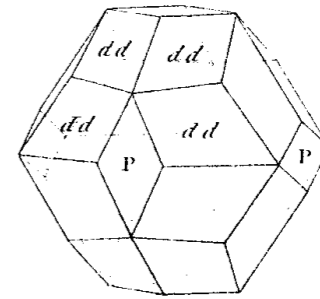


Fig. 46.

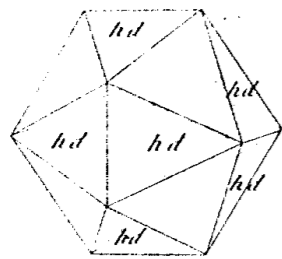


Fig. 47.

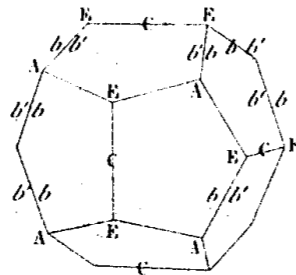


Fig. 48.

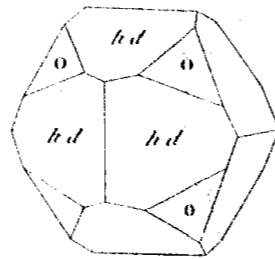


Fig. 49.

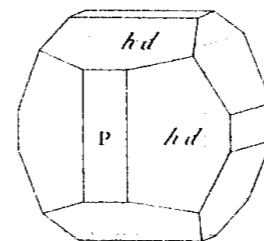


Fig. 50.

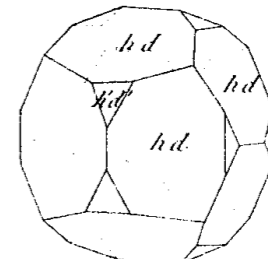


Fig. 51.

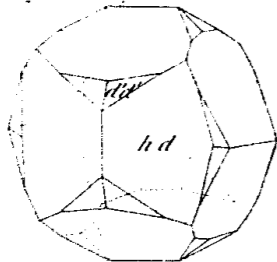


Fig. 52.

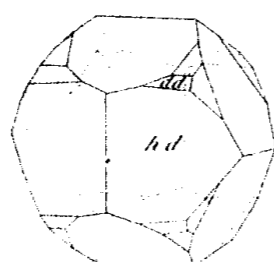


Fig. 53.

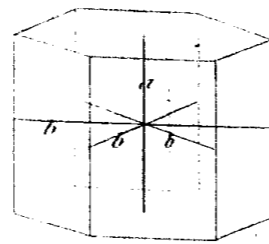


Fig. 54.

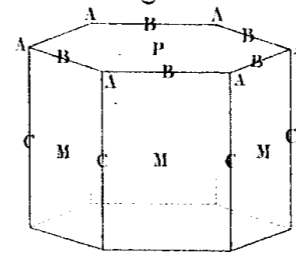


Fig. 55.

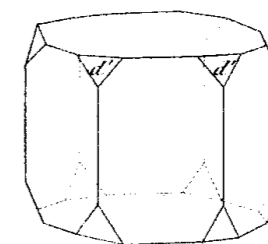


Fig. 56. LE DITÉTRAÈDRE ALTERNE.

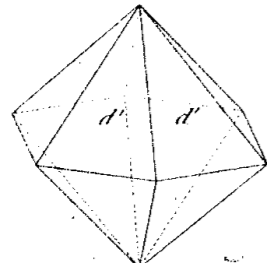


Fig. 57.

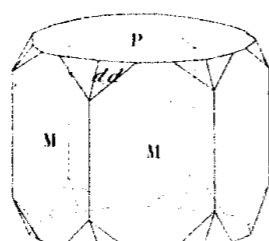


Fig. 58. LE DI-DODÉCAÈDRE.

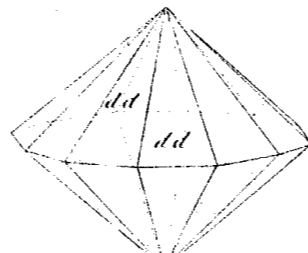


Fig. 59.

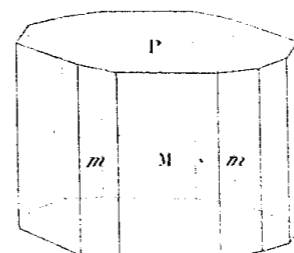


Fig. 60. LE PRISME ALTERNE.

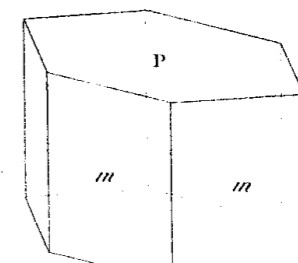


Fig. 61.

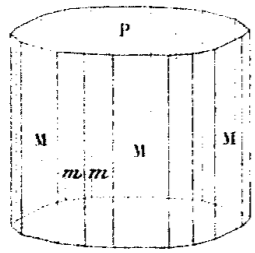


Fig. 62.

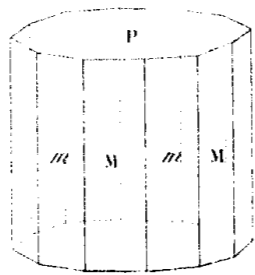


Fig. 63.

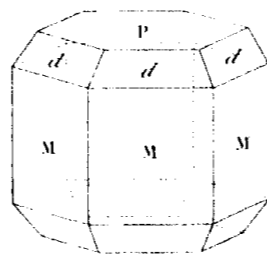


Fig. 64. LE DIHEXAÈDRE DIRECT.

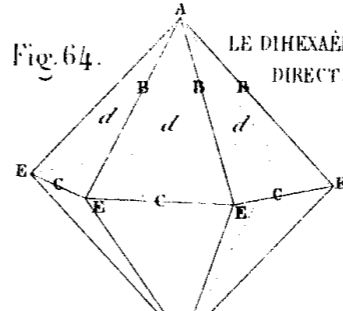


Fig. 65.

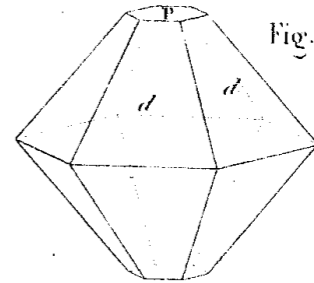


Fig. 66.

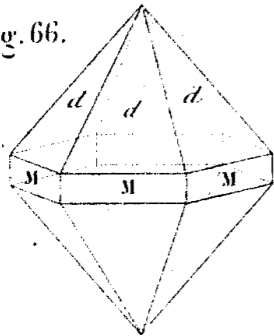


Fig. 67.

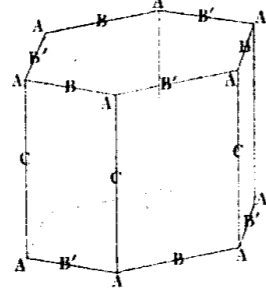


Fig. 68.

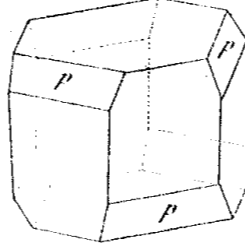


Fig. 69.

LE RHOMBOÈDRE.

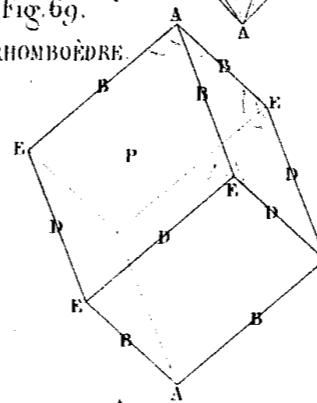


Fig. 70.

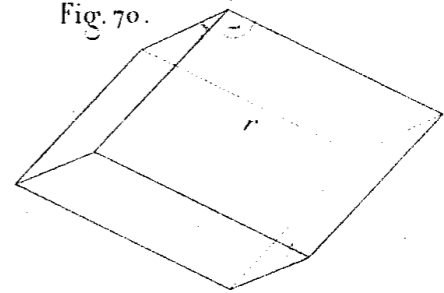


Fig. 71.

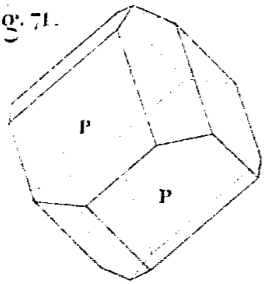


Fig. 72.

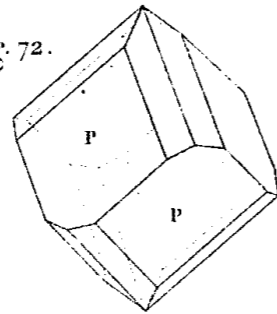


Fig. 73.

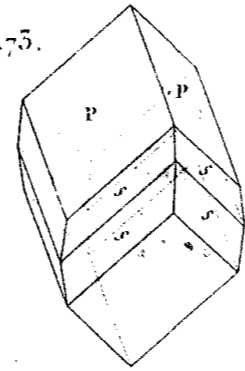


Fig. 74.

LE SCALÉNOÈDRE.

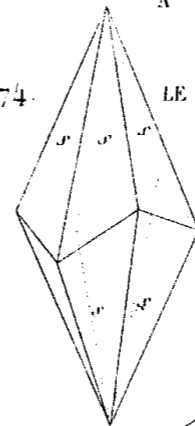


Fig. 75.

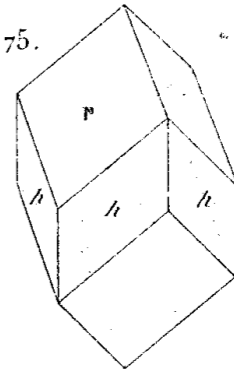


Fig. 76.

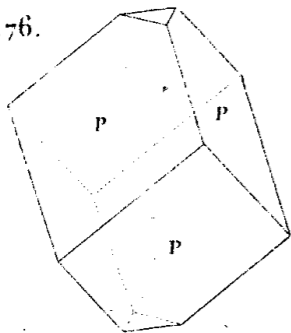


Fig. 77.

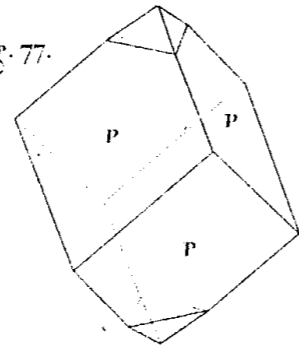


Fig. 78.

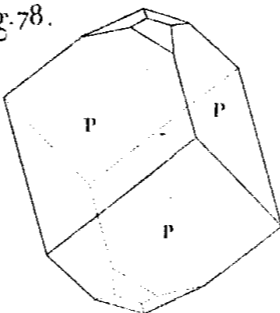


Fig. 79.

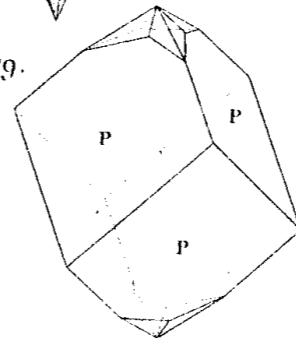


Fig. 80.

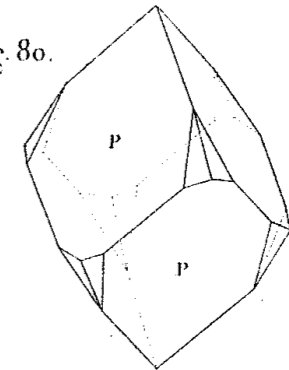


Fig. 81.

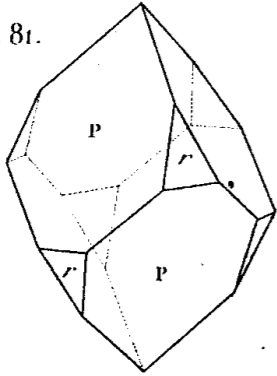


Fig. 82.

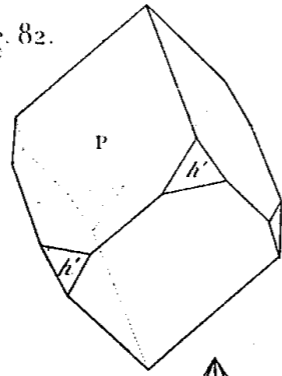


Fig. 85.

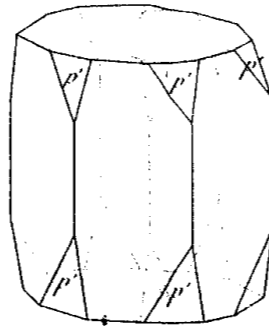


Fig. 84.

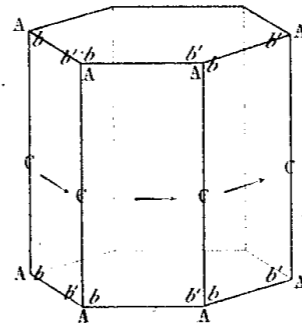


Fig. 85.

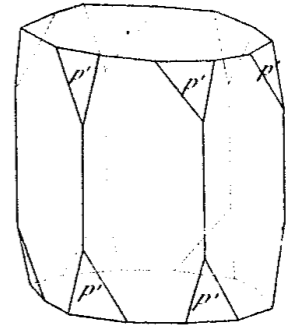


Fig. 86.

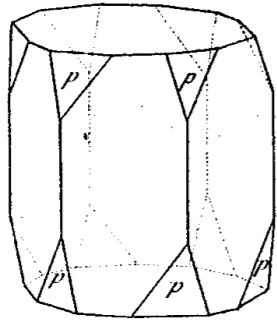


Fig. 87.
TRAPEZOËDRE
HEXAGONAL.

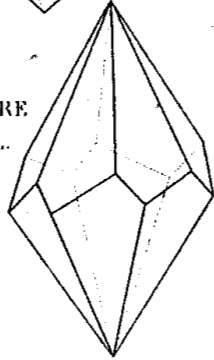


Fig. 87^{bis}.

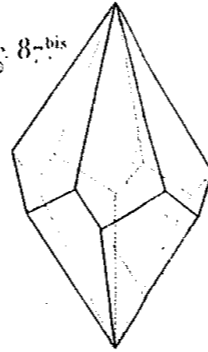


Fig. 88.

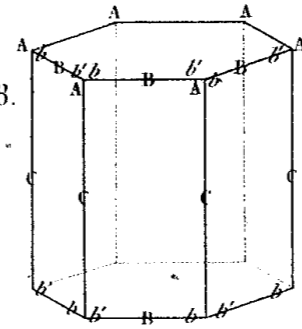


Fig. 89.

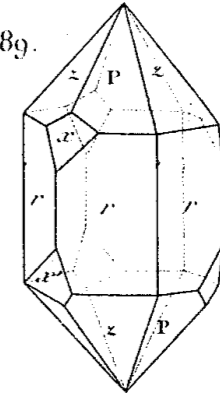


Fig. 90.
TRAPEZOËDRE
TRIGONAL.

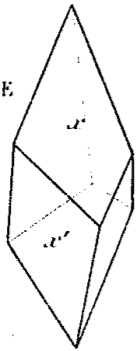


Fig. 91.

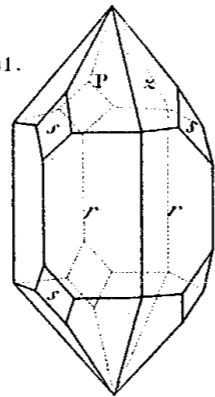


Fig. 92.
LE DI-TRIÈDRE.

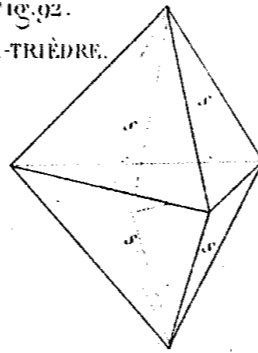


Fig. 93.

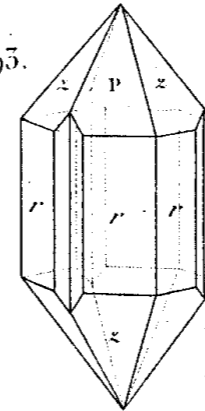


Fig. 94.

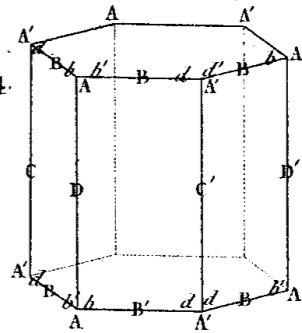


Fig. 95.

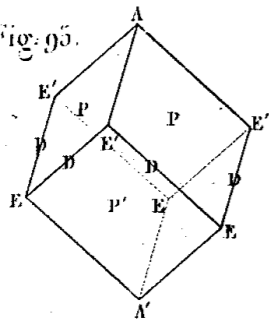


Fig. 96.

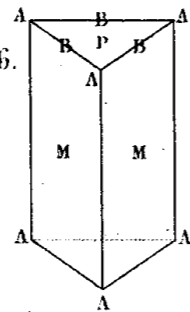


Fig. 97.

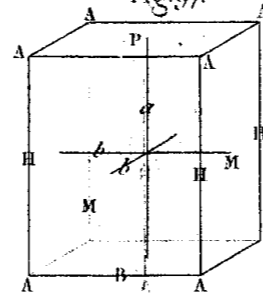
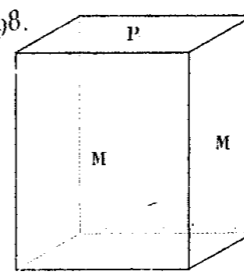


Fig. 98.



LE PRISME
CARRÉ.

Fig. 99.

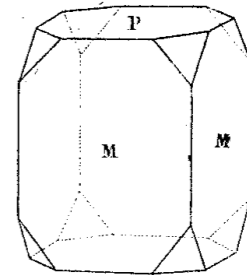


Fig. 100. LE QUADROCTAÈDRE.

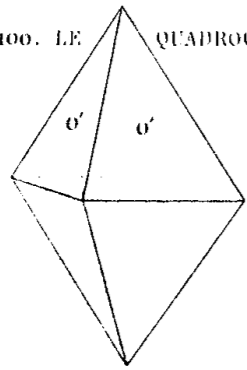


Fig. 101.

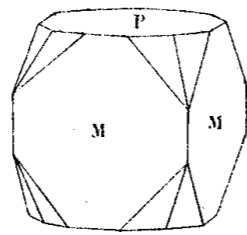


Fig. 102. LE DIOCTAÈDRE.

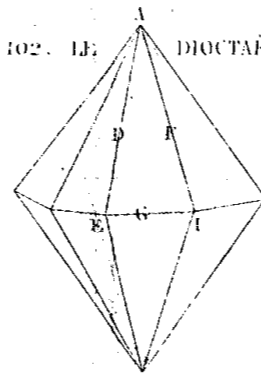


Fig. 103.

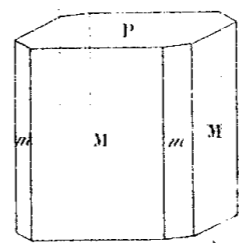


Fig. 104.

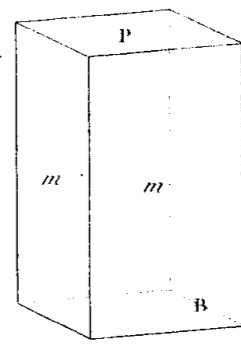


Fig. 105.

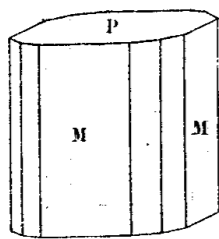


Fig. 106.

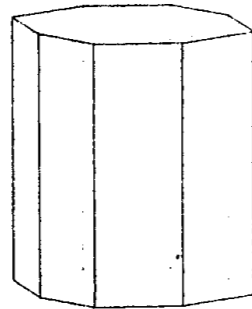


Fig. 107.

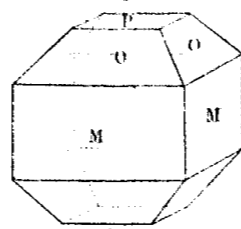


Fig. 108.

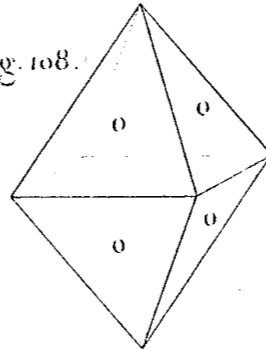


Fig. 109.

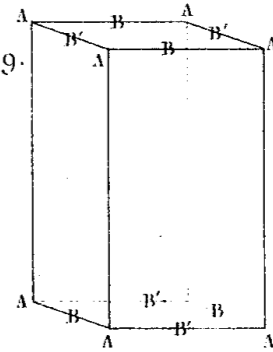


Fig. 110.

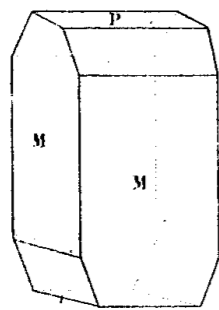


Fig. 111. LE SPHÉNOÈDRE.

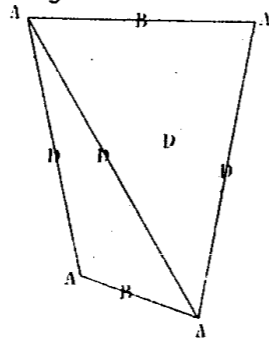


Fig. 112. LE SCALÉNOÈDRE.

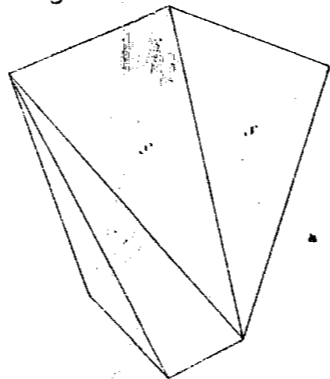


Fig. 113.

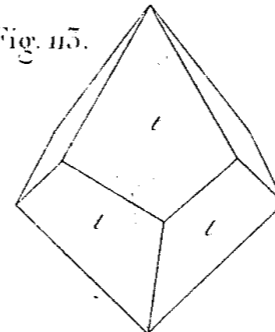


Fig. 114.

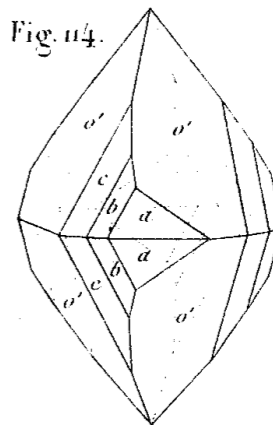


Fig. 115.

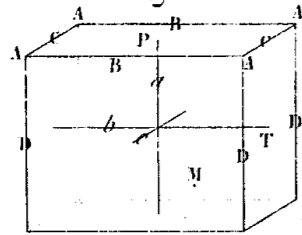


Fig. 116. LE PRISME RECTANGLE DROIT

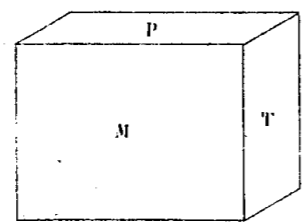


Fig. 117.

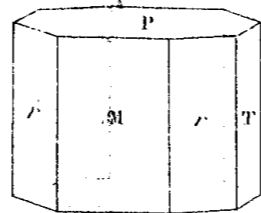


Fig. 118. LE PRISME RHOMBIQUE DROIT

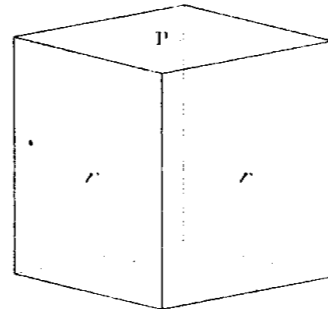


Fig. 119. DÔME.

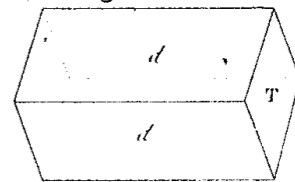


Fig. 120. DÔME.

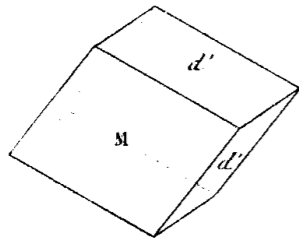


Fig. 121. OCTAÈDRE RECTANGLE.

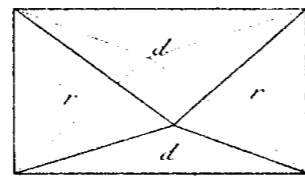


Fig. 122.

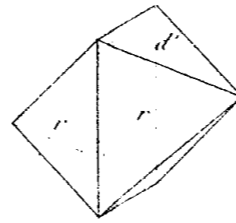


Fig. 123.

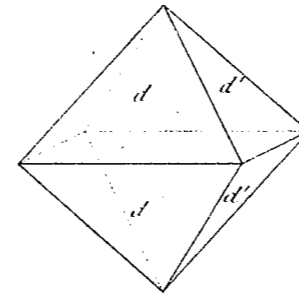


Fig. 124.

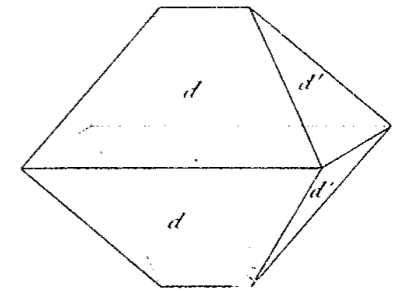


Fig. 125.

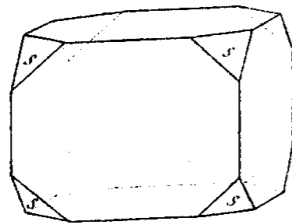


Fig. 126. LE RHOMBOCTAÈDRE.

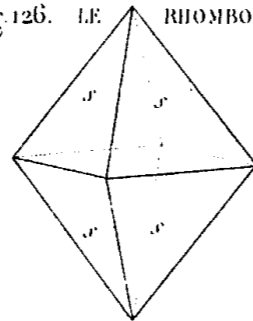


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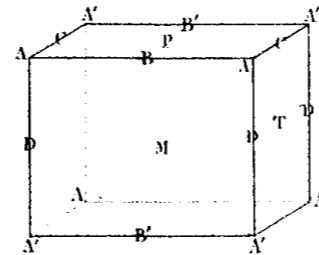


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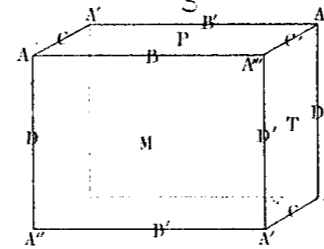
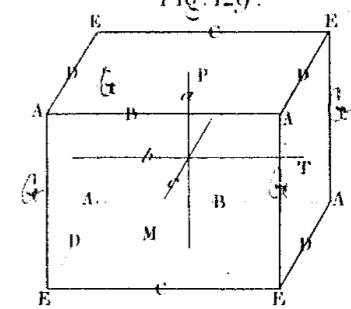


Fig. 129.



LE PRISME RECTANGLE OBLIQUE.

Fig. 130.

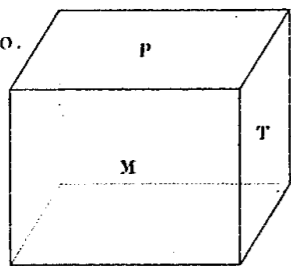


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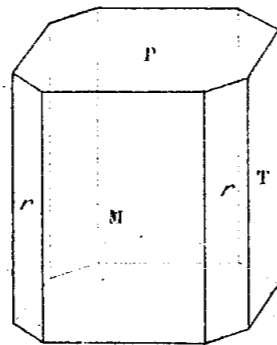


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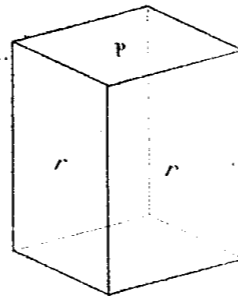


Fig. 133.

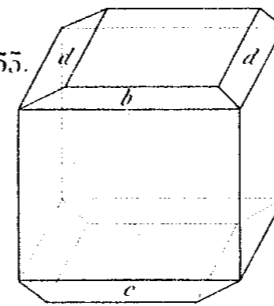


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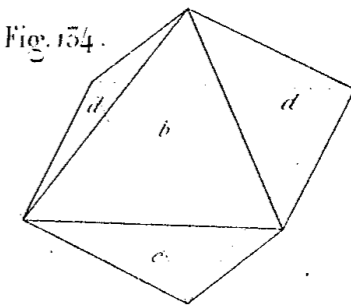


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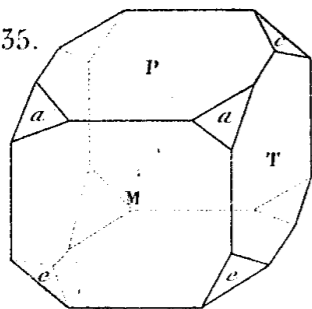


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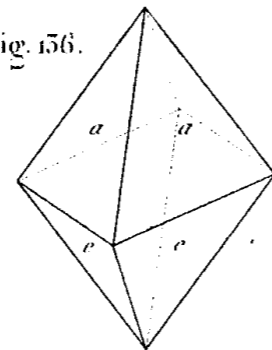


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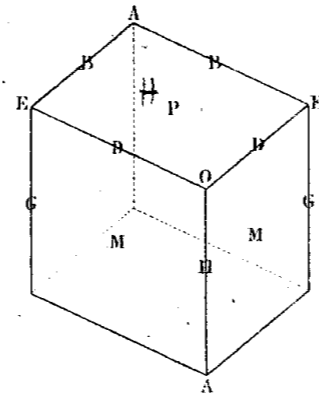


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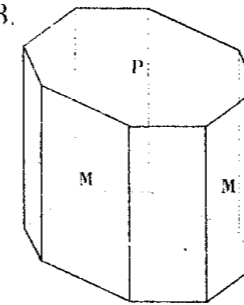
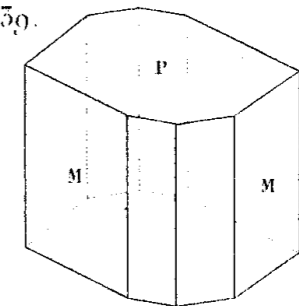


Fig. 139.



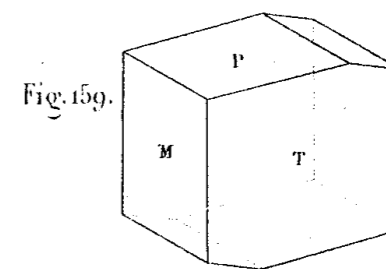
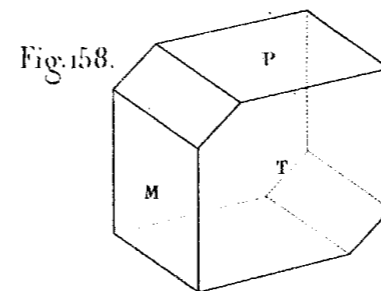
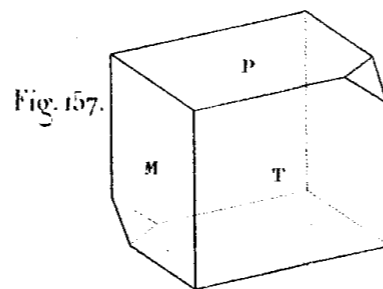
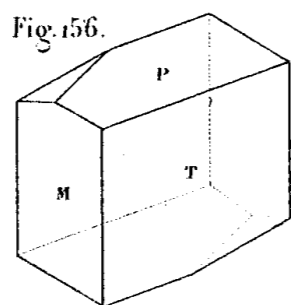
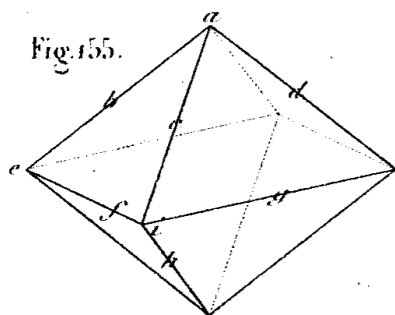
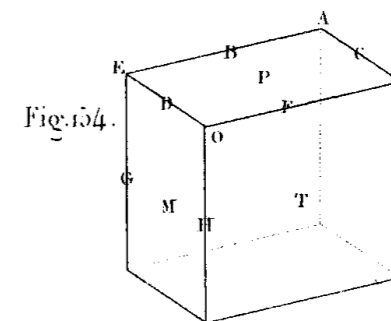
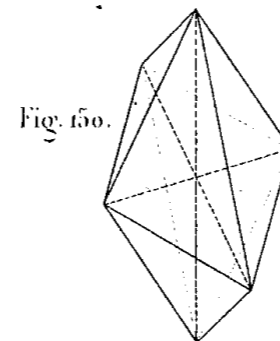
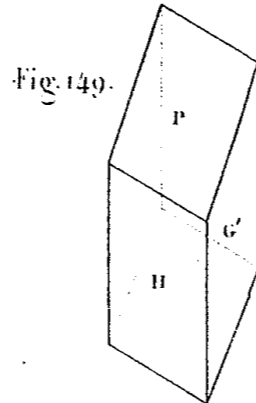
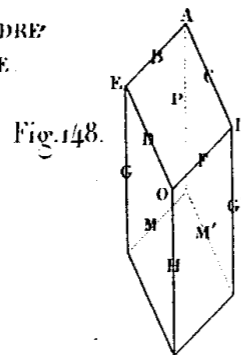
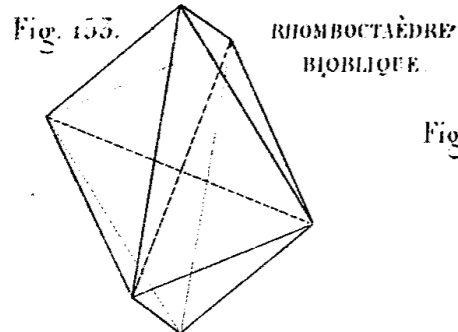
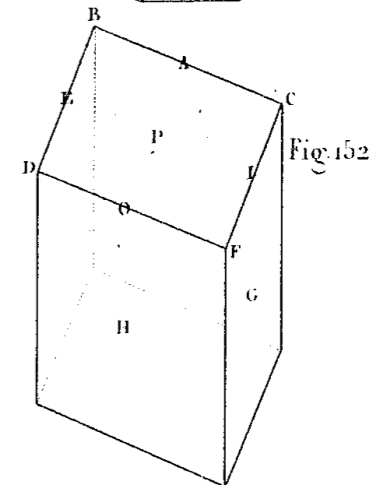
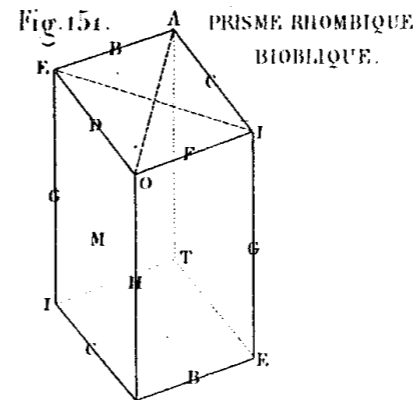
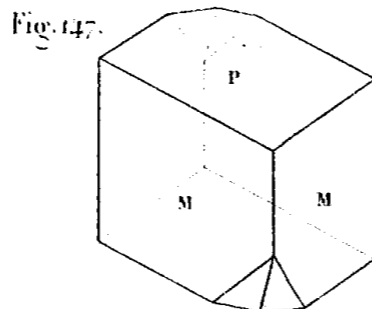
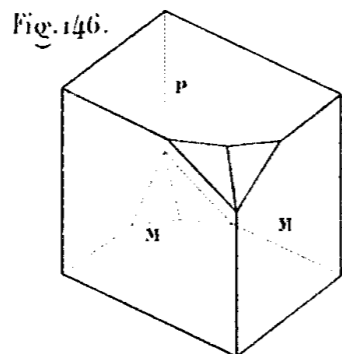
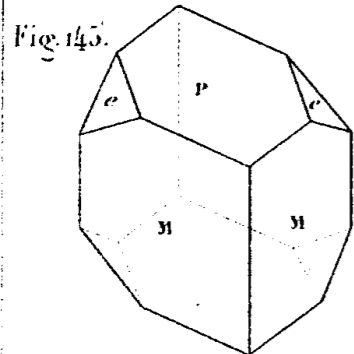
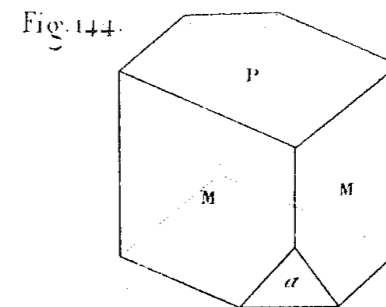
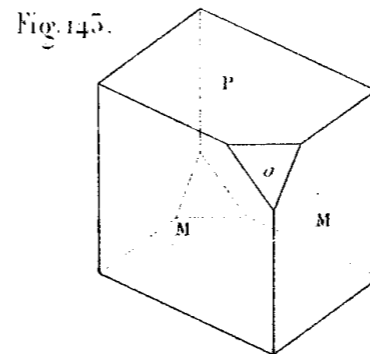
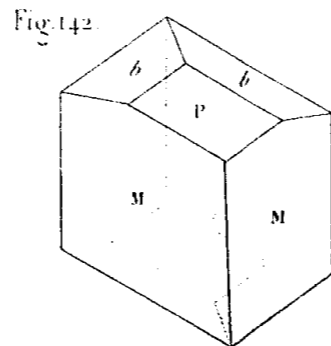
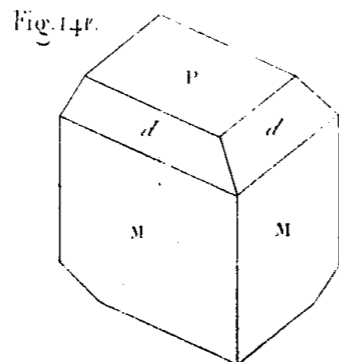
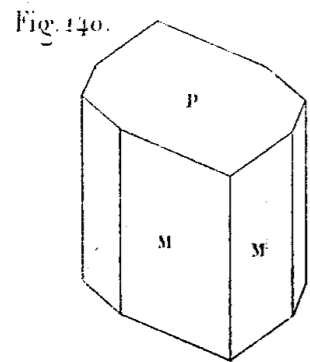


Fig. 1.

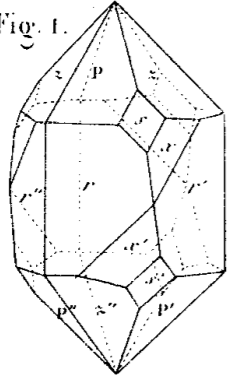


Fig. 3.

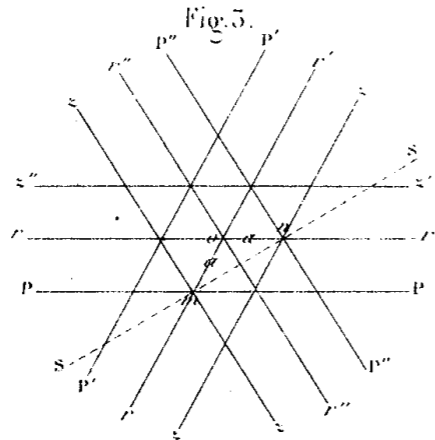


Fig. 5.

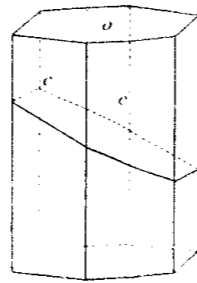


Fig. 6.

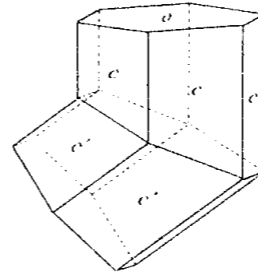


Fig. 7.

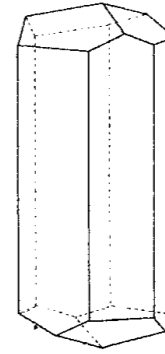


Fig. 8.

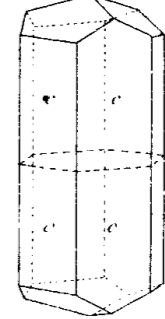


Fig. 2.

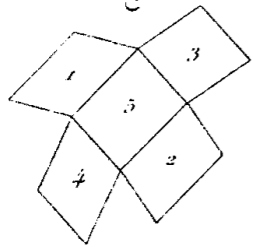


Fig. 4.

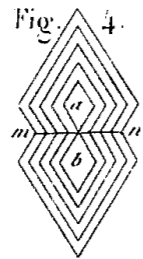


Fig. 11.

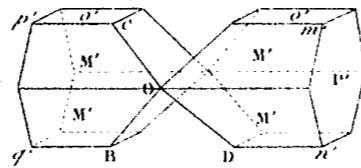


Fig. 9.

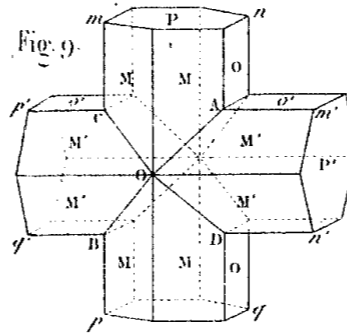


Fig. 10.

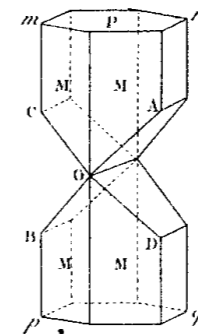


Fig. 12.

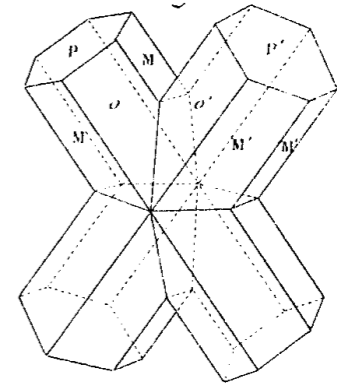


Fig. 13.

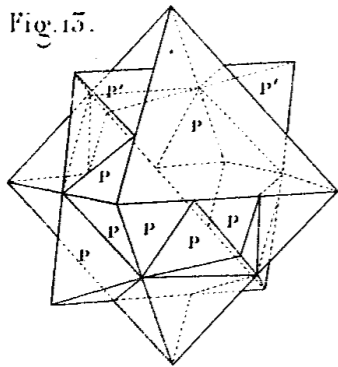


Fig. 14.

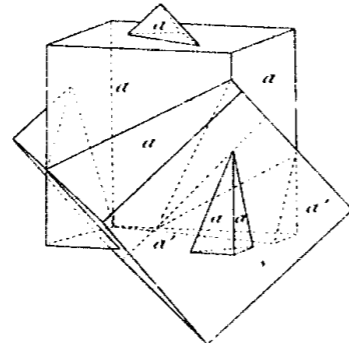


Fig. 15.

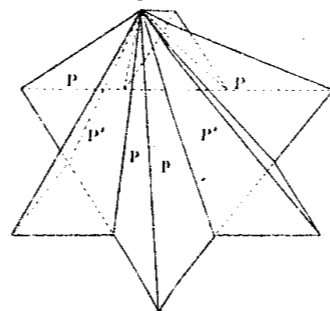


Fig. 16.

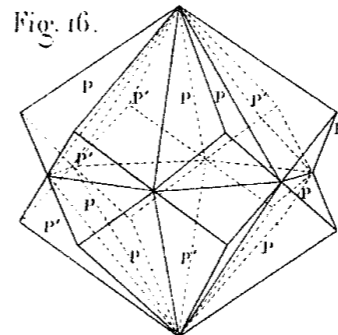


Fig. 17.

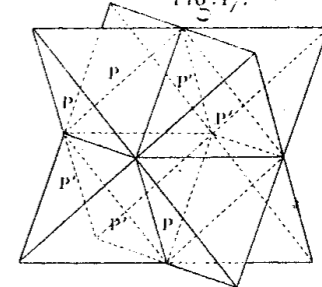


Fig. 18.

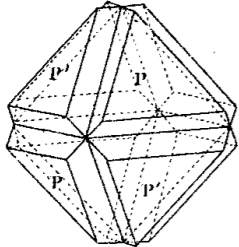


Fig. 19.

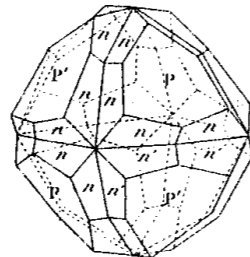


Fig. 20.

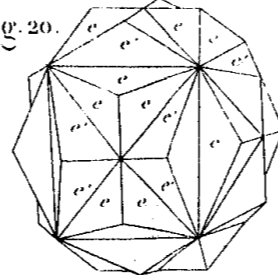


Fig. 21.

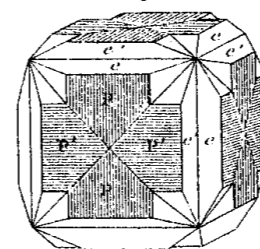
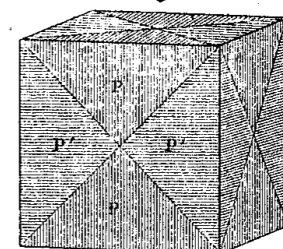


Fig. 22.



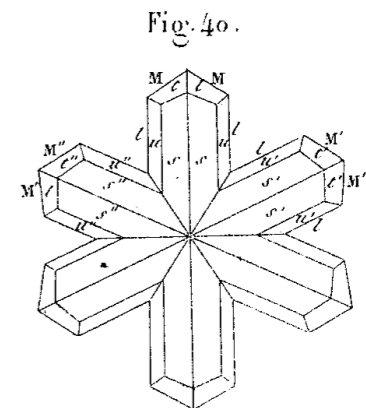
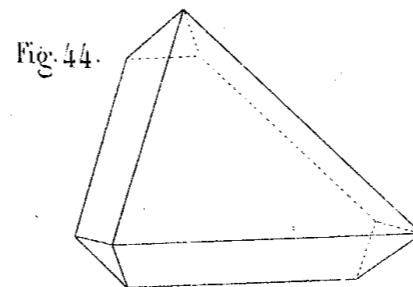
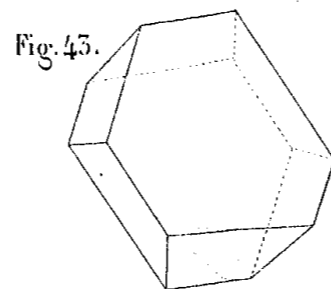
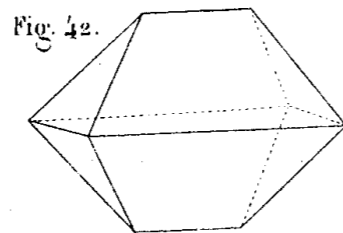
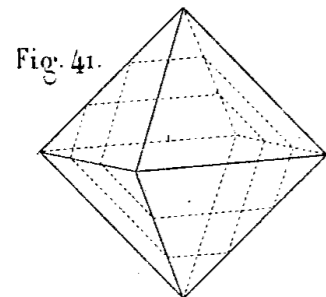
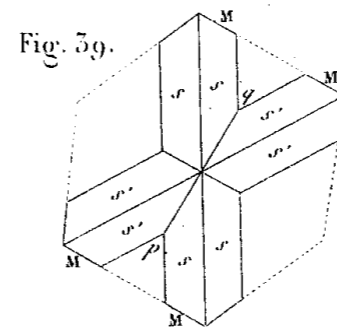
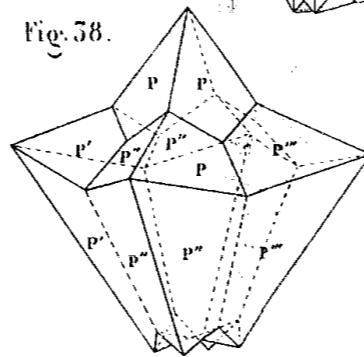
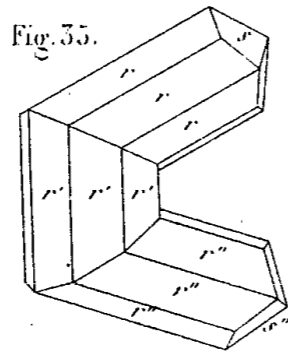
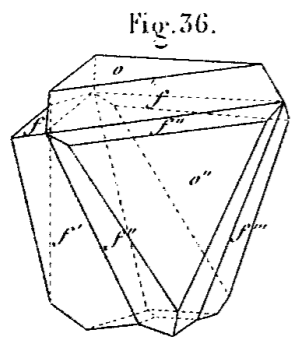
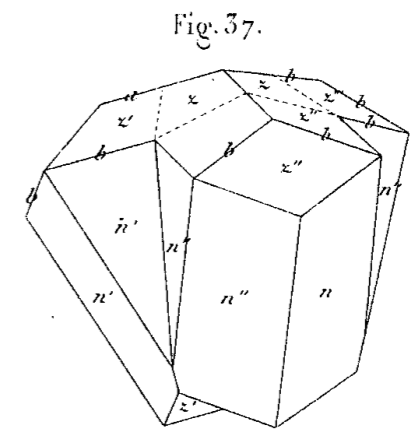
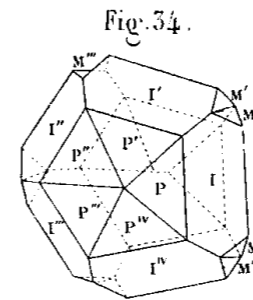
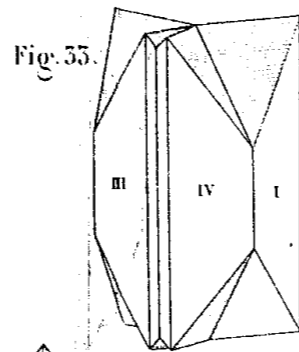
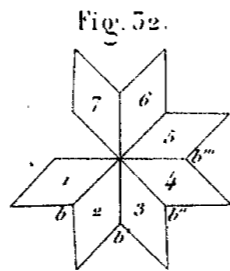
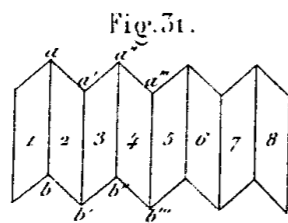
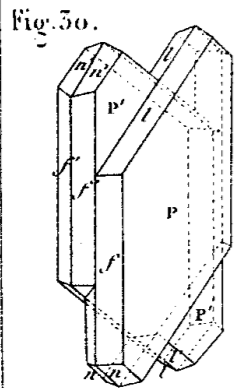
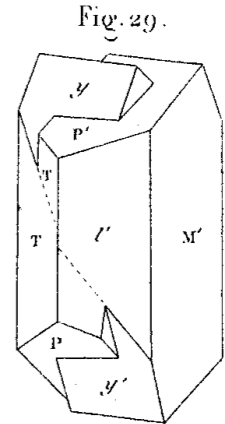
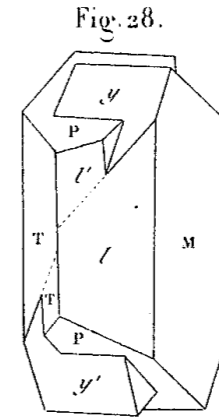
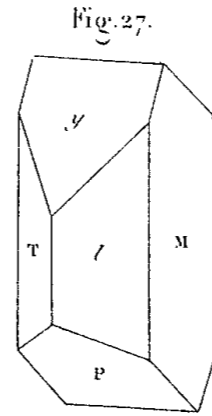
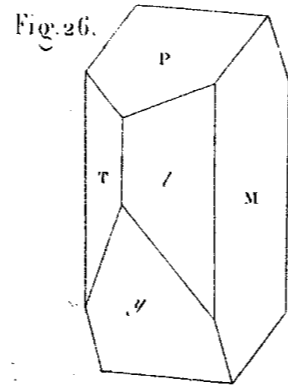
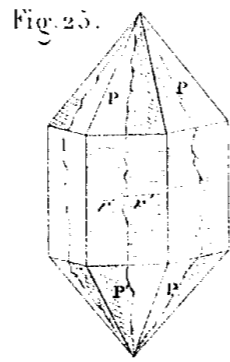
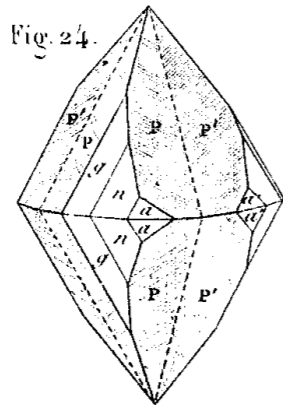
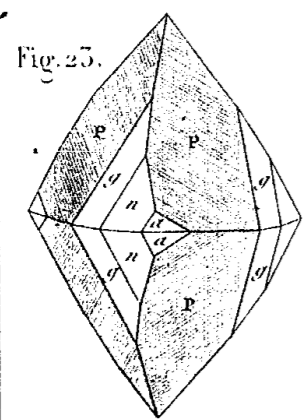


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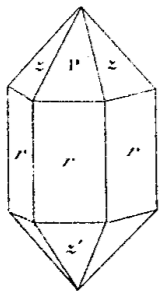


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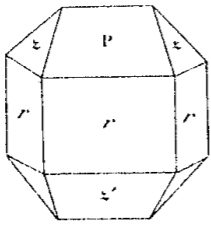


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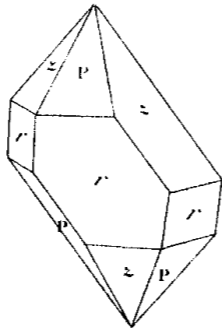


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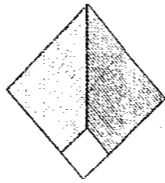


Fig. 49.

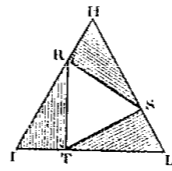


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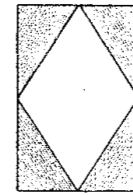


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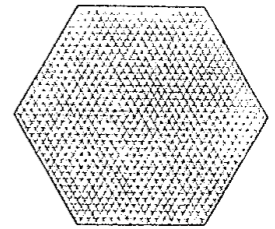


Fig. 1.

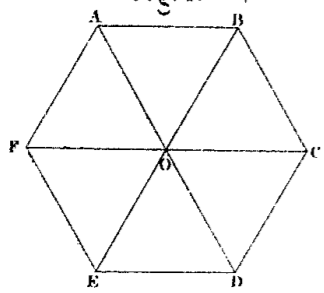


Fig. 2.

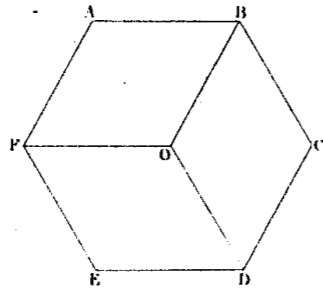


Fig. 3.

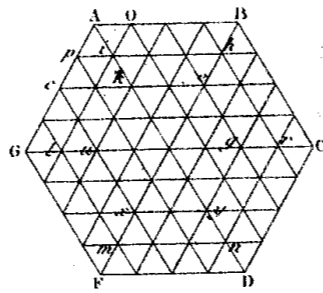


Fig. 4.

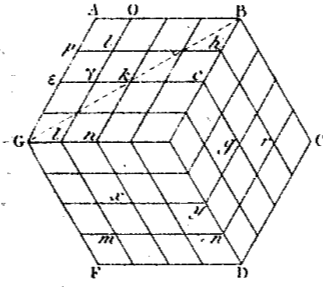


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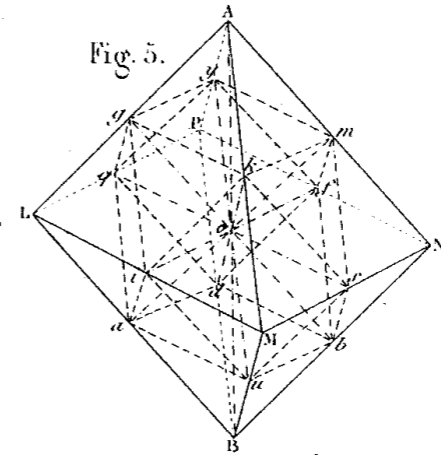


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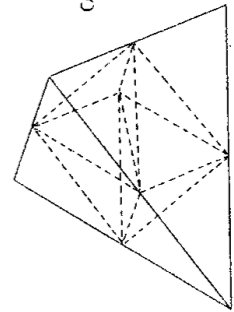


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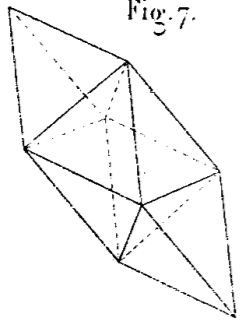


Fig. 10.

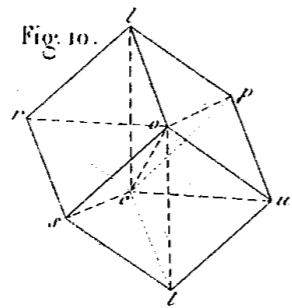


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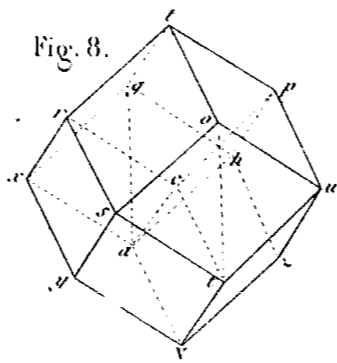


Fig. 12.

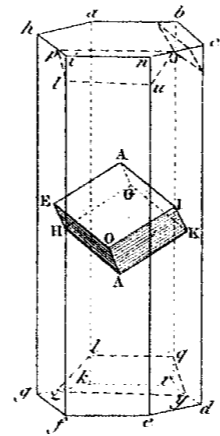


Fig. 14.

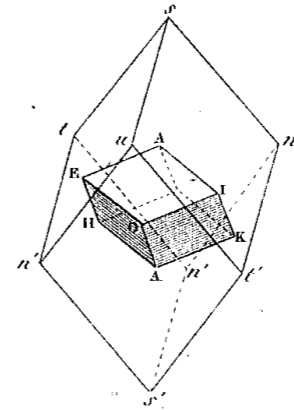


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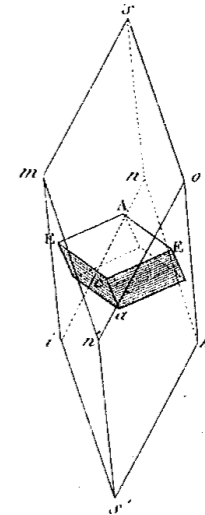


Fig. 9.

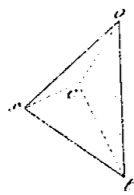


Fig. 11.

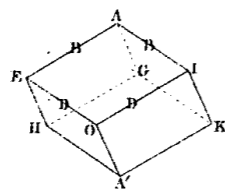
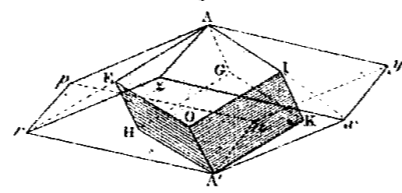


Fig. 13.



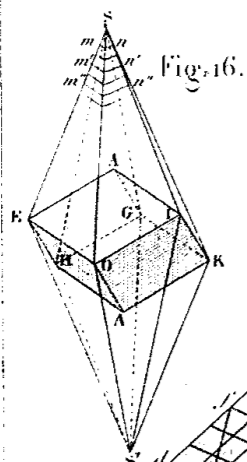


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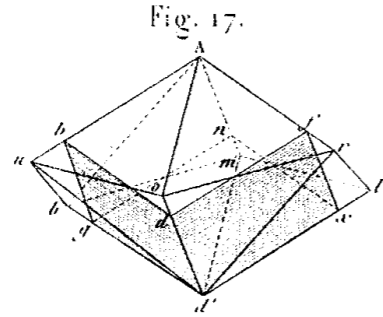


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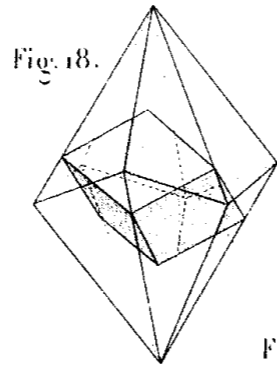


Fig. 18.

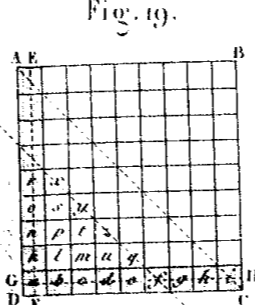


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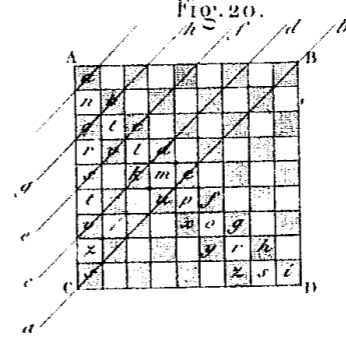


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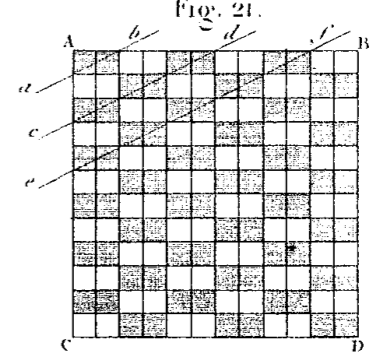


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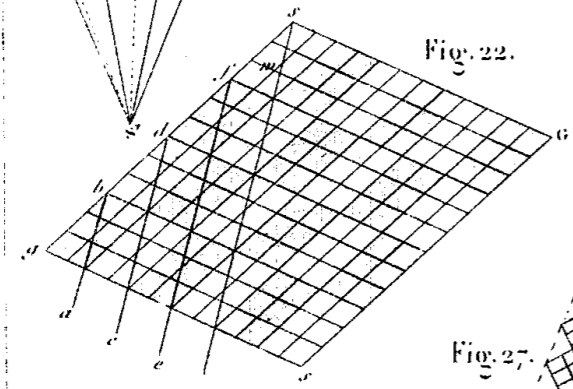


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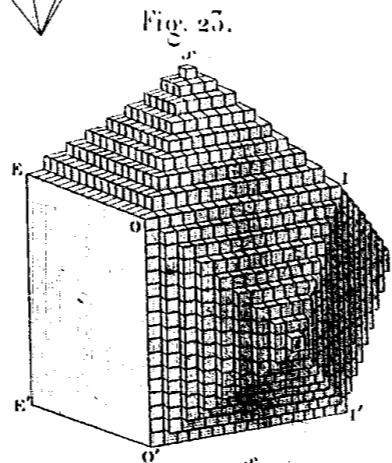


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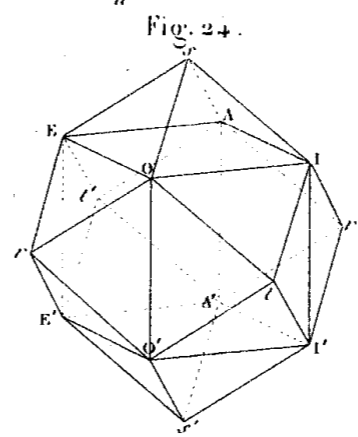


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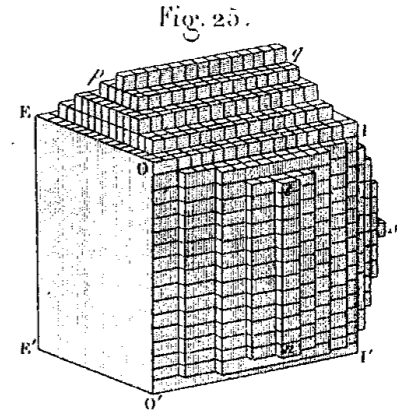


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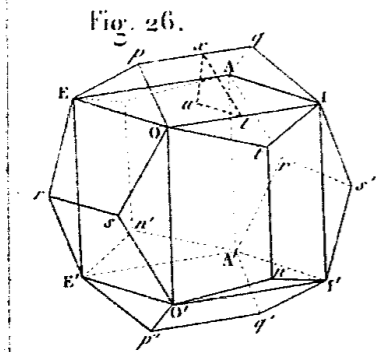


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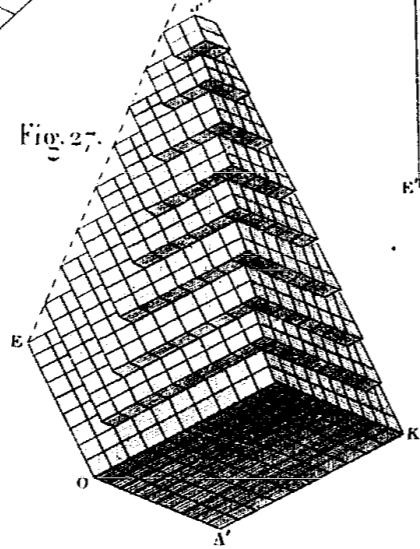


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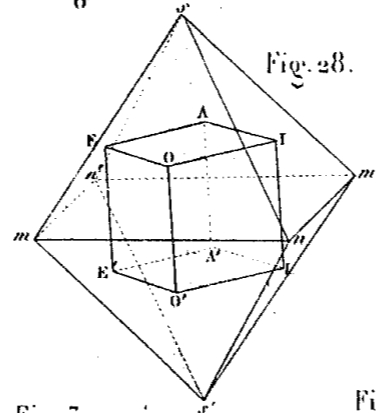


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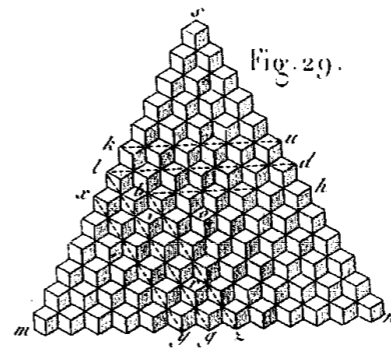


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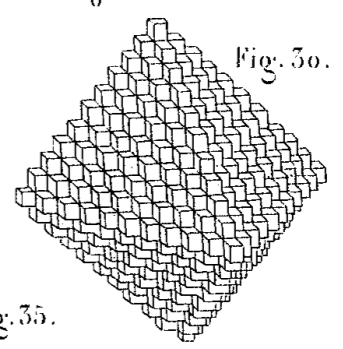


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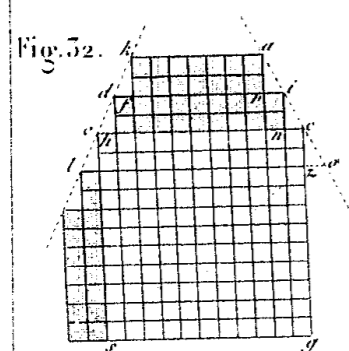


Fig. 32.

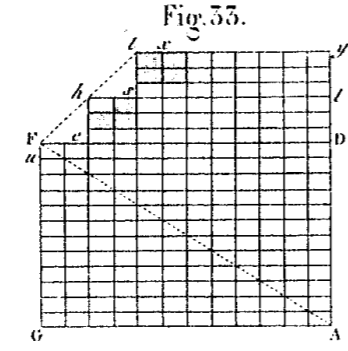


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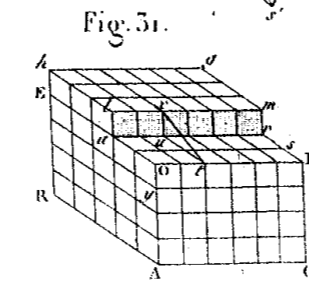


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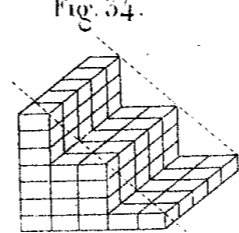


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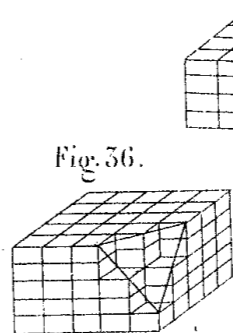


Fig. 36.

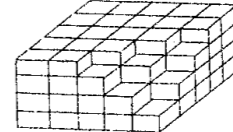


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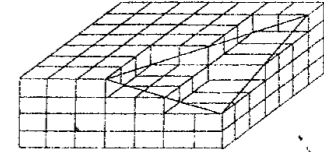


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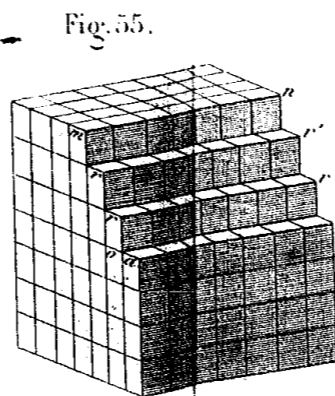
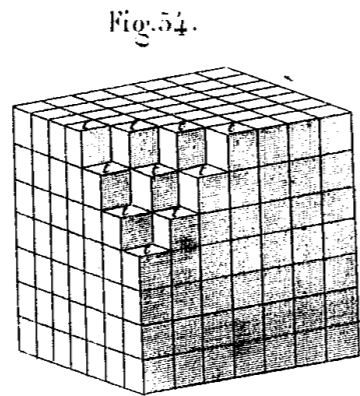
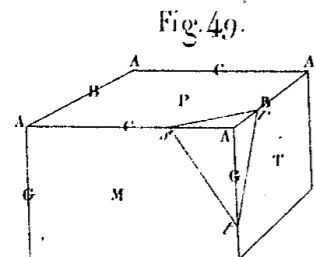
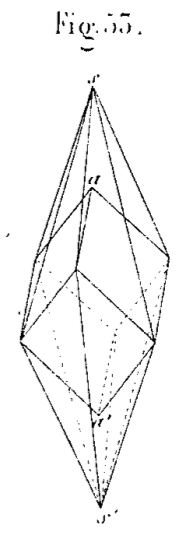
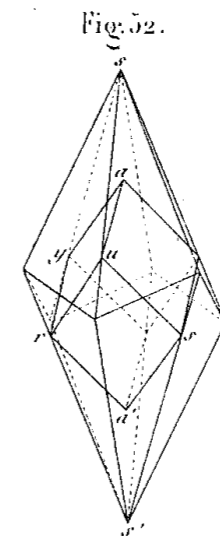
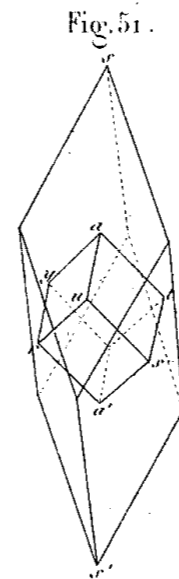
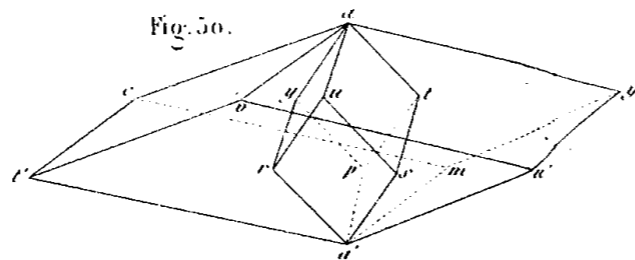
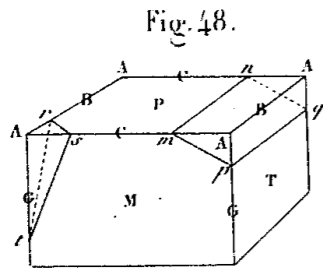
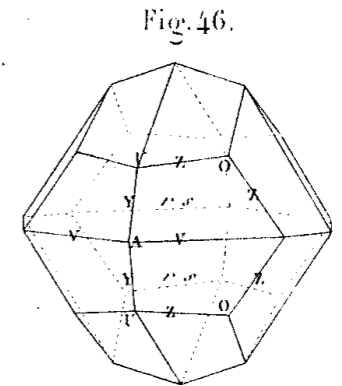
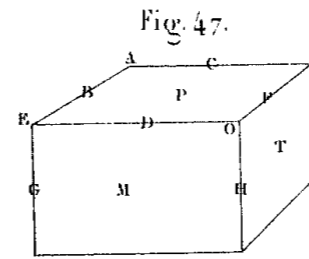
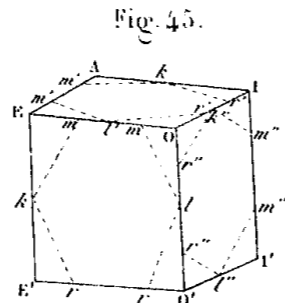
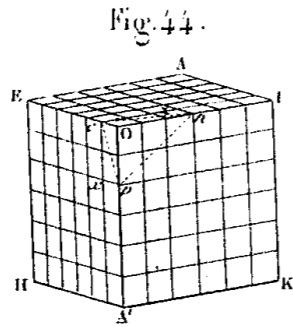
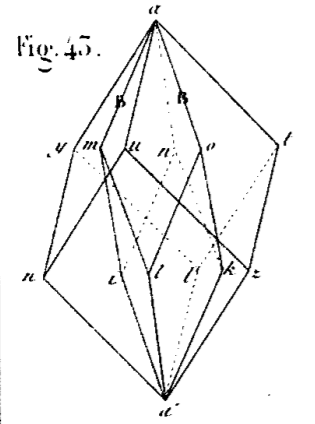
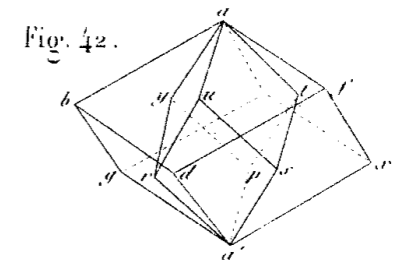
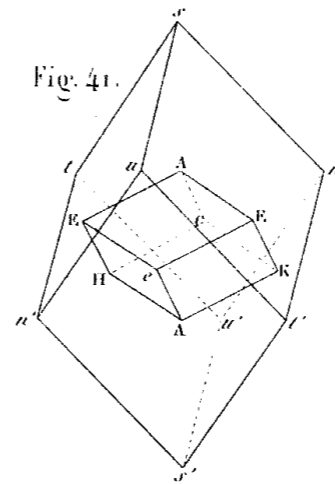
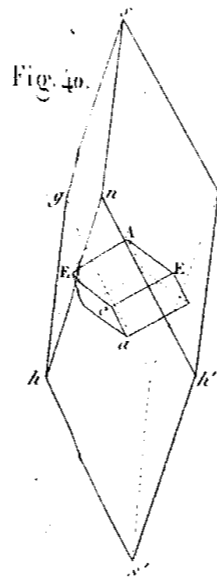
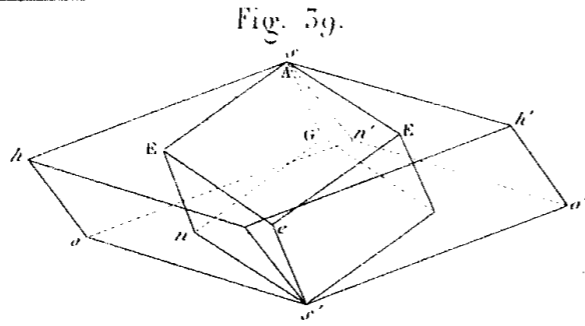
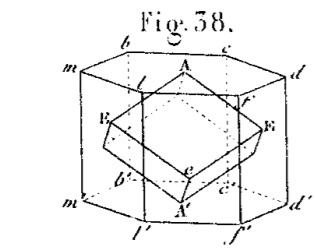


Fig. 57.

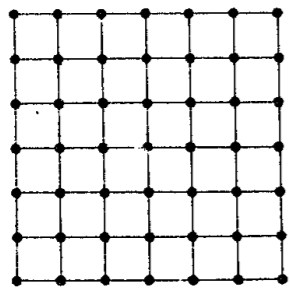


Fig. 58.

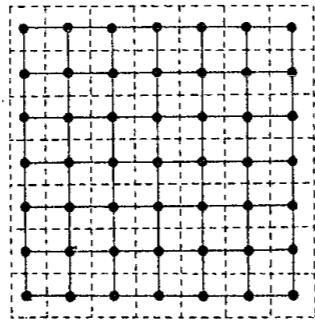


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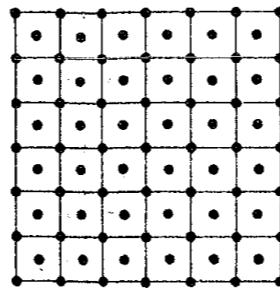


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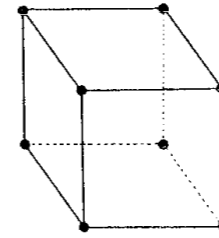


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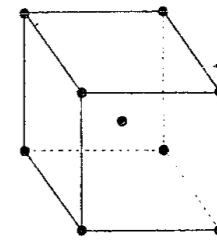


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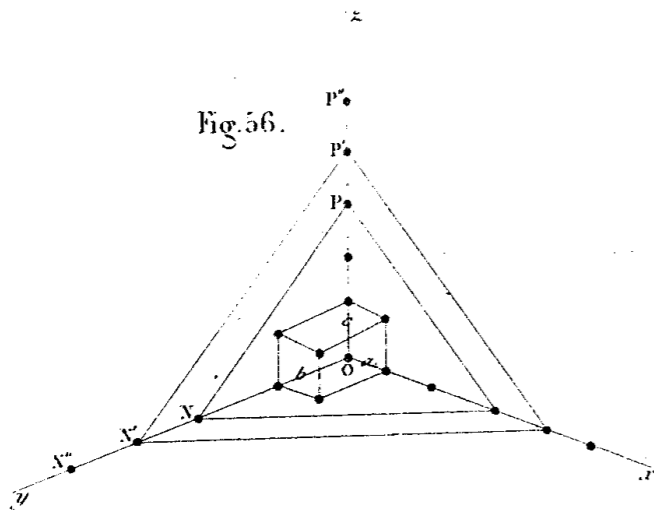


Fig. 65.

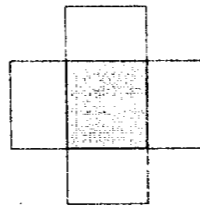


Fig. 64.



Fig. 65.

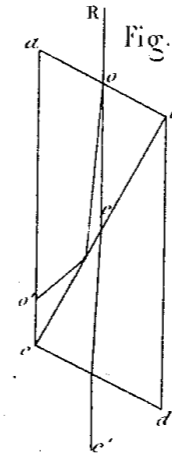


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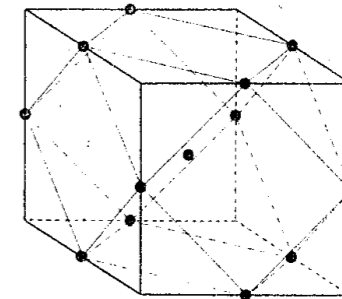


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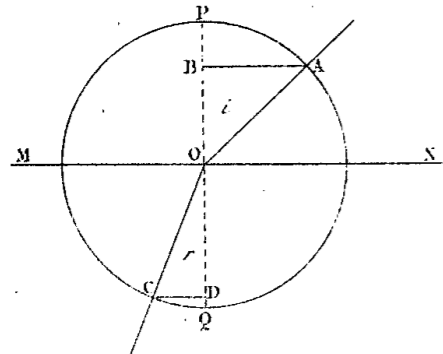


Fig. 67.

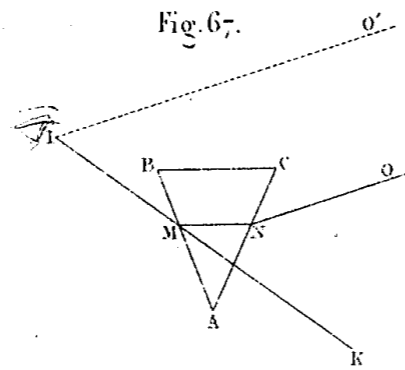


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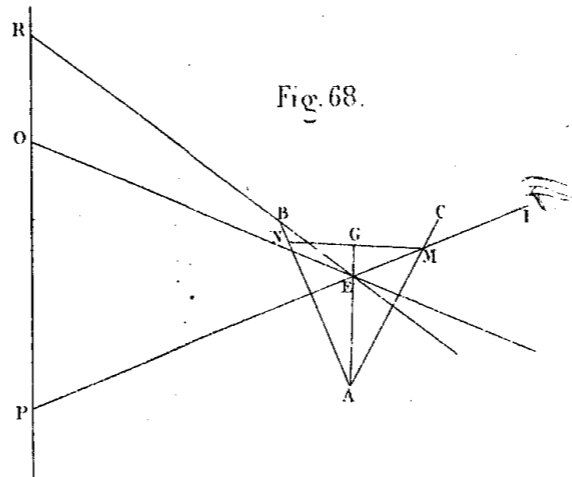


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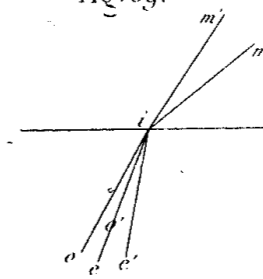


Fig. 72.

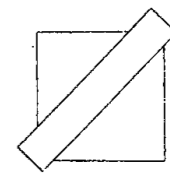


Fig. 70.

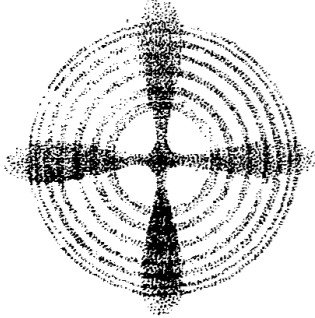


Fig. 71.

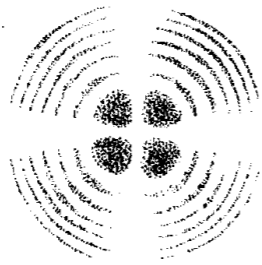


Fig. 73.



Fig. 74.

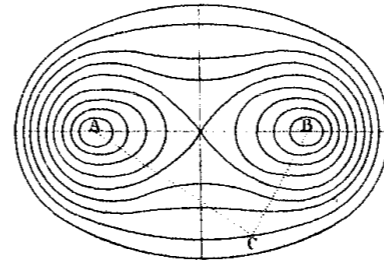


Fig. 75.

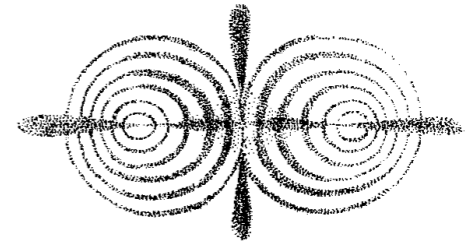


Fig. 76.

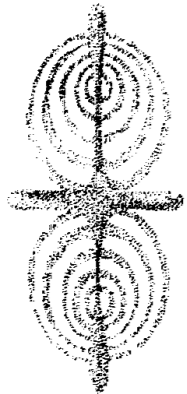


Fig. 77.

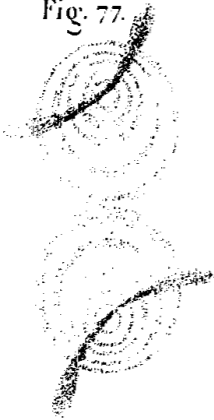


Fig. 78.



Fig. 79.

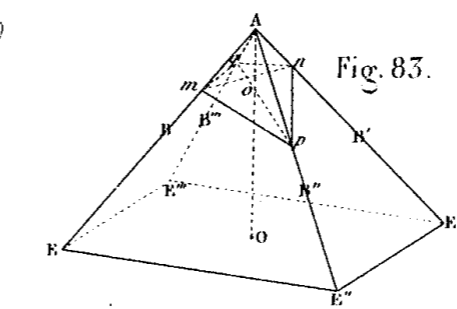
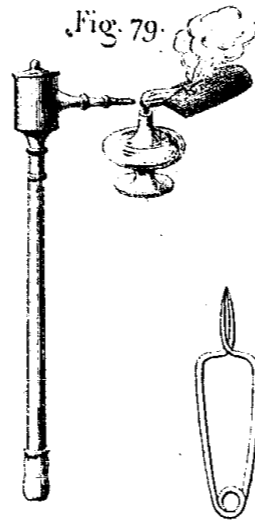


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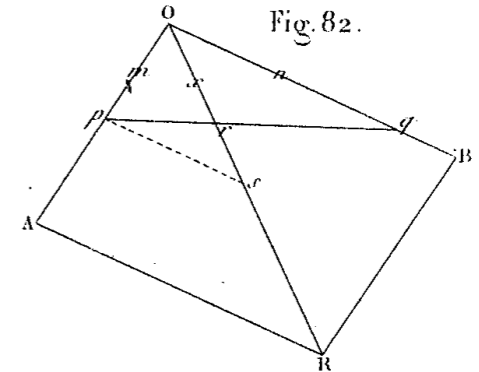


Fig. 82.

Fig. 80.

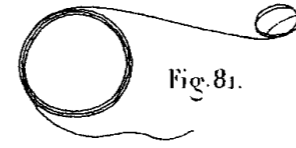
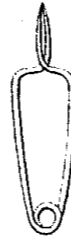


Fig. 81.

Fig. 84.

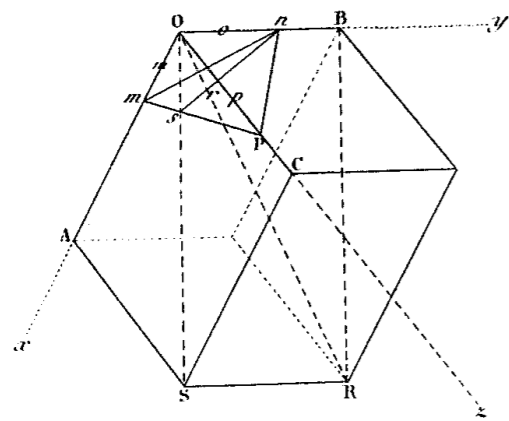


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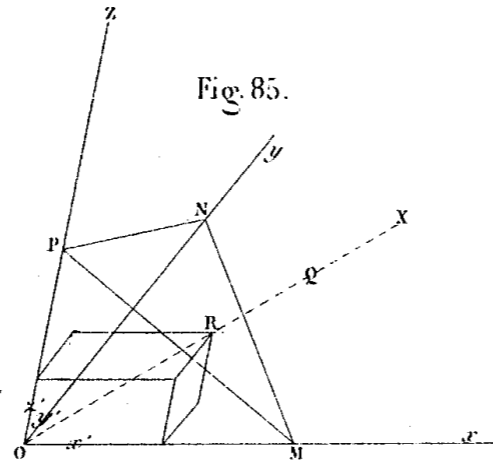


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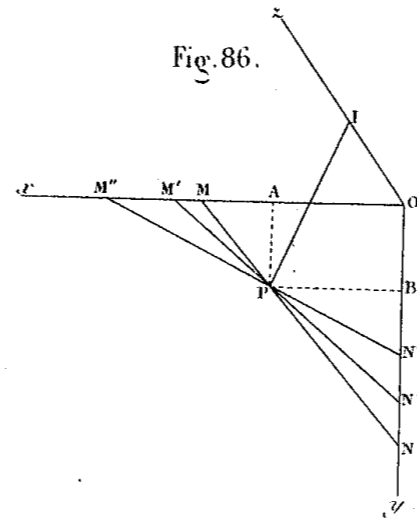


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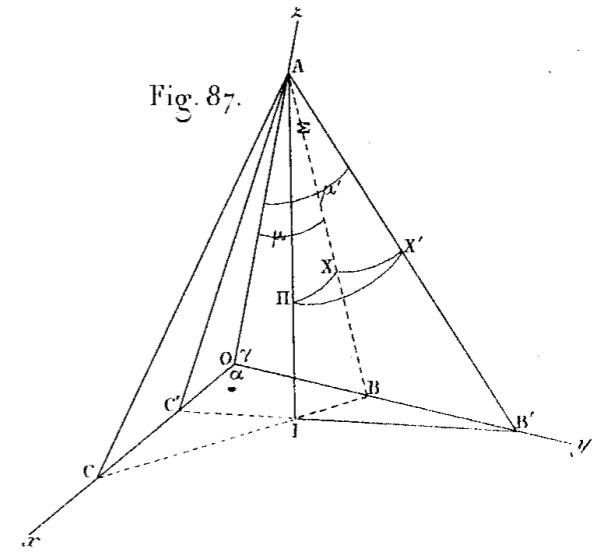


Fig. 1. DIAMANT.

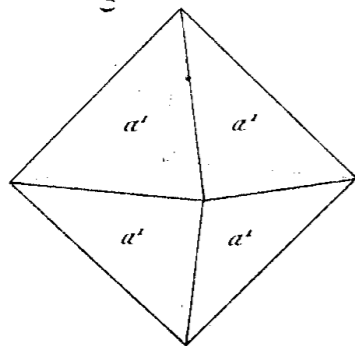


Fig. 2.

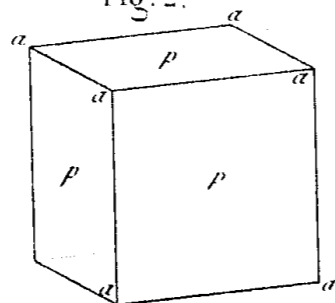


Fig. 3.

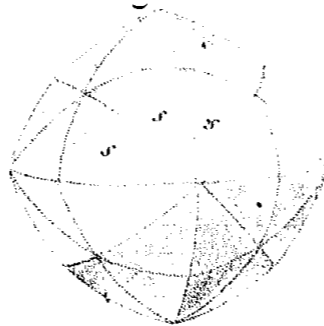


Fig. 4.



Fig. 5.

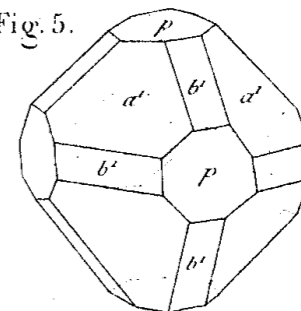


Fig. 6.

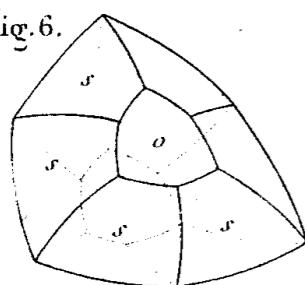


Fig. 7.

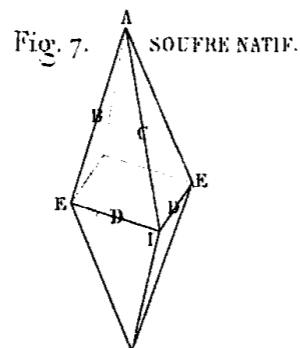


Fig. 8.

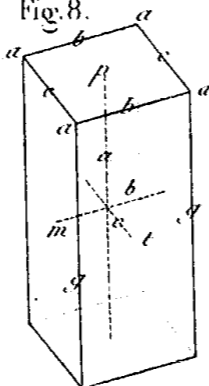


Fig. 9.

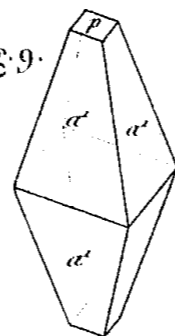


Fig. 10.

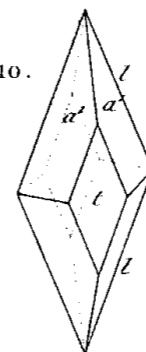


Fig. 11.

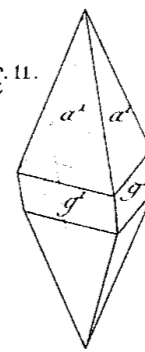


Fig. 12.

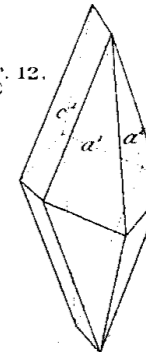


Fig. 14. SOUFRE FONDU.

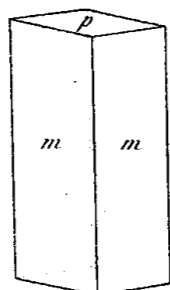


Fig. 15.

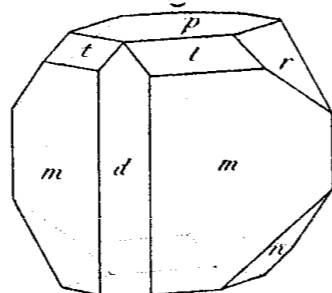


Fig. 17.

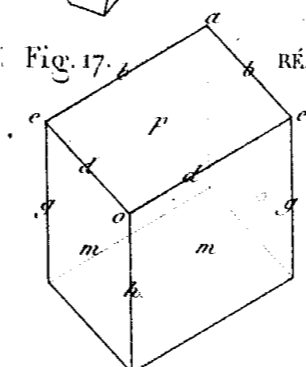


Fig. 18.

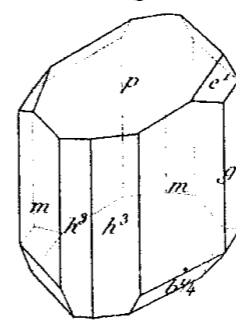


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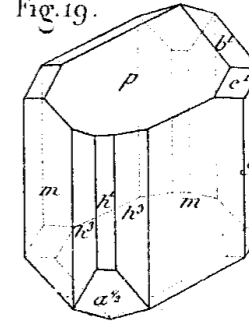


Fig. 13.

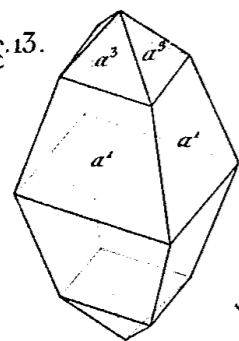


Fig. 16. ARSÉNIC NATIF.

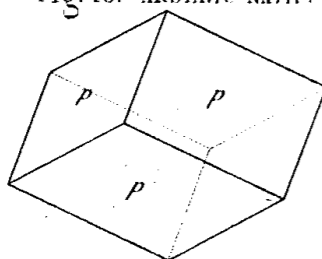


Fig. 20. ORPIMENT.

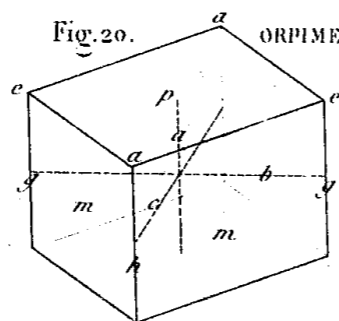


Fig. 21.

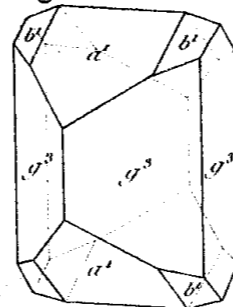


Fig. 22.

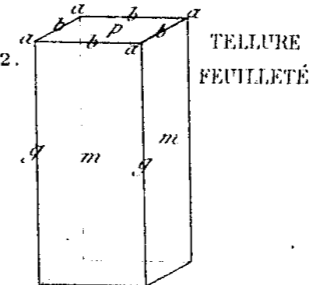


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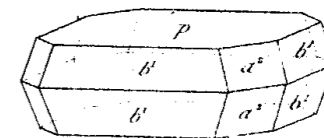


Fig. 24. SYLVANE.

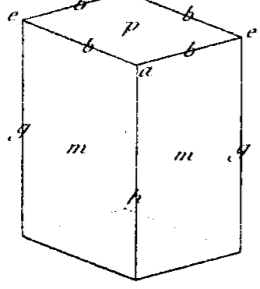


Fig. 25.

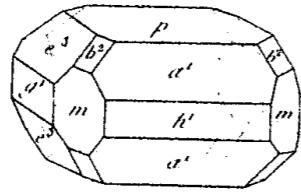


Fig. 26. STIBINE.

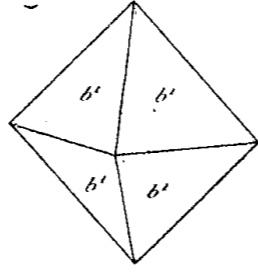


Fig. 27.

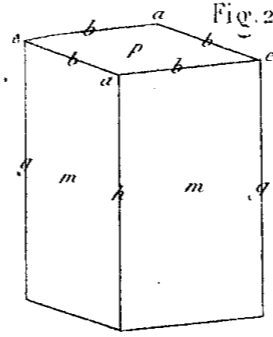


Fig. 28.

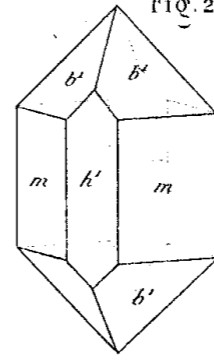


Fig. 29.

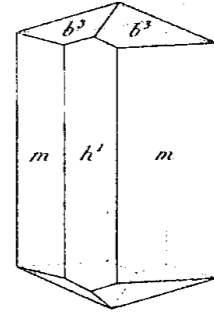


Fig. 31. BOURNONITE.

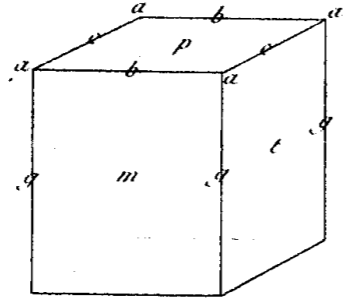


Fig. 30.

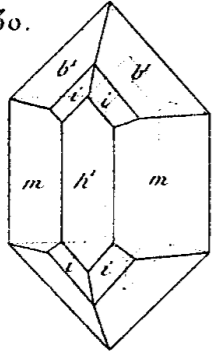


Fig. 32.

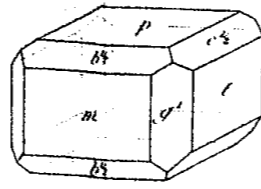


Fig. 33. CASSITÉRITE.

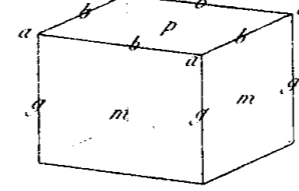


Fig. 34.

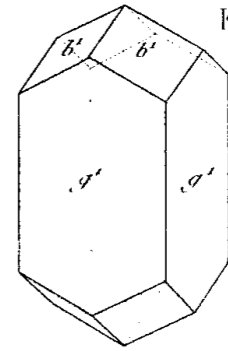


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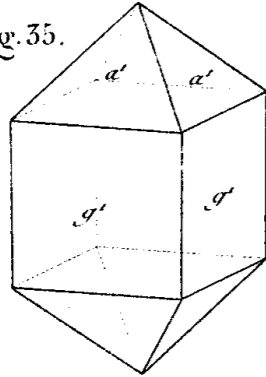


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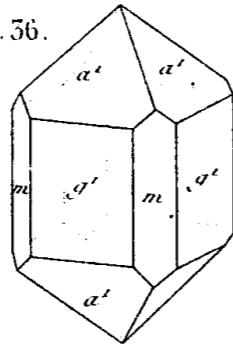


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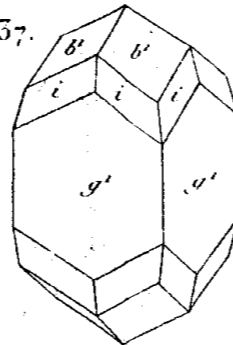


Fig. 38.

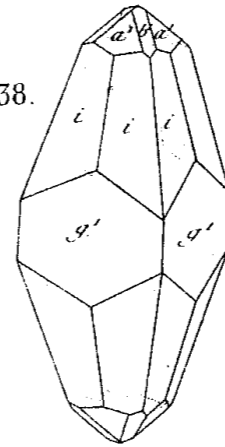


Fig. 39.

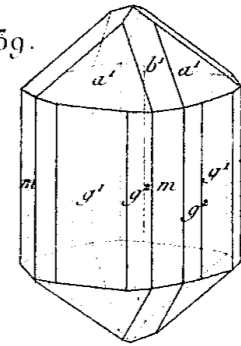


Fig. 41.

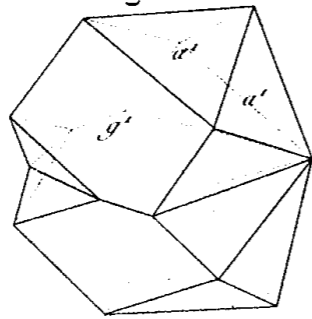


Fig. 44. FERGUSONITE.

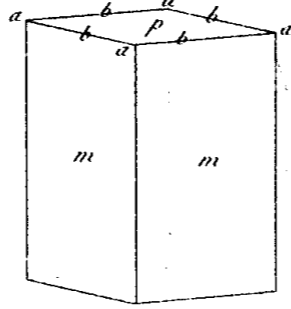


Fig. 45.

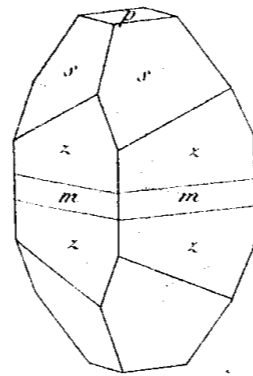


Fig. 42. TANTALITE.

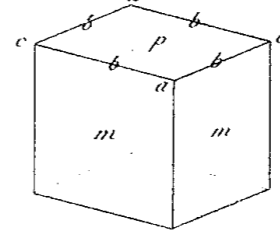


Fig. 43.

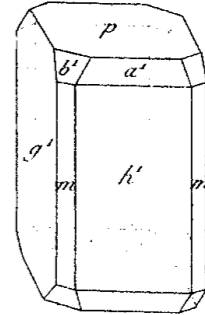
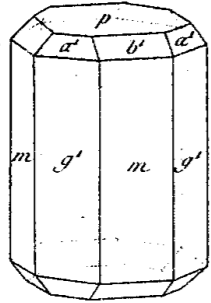


Fig. 40.



RUTILE. Fig. 46.

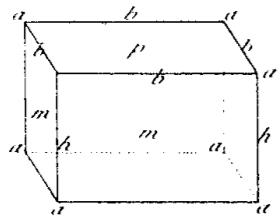


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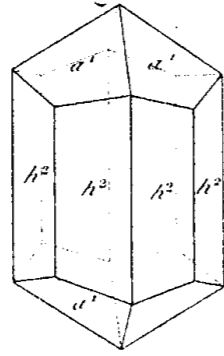


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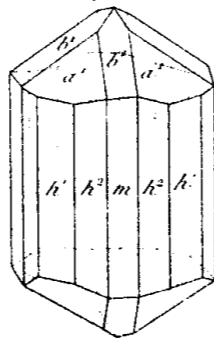


Fig. 49.

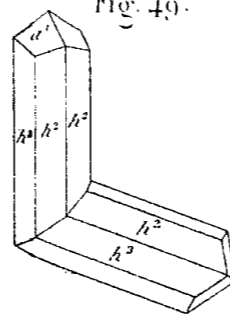


Fig. 50.

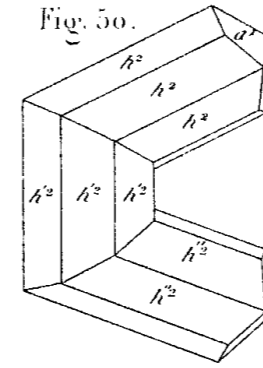


Fig. 51.

BROOKITE.

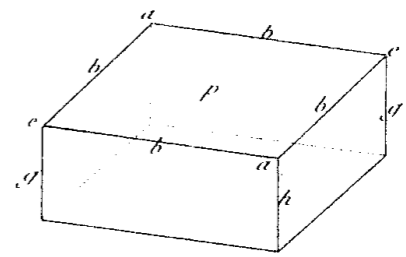
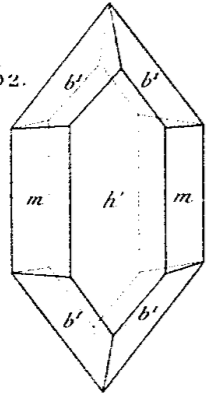


Fig. 52.



ANATASE.

Fig. 55.

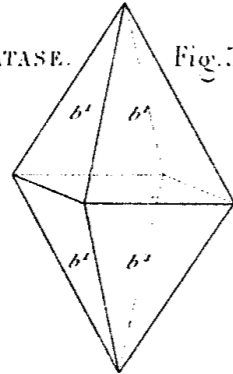


Fig. 54.

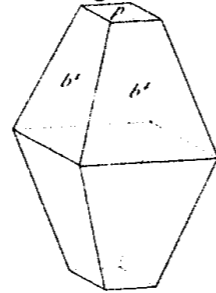


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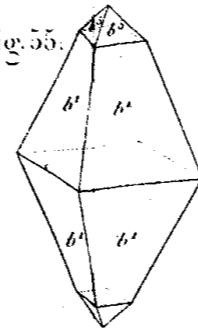


Fig. 56.

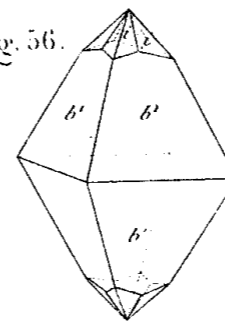


Fig. 57.

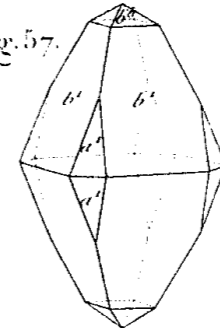
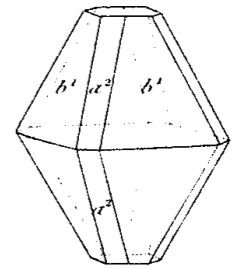


Fig. 58.



SPHÈRE.

Fig. 59.

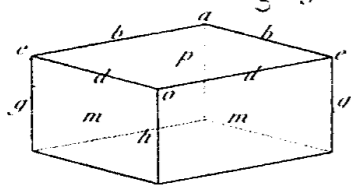


Fig. 60.

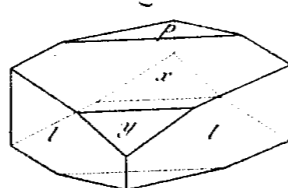


Fig. 61.



Fig. 62.

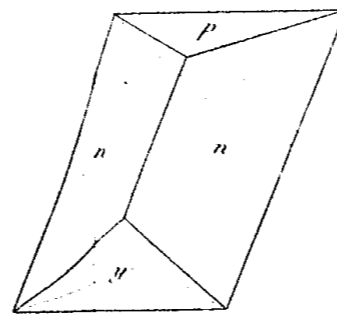


Fig. 65.

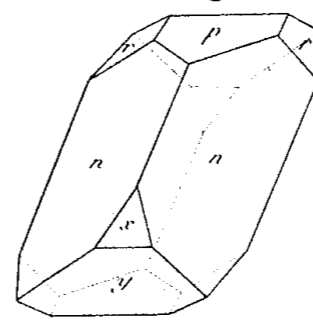


Fig. 64.

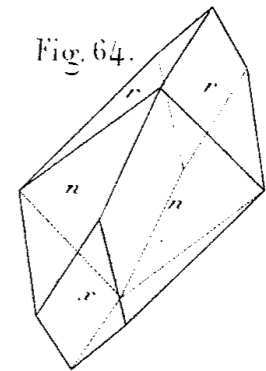


Fig. 65.

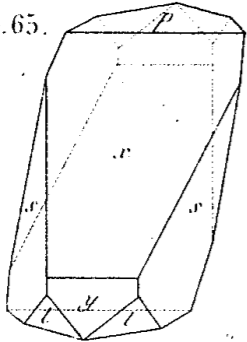


Fig. 66.

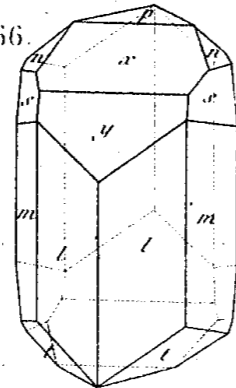


Fig. 67.

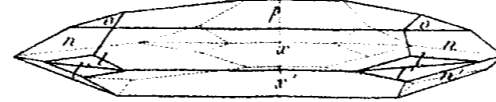
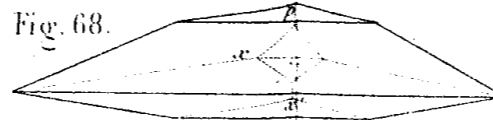


Fig. 68.



POLYMNITE. Fig. 69.

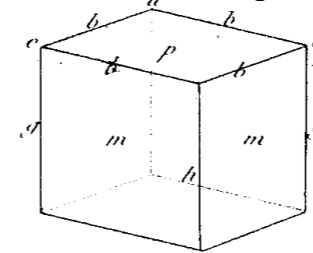
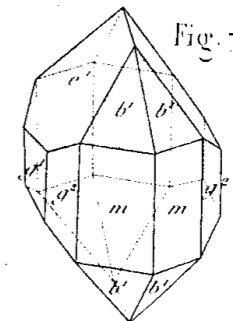


Fig. 70.



MOLYBDÉNITE Fig. 71.

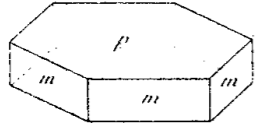


Fig. 72. SCHÉELITE. Fig. 73.

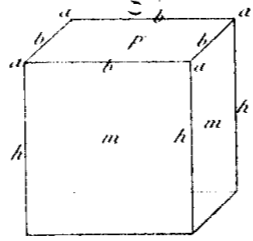
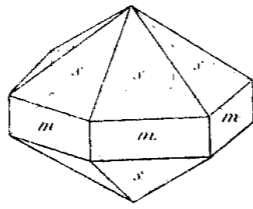


Fig. 74.

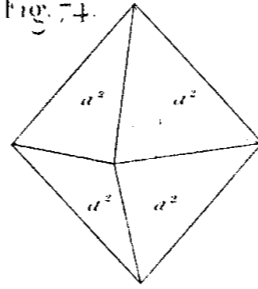
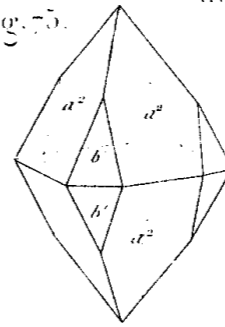


Fig. 75.



HAUSMANNITE Fig. 76.

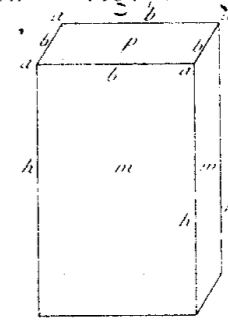


Fig. 77.

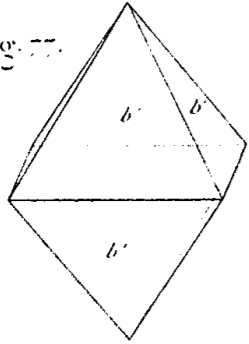
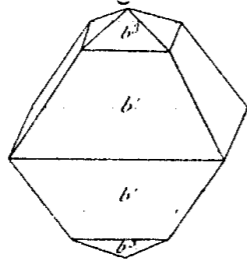


Fig. 78.



BRAUNITE. Fig. 79.

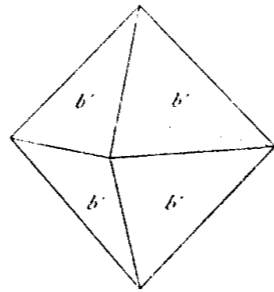


Fig. 80.

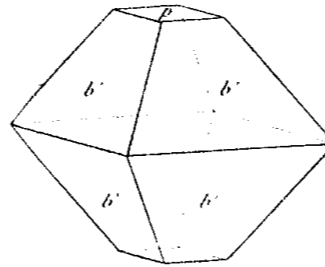


Fig. 81.

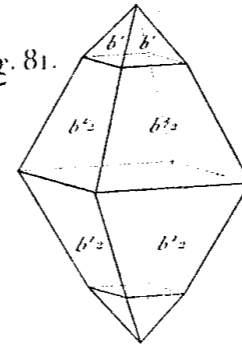


Fig. 82.

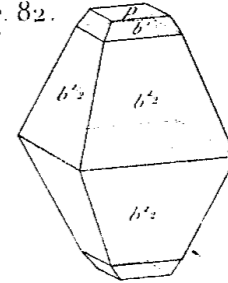
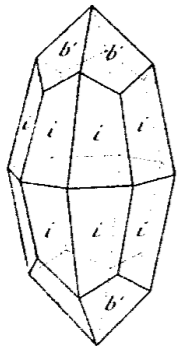


Fig. 85.



MANGANITE. Fig. 84.

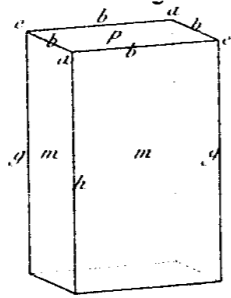


Fig. 85.

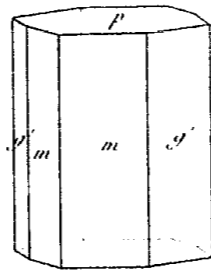


Fig. 86.

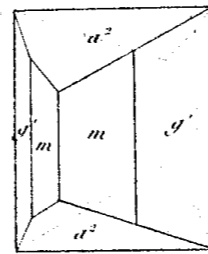


Fig. 87.

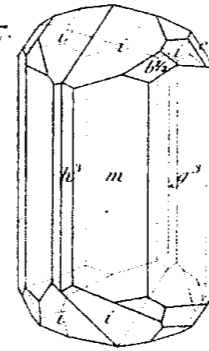
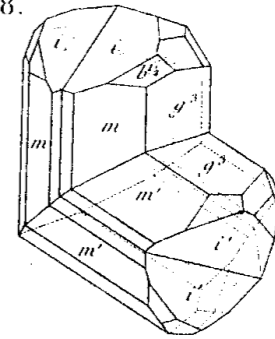


Fig. 88.



PYROLUSITE. Fig. 89.

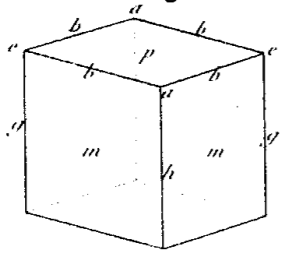


Fig. 90.

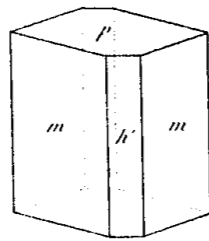


Fig. 91.

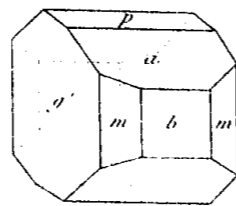
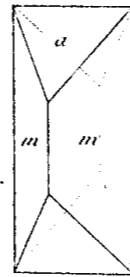


Fig. 92.



MISPICKEL. Fig. 93.

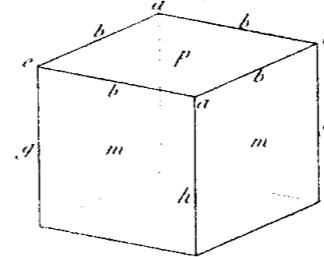
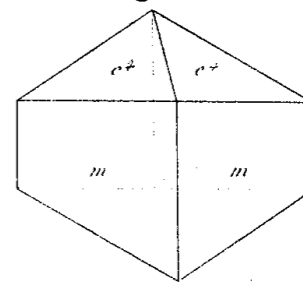


Fig. 94.



MISPICKEL Fig. 95.

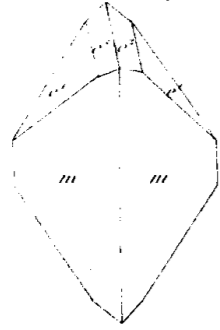


Fig. 96.

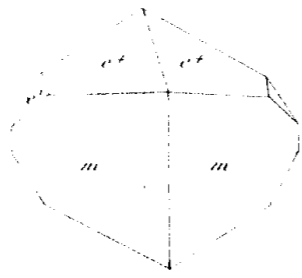
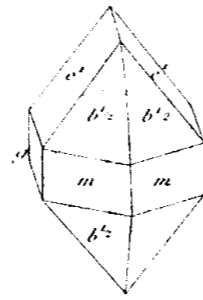


Fig. 97.



PYRITE Fig. 98.

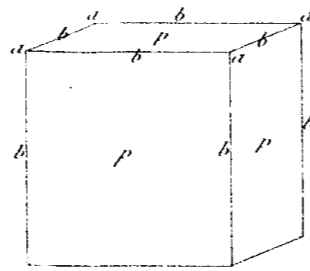


Fig. 99.

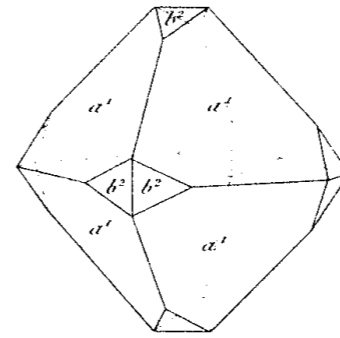


Fig. 100.

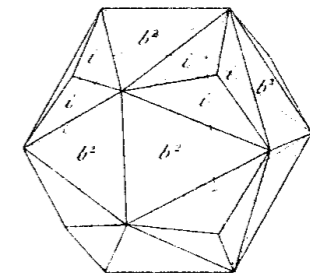


Fig. 102.

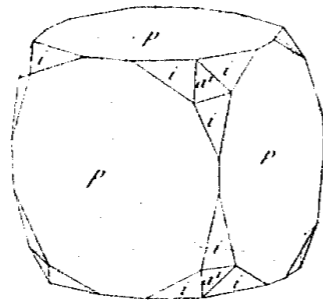


Fig. 101.

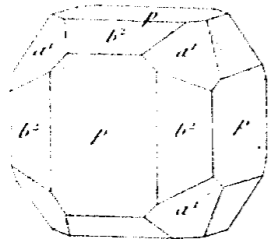


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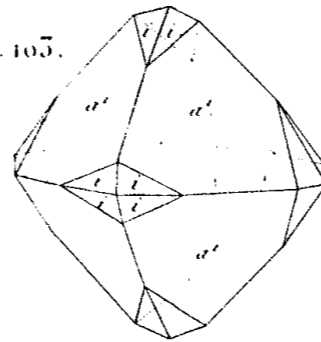


Fig. 104.

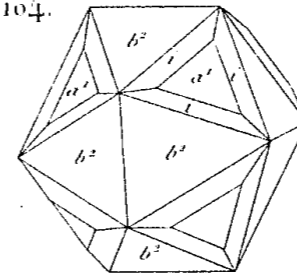


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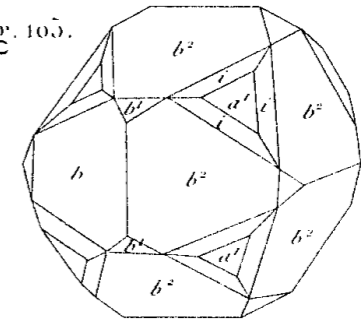


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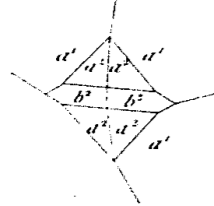


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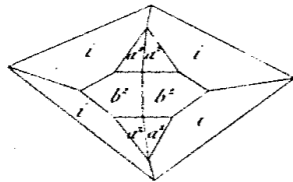


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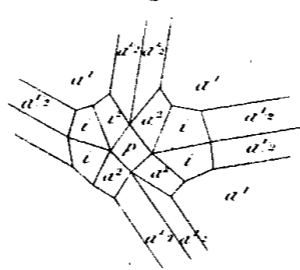


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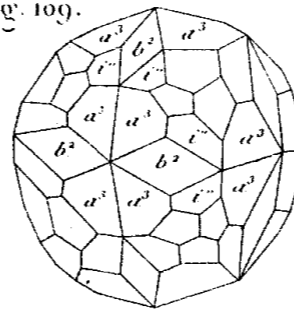


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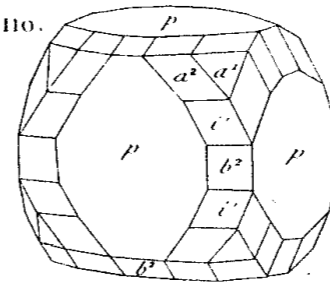
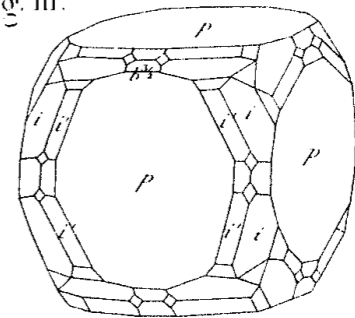


Fig. 111.



MARCASSITE
OR SPERRISE Fig. 112.

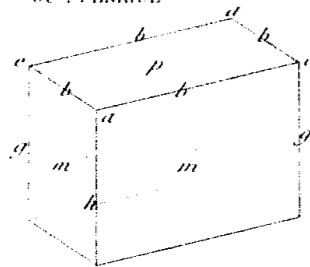


Fig. 113.

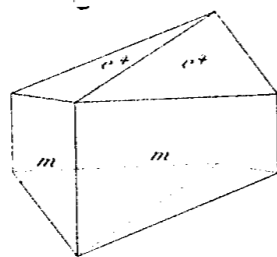


Fig. 114.

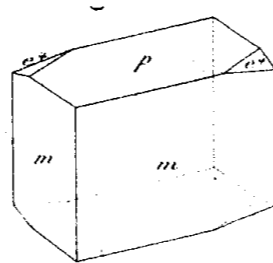


Fig. 115.

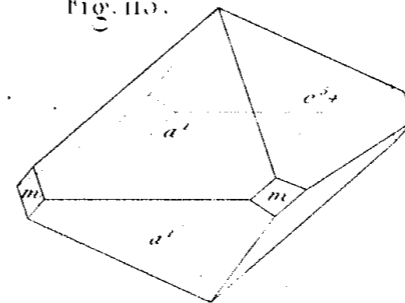


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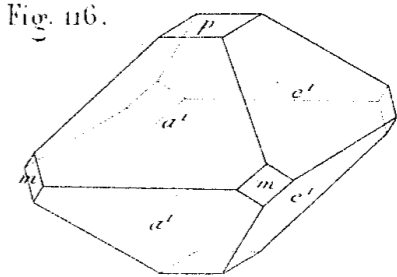


Fig. 117.

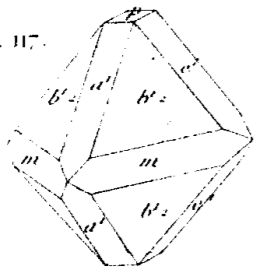


Fig. 118.



Fig. 119.

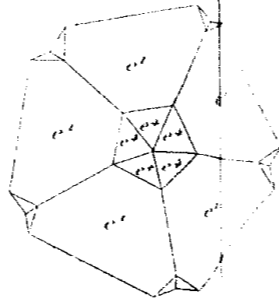


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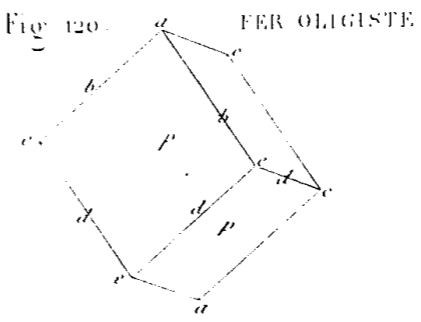


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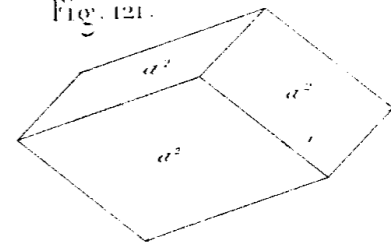


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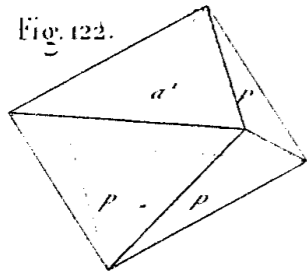


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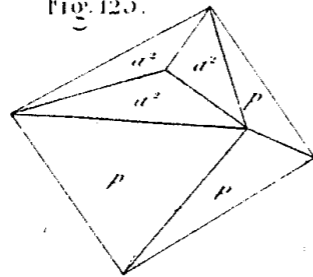


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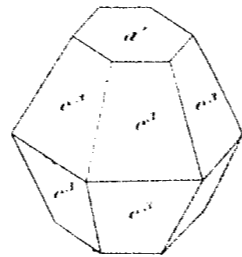


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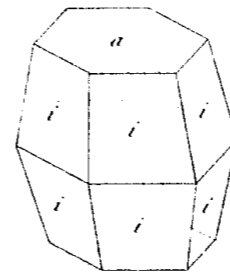


Fig. 126.

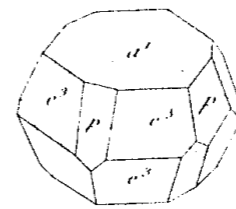


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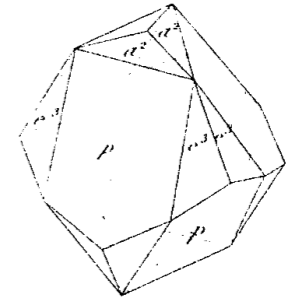


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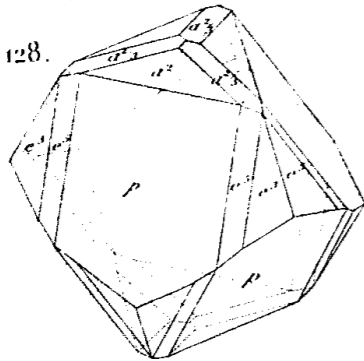


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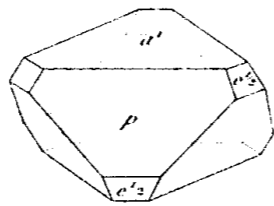


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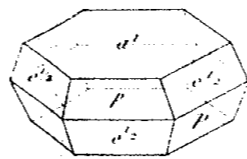


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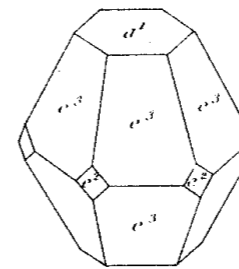
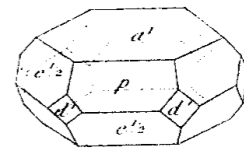


Fig. 132.



CRATOXITE.

Fig. 133.



Fig. 136.



Fig. 137.



Fig. 138.



Fig. 139.

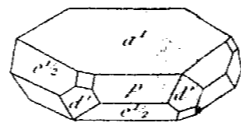


Fig. 140.

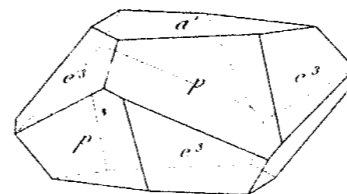


Fig. 135.

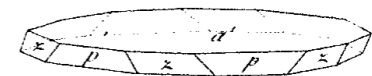
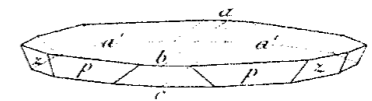
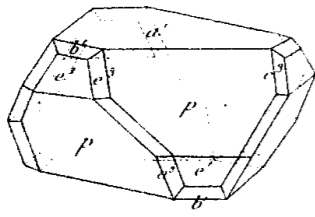


Fig. 134.



ILMÉNITE. Fig. 145.



GÛTHITE. Fig. 142.

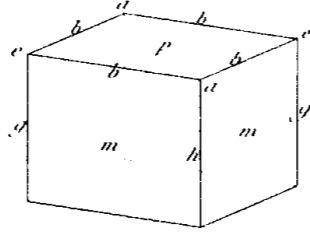
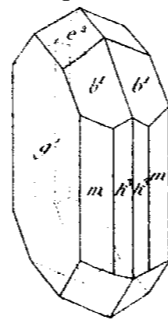


Fig. 145.



MÉLANTÉRITE. Fig. 144.

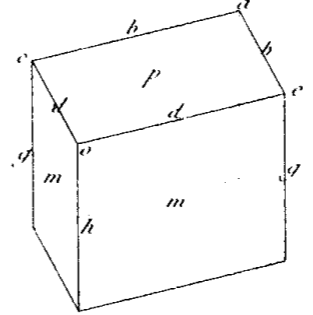


Fig. 145.

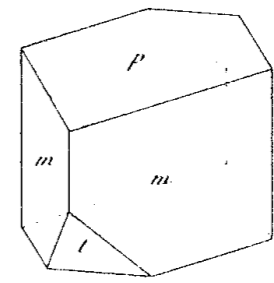
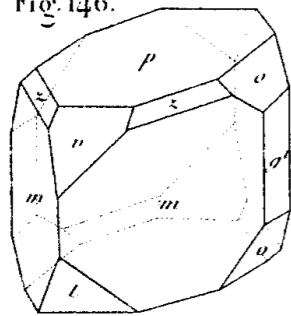


Fig. 146.



VIVIANITE. Fig. 147.

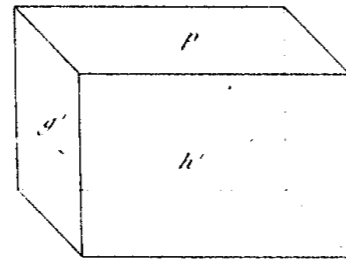
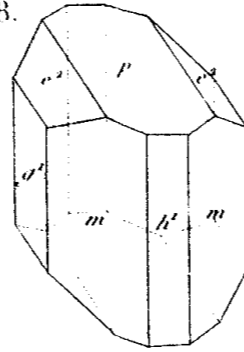


Fig. 148.



SIDÉROSE. Fig. 149.

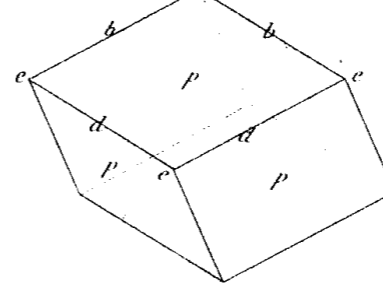


Fig. 150.

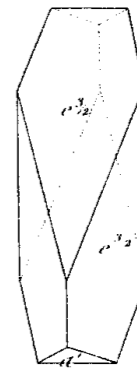


Fig. 151.

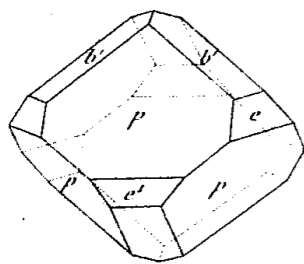


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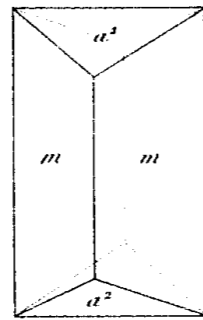


Fig. 154.

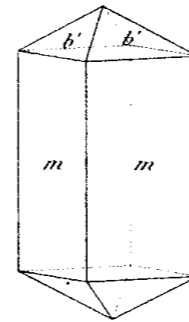


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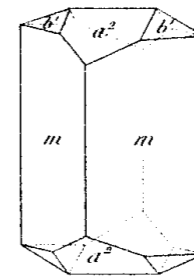


Fig. 156.

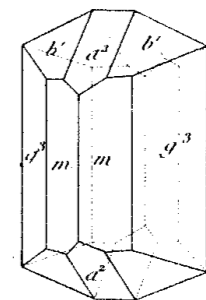


Fig. 157.

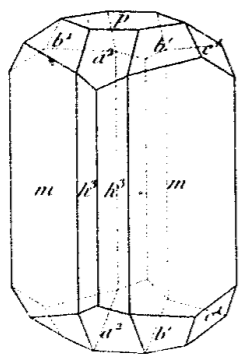
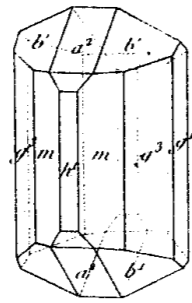


Fig. 158.



ACHMITE. Fig. 159.

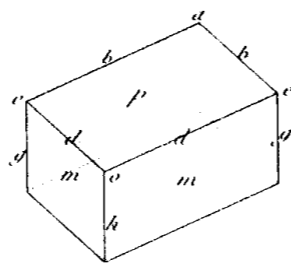
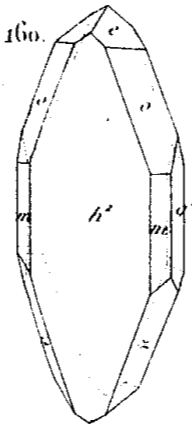


Fig. 160.



SCORODITE. Fig. 161.

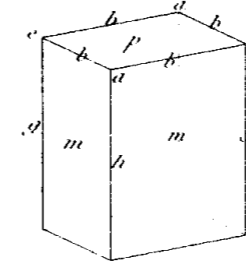


Fig. 162.

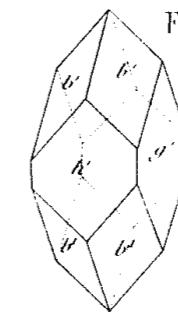
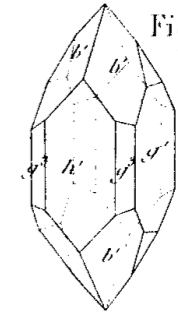


Fig. 165.



WOLFRAM. Fig. 164.

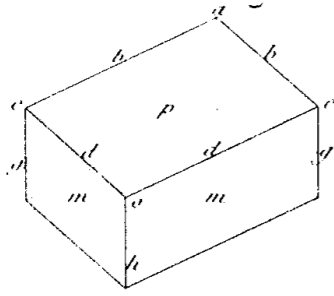


Fig. 165.

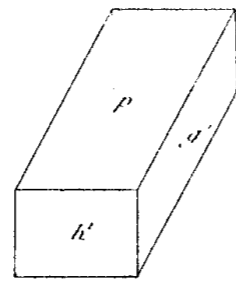


Fig. 166.

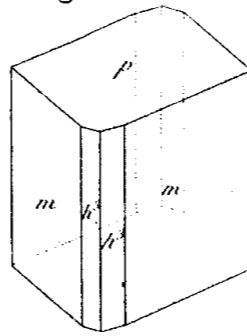
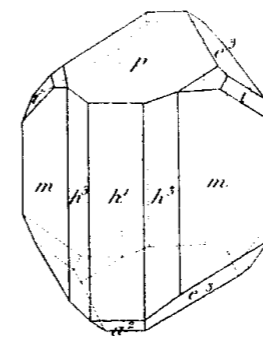
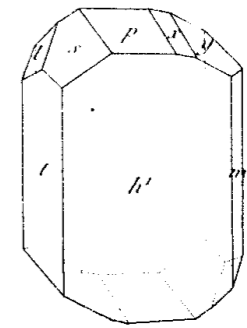


Fig. 167.



ALLANITE. Fig. 168.



BLENDE. Fig. 169.

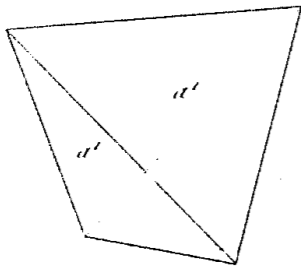


Fig. 170.

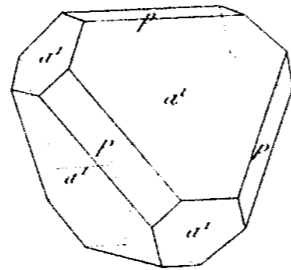


Fig. 171.

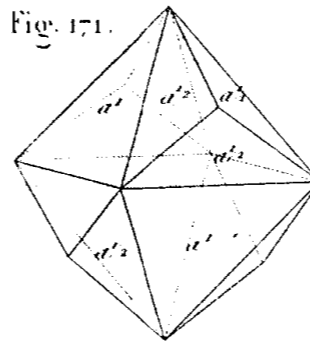


Fig. 172.

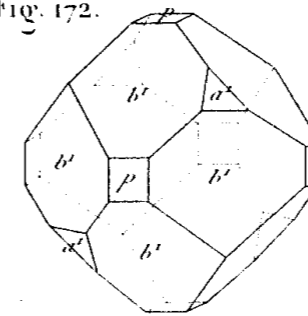
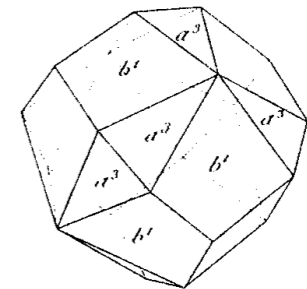


Fig. 173.



ZINC SILICATE. Fig. 174.

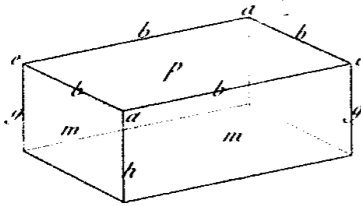


Fig. 175.

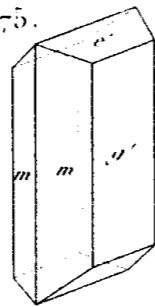


Fig. 176.

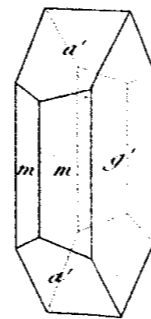
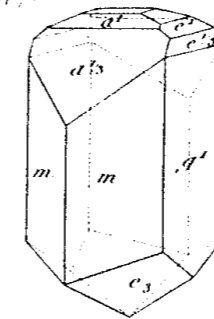


Fig. 177.



WILLFMITTE. Fig. 178.

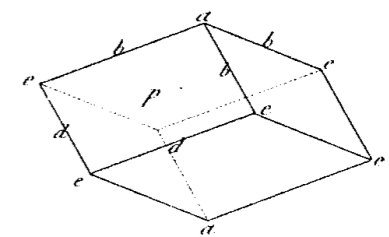
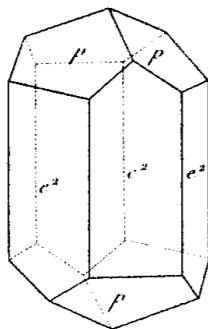


Fig. 179.



URANITE. Fig. 180.

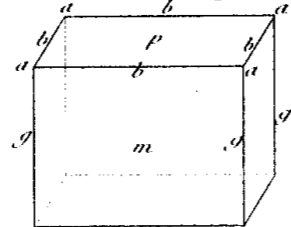


Fig. 181.

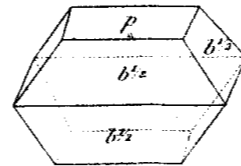


Fig. 182.

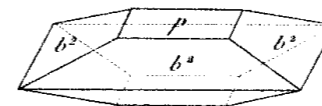
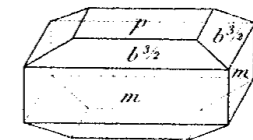
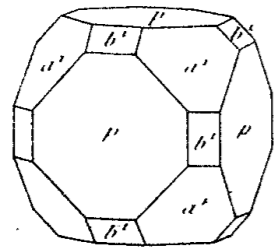


Fig. 183.



SMALTINE. Fig. 184.



CHALKOSINE. Fig. 185.

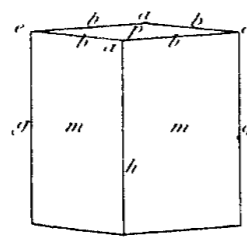


Fig. 186.

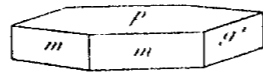


Fig. 187.

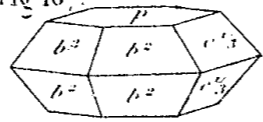


Fig. 188.

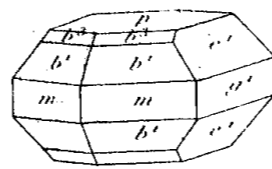


Fig. 189.

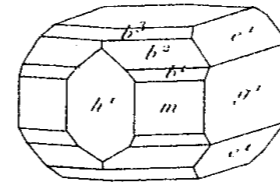
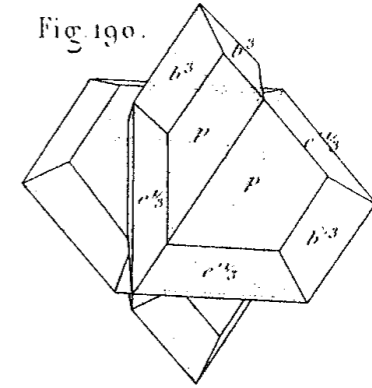


Fig. 190.



CHALCOPYRITE. Fig. 191.

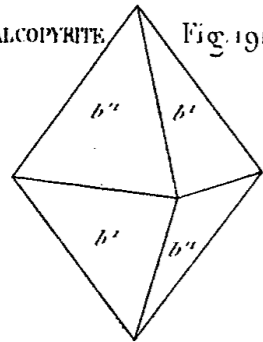


Fig. 192.

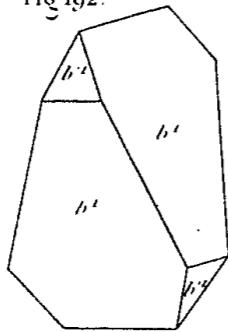


Fig. 193.

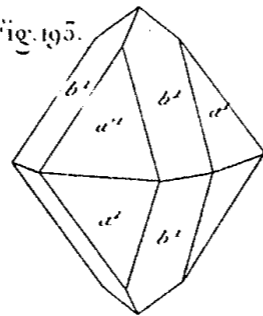


Fig. 194.

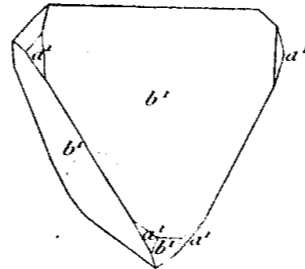


Fig. 195.

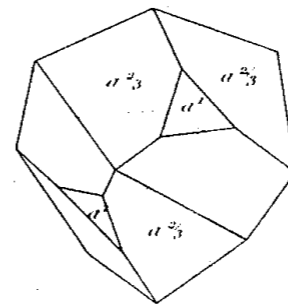


Fig. 196.

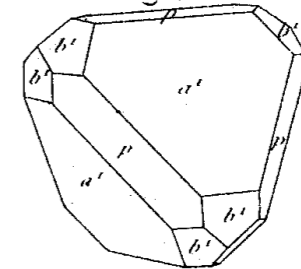


Fig. 197.

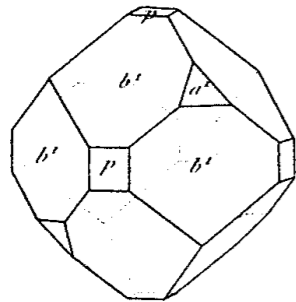


Fig. 198.

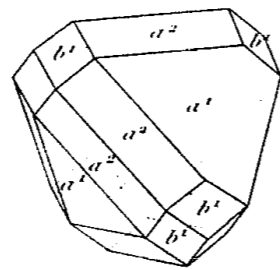
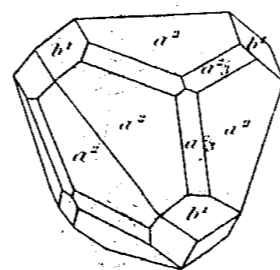


Fig. 199.



CUPRITE. Fig. 200.

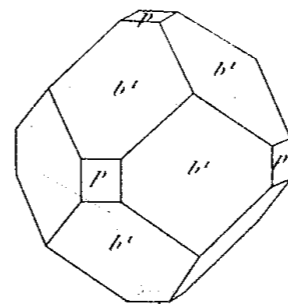
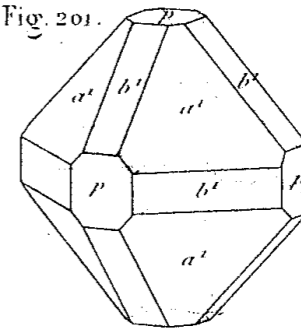


Fig. 201.



AZURITE. Fig. 202.

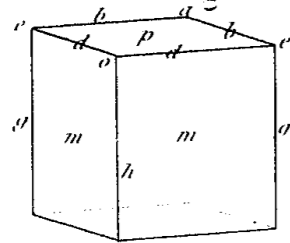


Fig. 203.

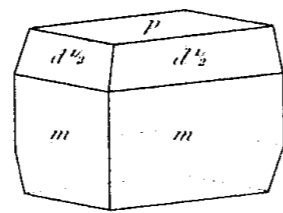


Fig. 204.

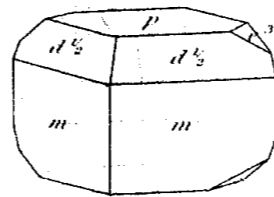


Fig. 205.

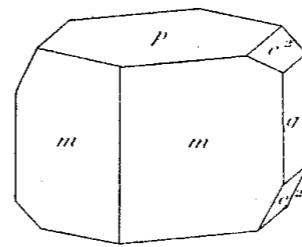
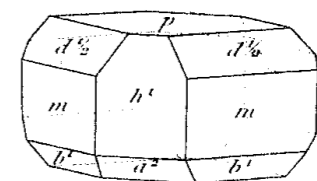
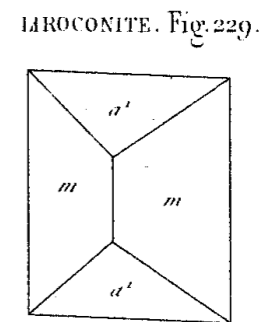
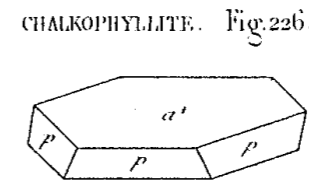
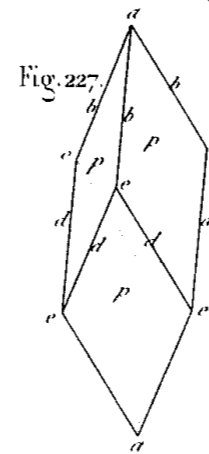
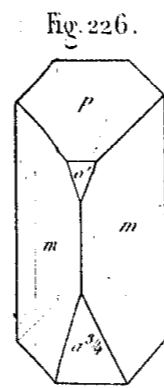
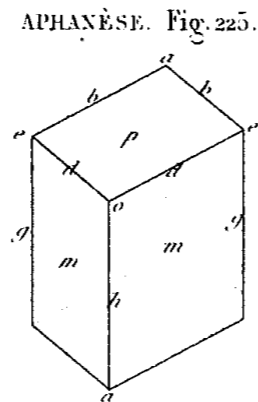
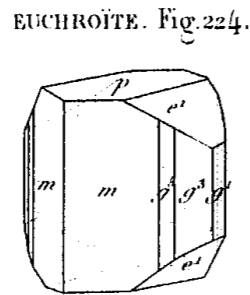
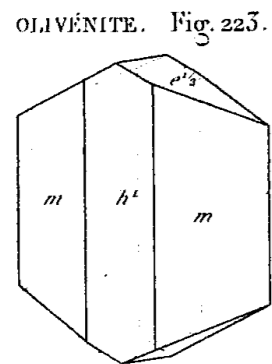
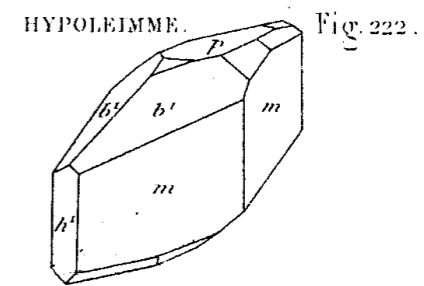
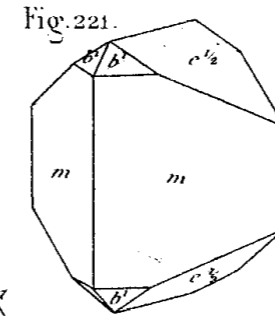
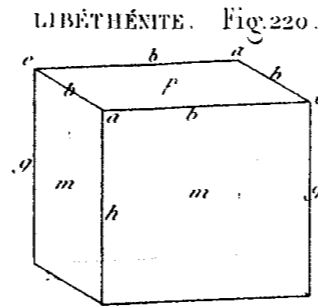
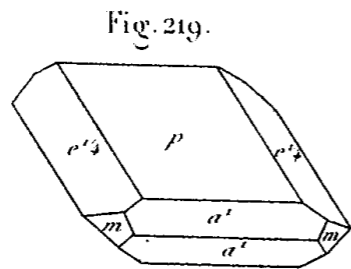
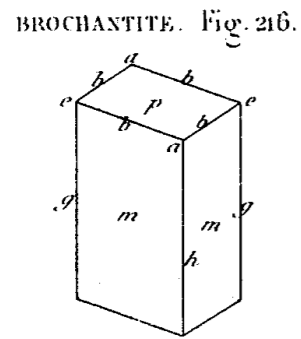
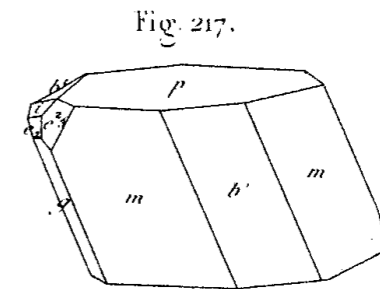
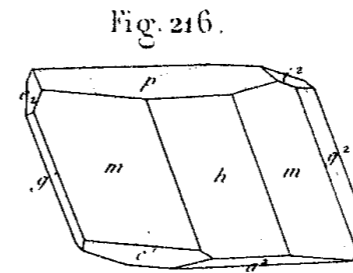
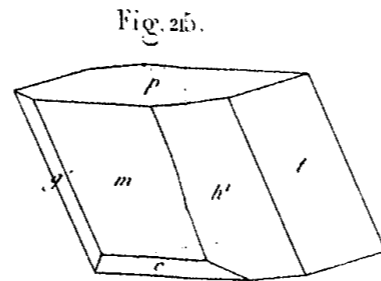
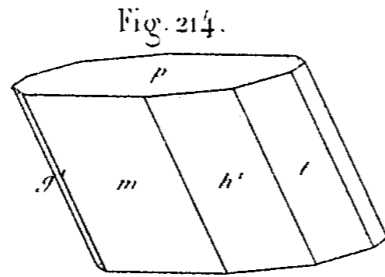
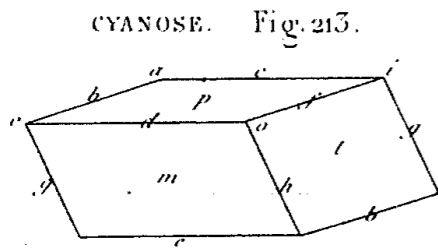
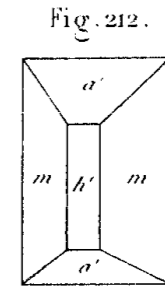
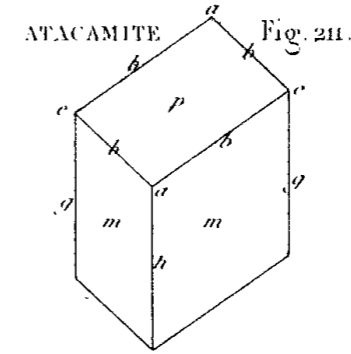
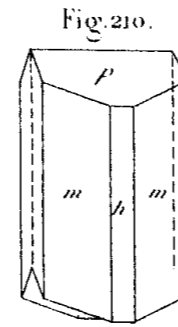
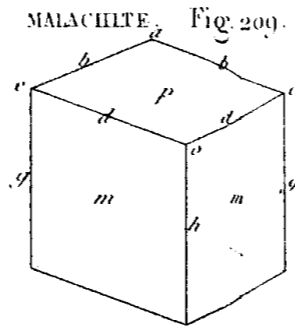
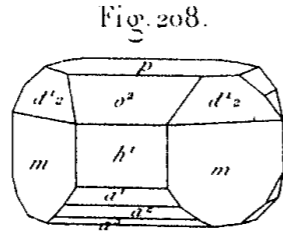
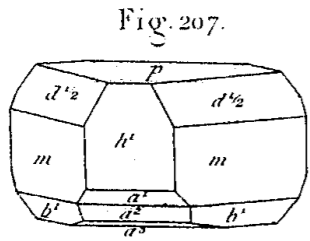


Fig. 206.





DIOPHASE Fig. 230.

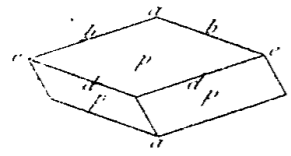
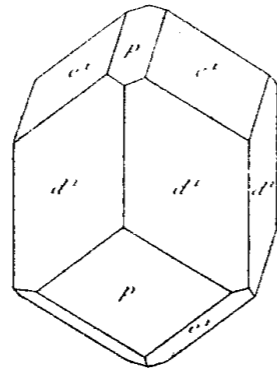


Fig. 231.



CALÈNE. Fig. 232.

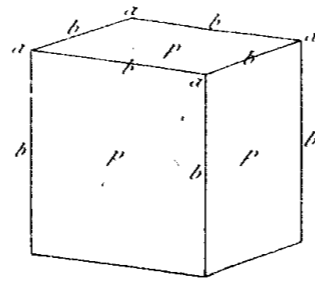


Fig. 233.

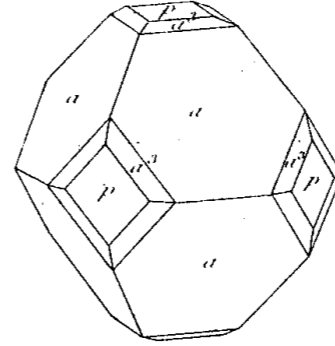
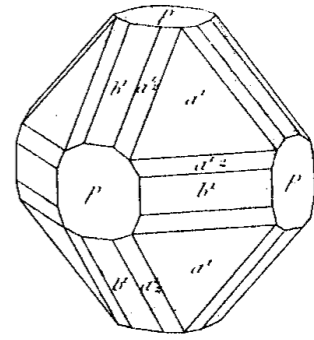


Fig. 234.



CÉRUSE. Fig. 225.

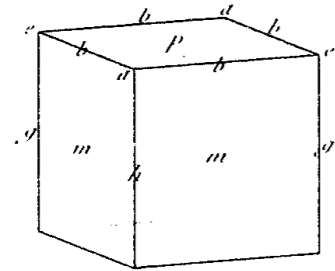


Fig. 236.

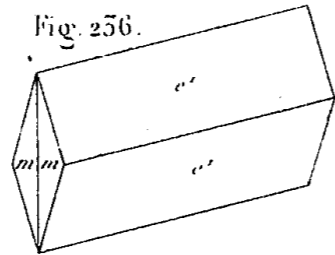


Fig. 237.

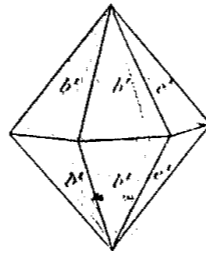


Fig. 238.

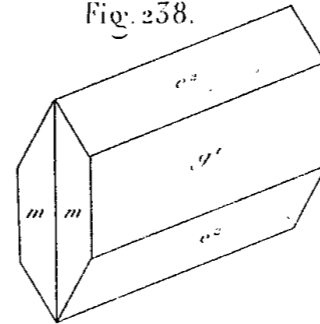


Fig. 239.

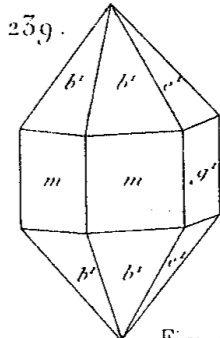


Fig. 240.

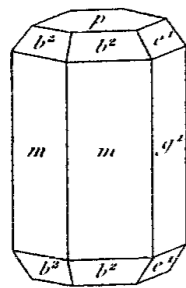


Fig. 241.

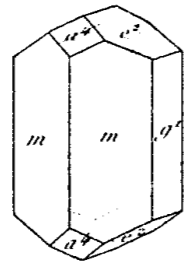


Fig. 242.

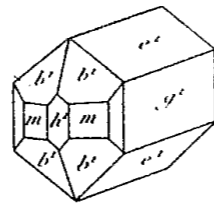
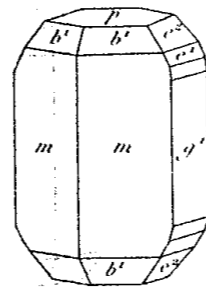


Fig. 243.



ANGLÈSITE Fig. 244.

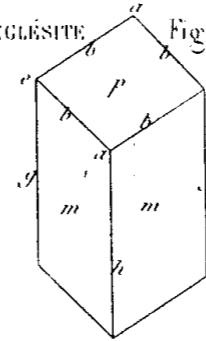


Fig. 245.

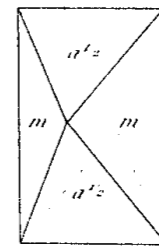


Fig. 246.

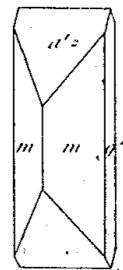


Fig. 247.

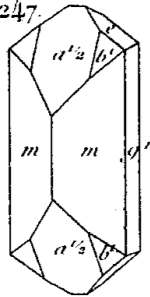
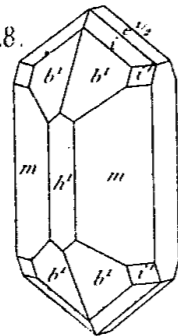
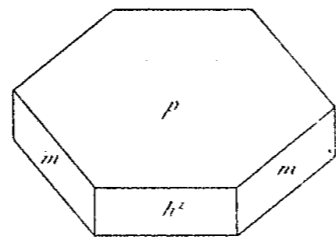


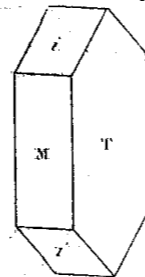
Fig. 248.



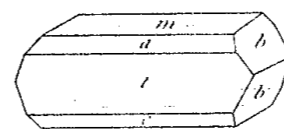
LEADHILLITE. Fig. 249.



CALÉDONITE. Fig. 250.



LIXARITE. Fig. 251.



PYROMORPHITE. Fig. 252.

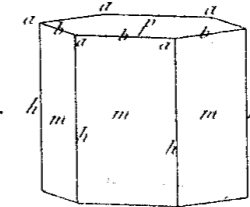
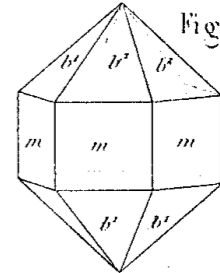
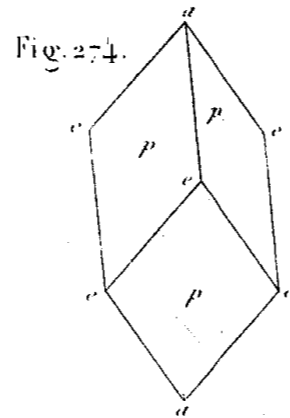
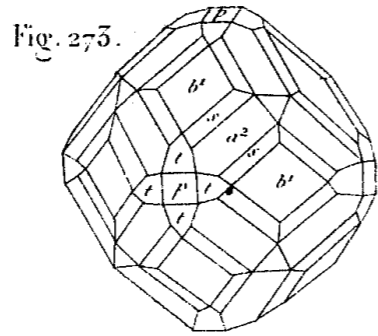
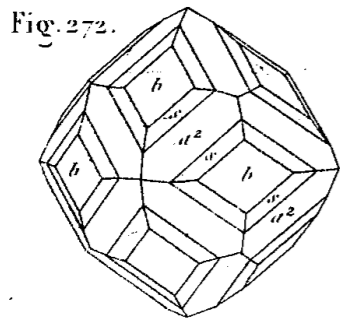
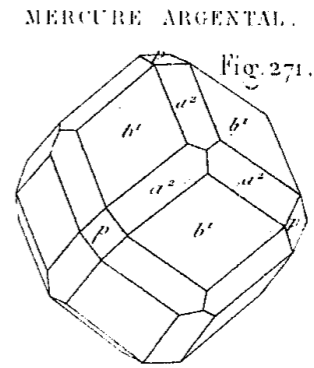
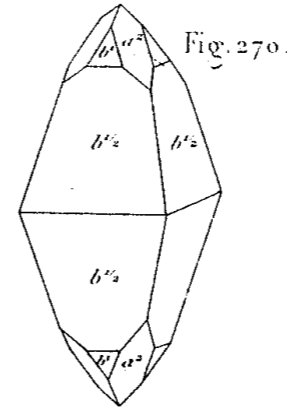
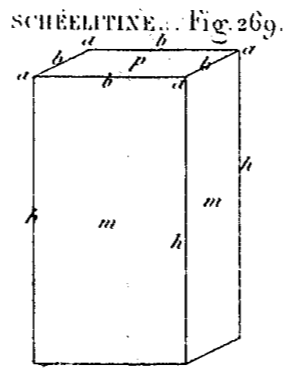
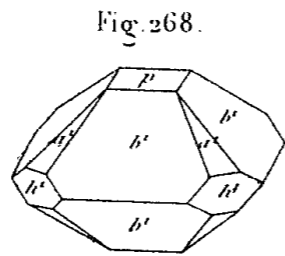
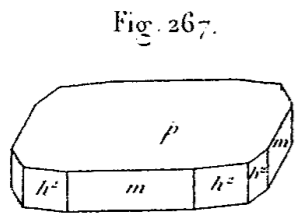
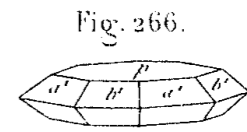
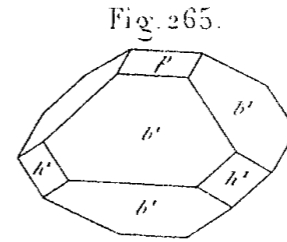
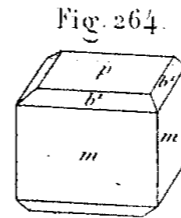
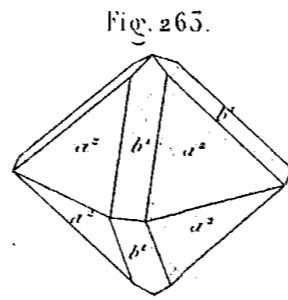
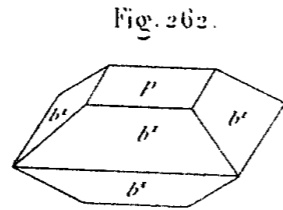
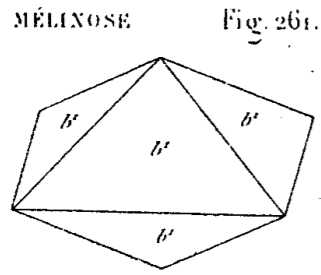
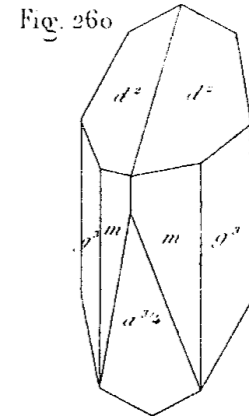
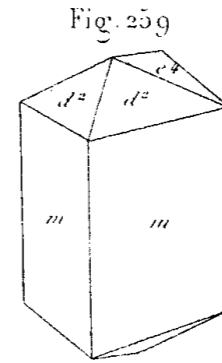
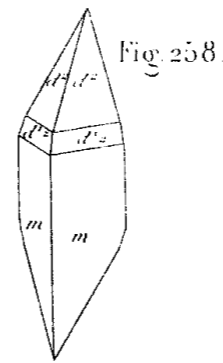
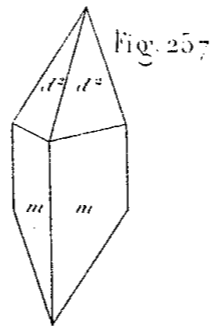
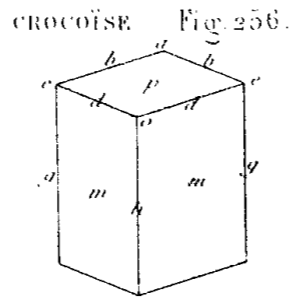
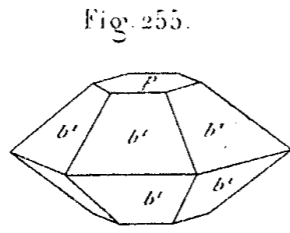
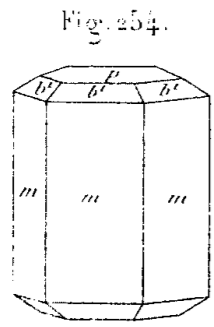
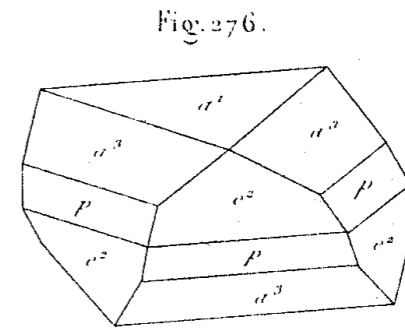
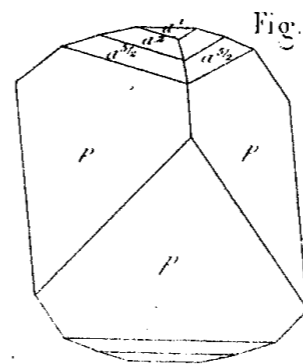


Fig. 253.





CINABRE.



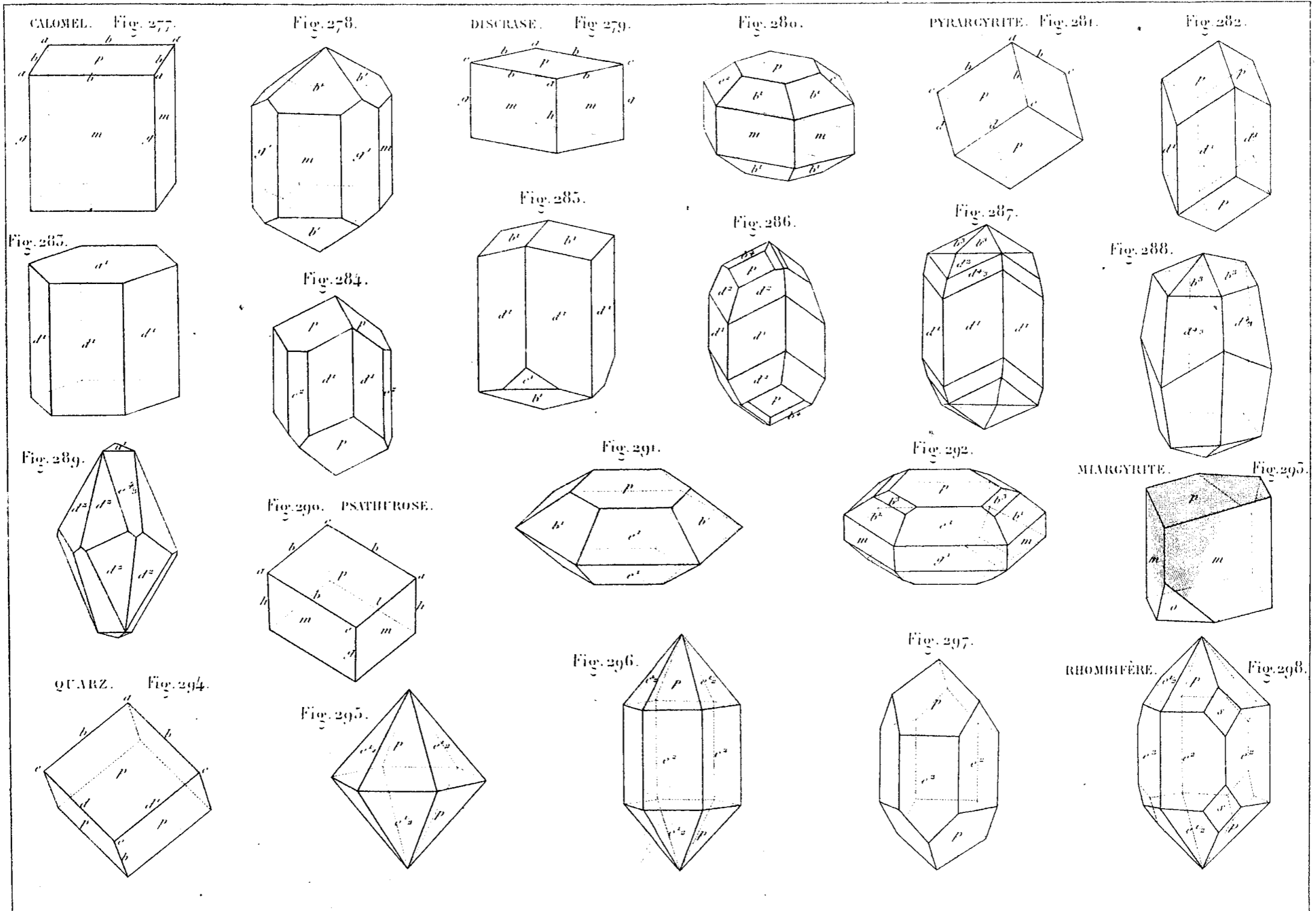


Fig. 299. PLAGIO-RHOMBIFÈRE DROIT.

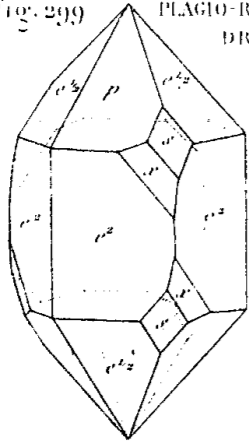


Fig. 300. PLAGIO-RHOMBIFÈRE GAUCHE.

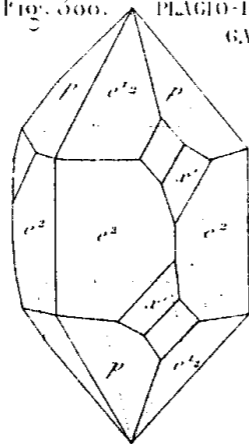


Fig. 301.

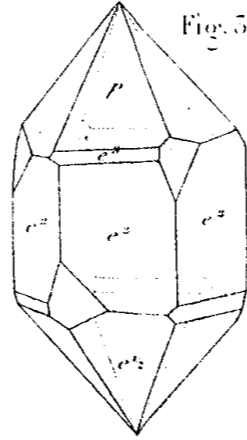


Fig. 302.

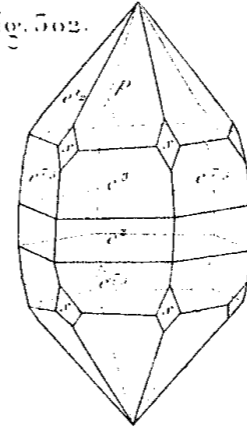


Fig. 303.

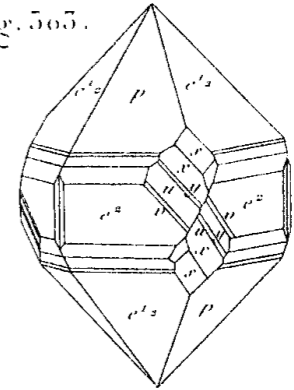
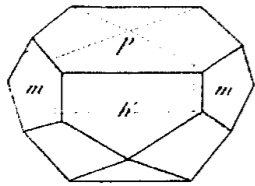


Fig. 304.



CORINDON. Fig. 305.

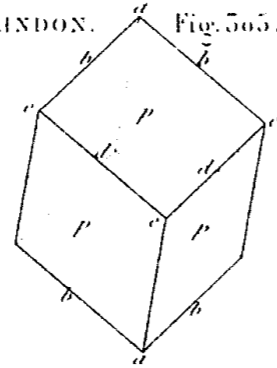


Fig. 306.

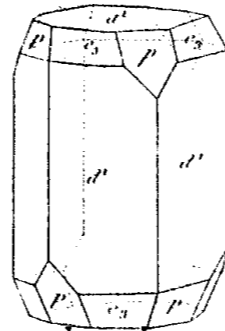
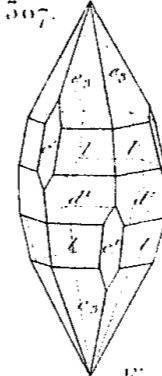


Fig. 307.



FLUORINE. Fig. 308.

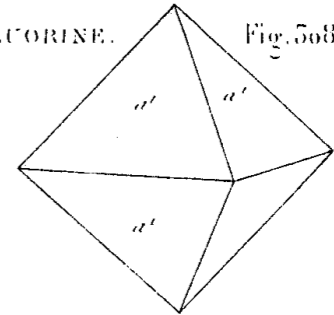


Fig. 309.

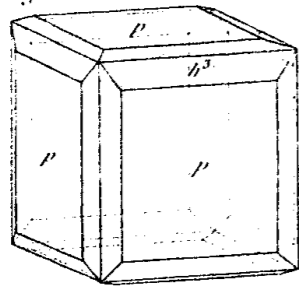


Fig. 310.

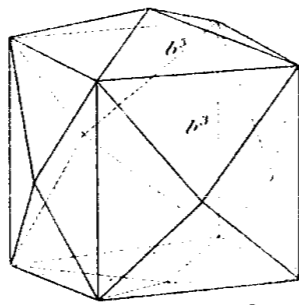


Fig. 311.

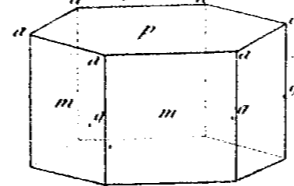


Fig. 312.

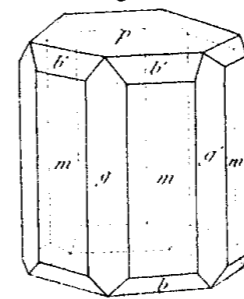


Fig. 313.

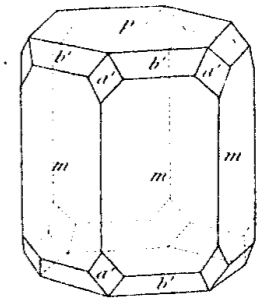
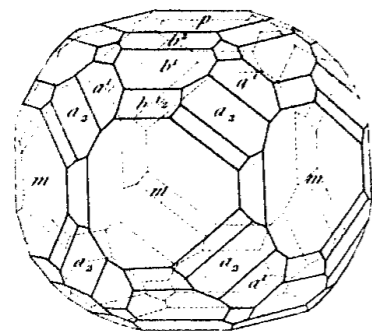


Fig. 314.



XTRE. Fig. 315.

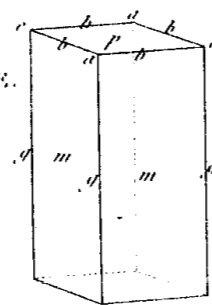


Fig. 316.

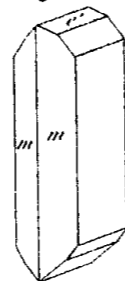


Fig. 317.

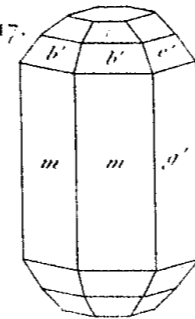


Fig. 318.

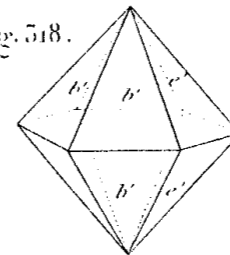
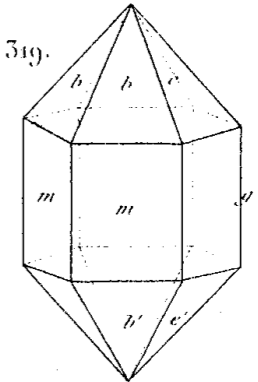


Fig. 319.



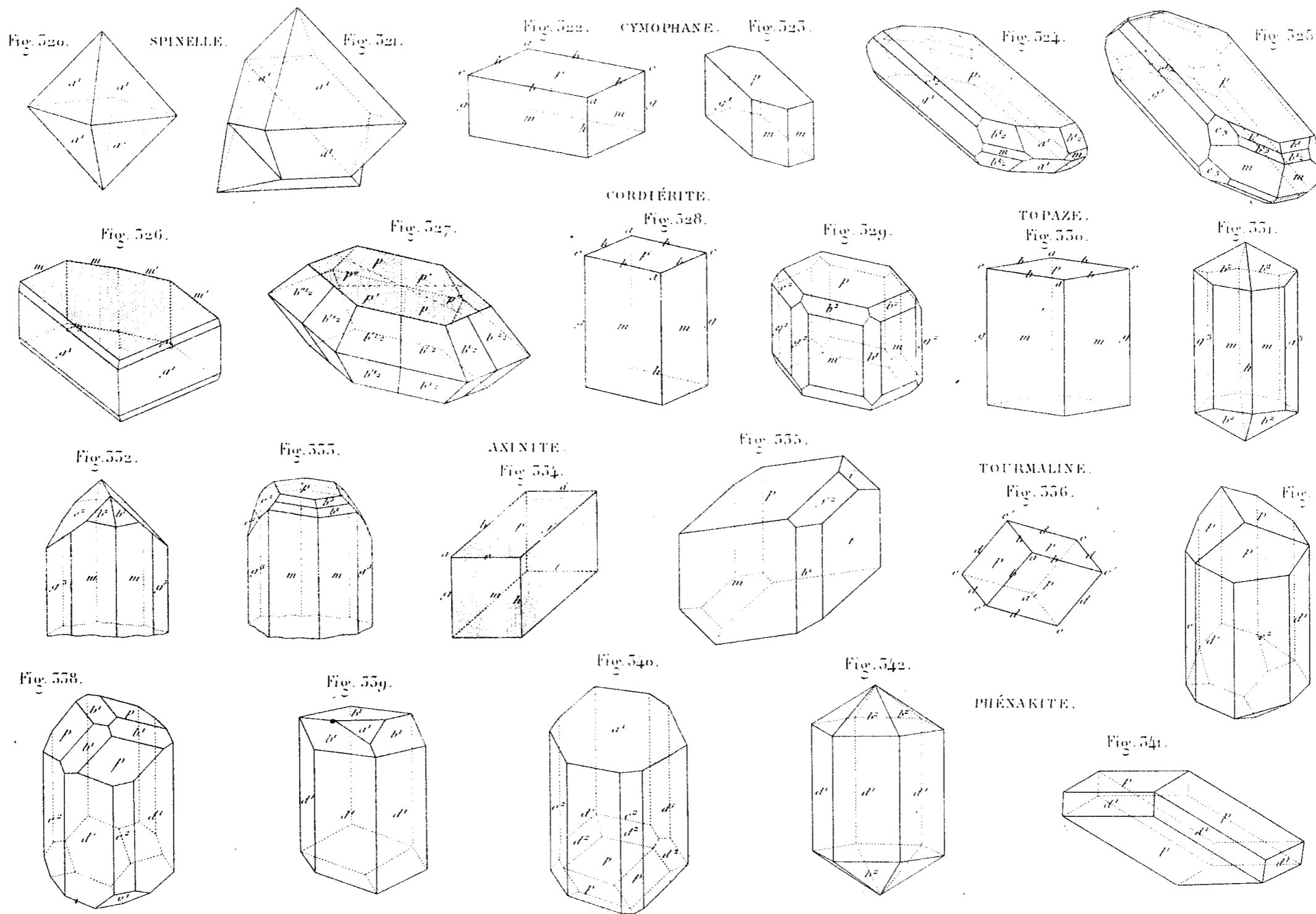


Fig. 543.

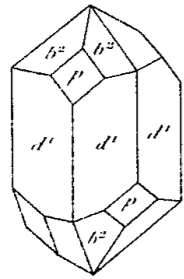


Fig. 544.

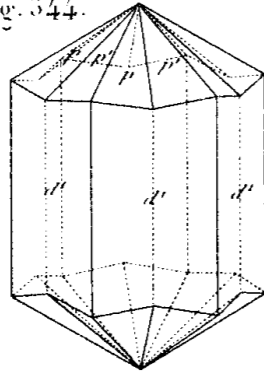


Fig. 545. EMERAUDE.

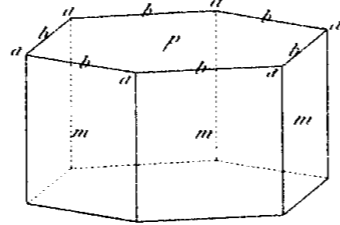


Fig. 546.

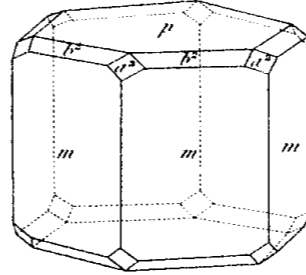


Fig. 547.

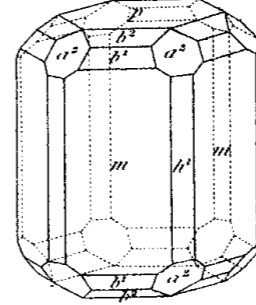


Fig. 548. EUCLASE.

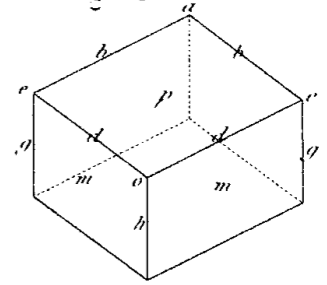
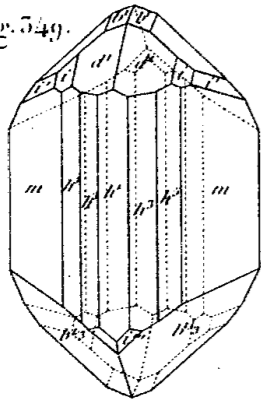


Fig. 549.



ZIRCON. Fig. 550.

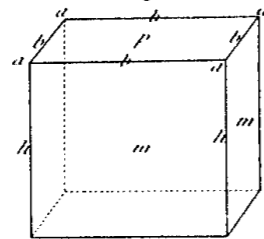


Fig. 551.

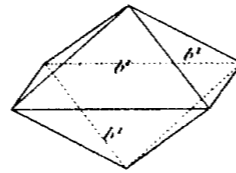


Fig. 552.

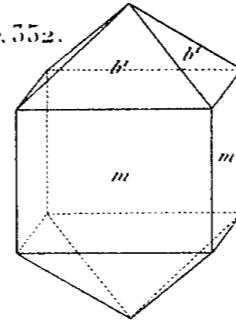


Fig. 553.

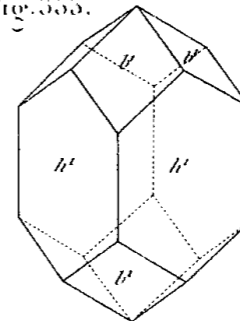


Fig. 554.

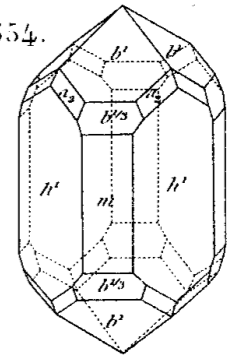


Fig. 556.

GRENAT.

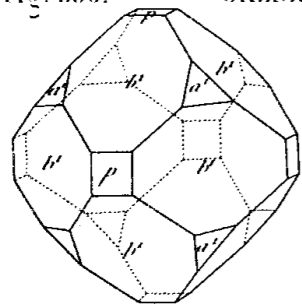
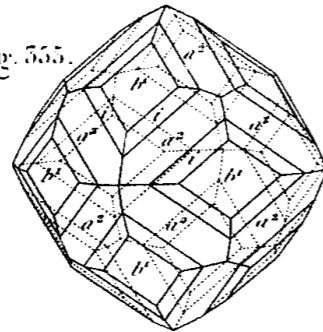


Fig. 555.



IDOCRASE. Fig. 556 bis

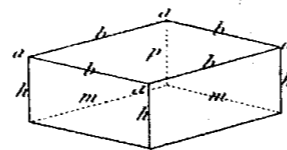
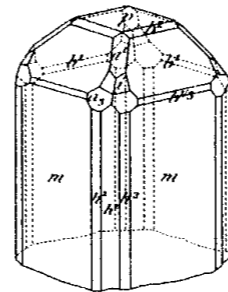


Fig. 557.



MACLE.

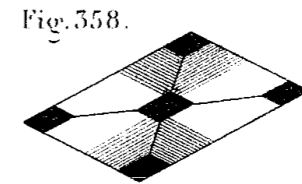
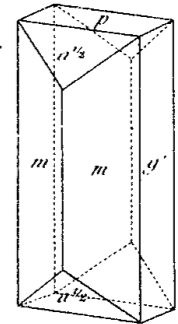


Fig. 559.



DISTHÈNE. Fig. 560.

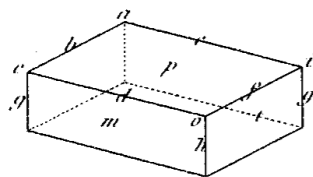


Fig. 561. ÉPIDOTE.

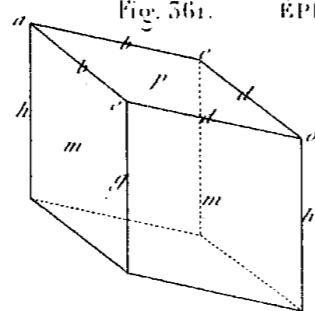


Fig. 562.

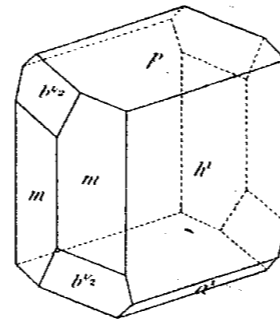


Fig. 565.

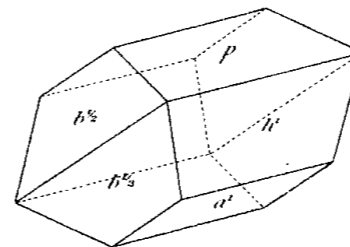


Fig. 564.

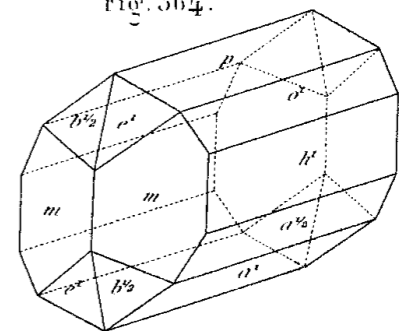


Fig. 565. TRITAXE.

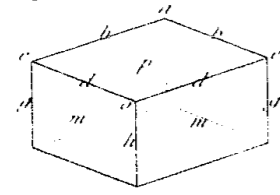


Fig. 566. ORTHOSE.

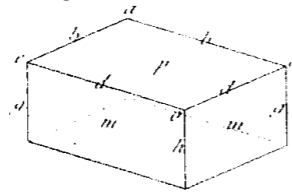


Fig. 567.



Fig. 568.

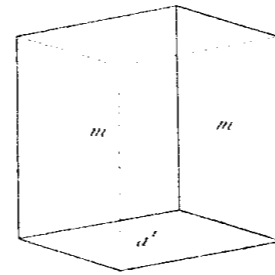


Fig. 569.

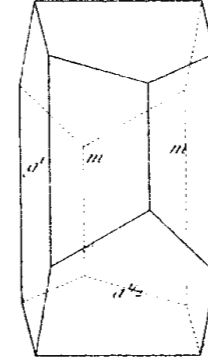


Fig. 570.

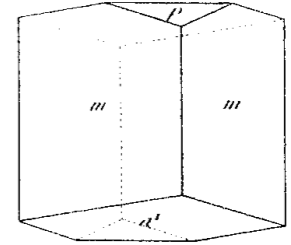


Fig. 571.

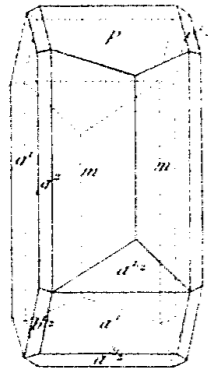


Fig. 572.

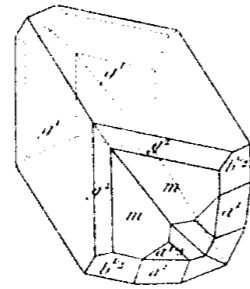


Fig. 573. ALBITE.

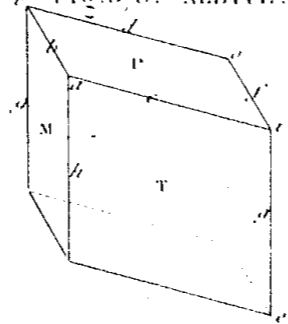


Fig. 574.

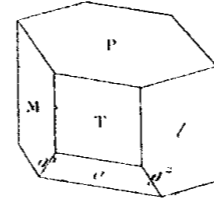


Fig. 576.

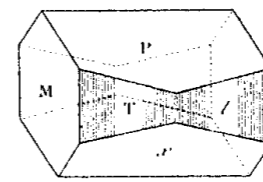


Fig. 575.

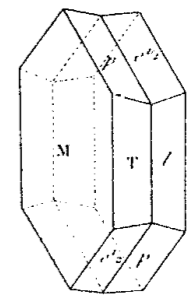


Fig. 577. OLIGOCLASE.

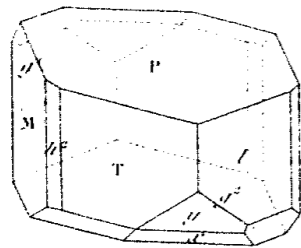


Fig. 578. LÉVYNE.

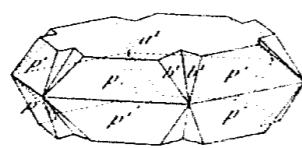


Fig. 579. CHABASIE.

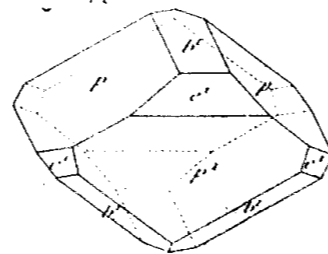
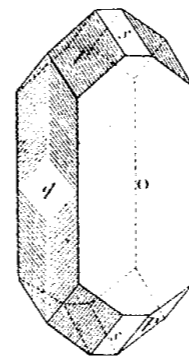


Fig. 580.



HARMOTOME. Fig. 581.

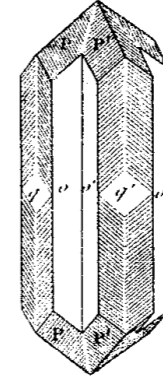
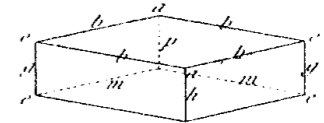


Fig. 586. HUMITE.



HEULANDITE.

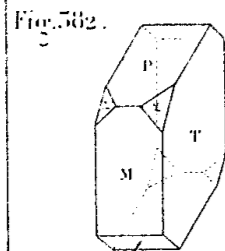


Fig. 583.

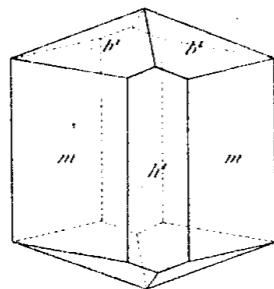


Fig. 584. PÉRIDOT.

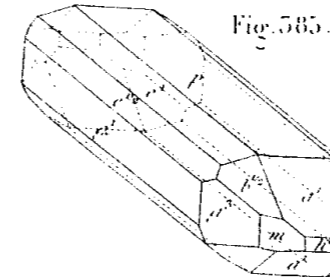
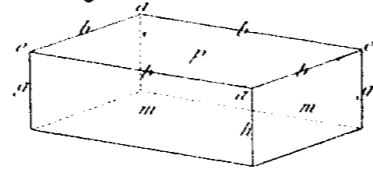
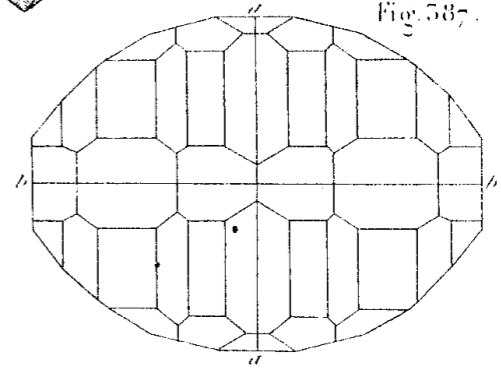


Fig. 585.

Fig. 587.



PYROXÈNE.

Fig. 588.

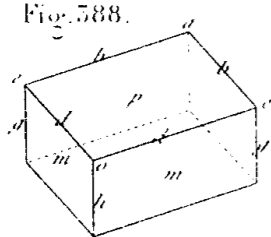


Fig. 594.

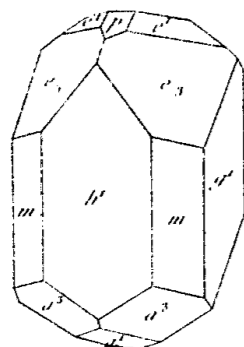
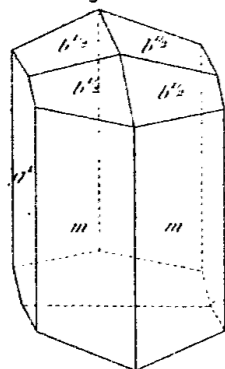


Fig. 599.



CALCAIRE

Fig. 405.

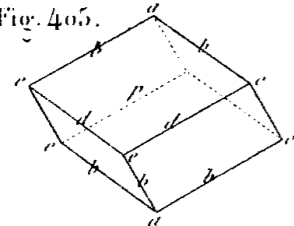
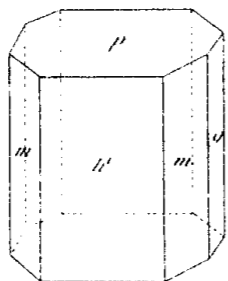


Fig. 389.



AMPHIBOLE.

Fig. 395.

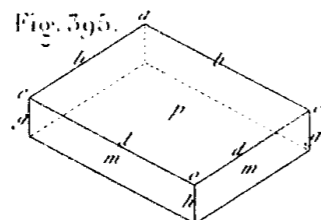


Fig. 390.

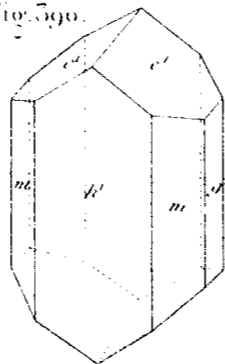


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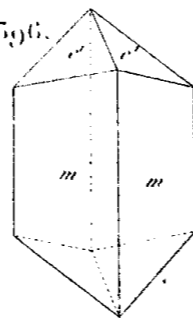


Fig. 391.

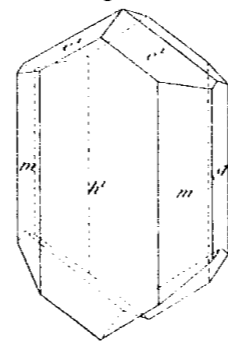


Fig. 397.

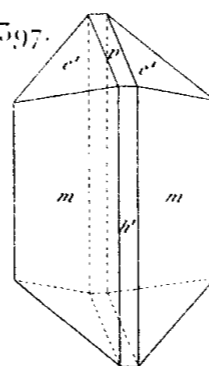


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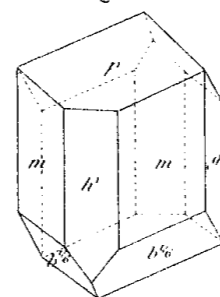


Fig. 398.

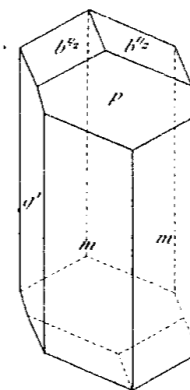


Fig. 395.

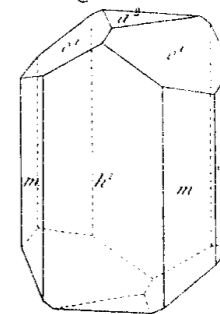
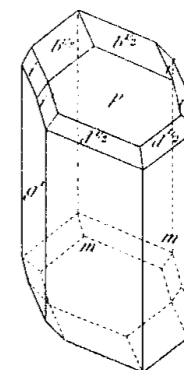


Fig. 400.



BORACITE.

Fig. 402.

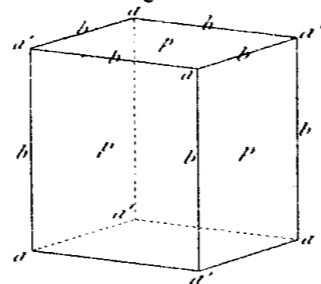


Fig. 403.

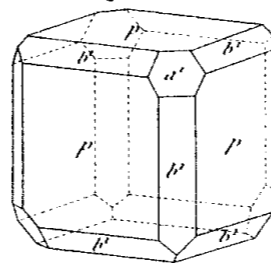
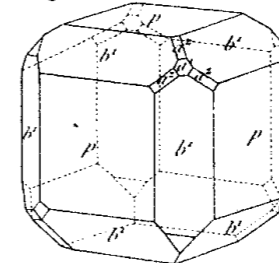


Fig. 404.



BABINGTONITE.

Fig. 401.

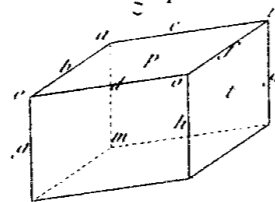


Fig. 406.

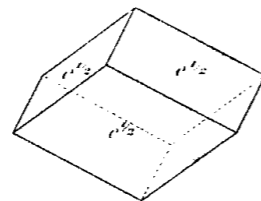


Fig. 408.

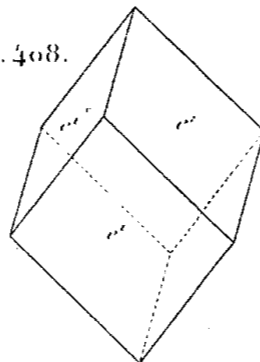


Fig. 407.

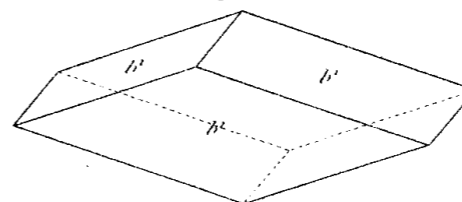
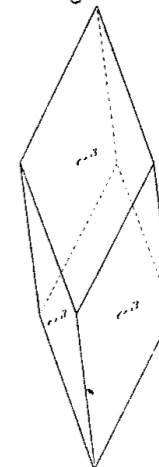
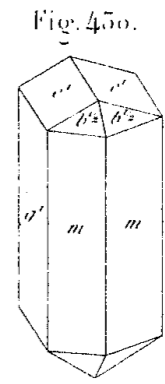
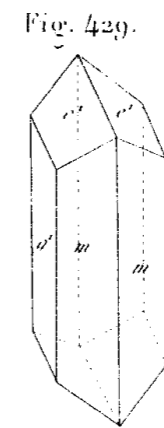
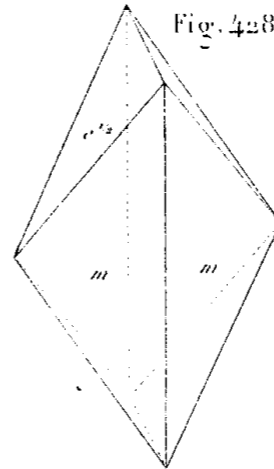
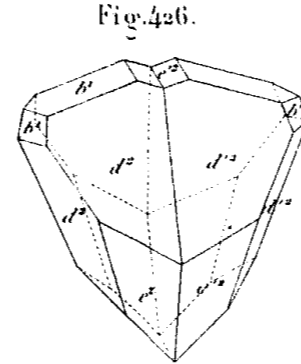
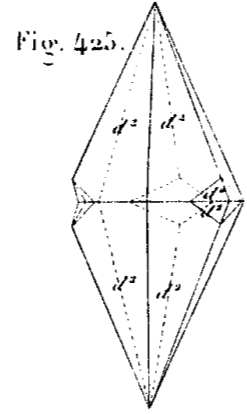
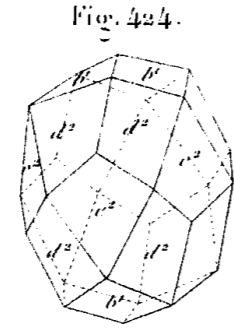
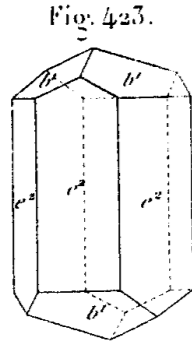
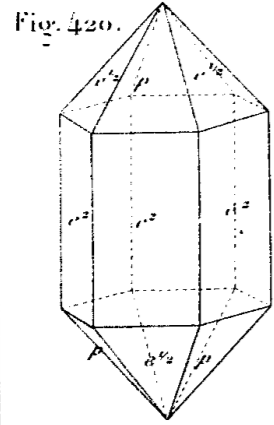
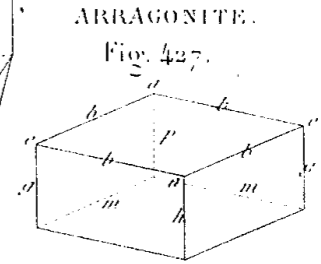
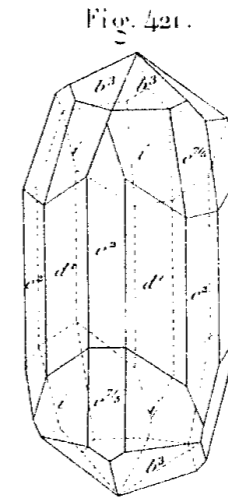
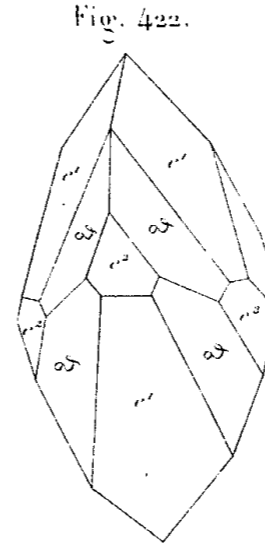
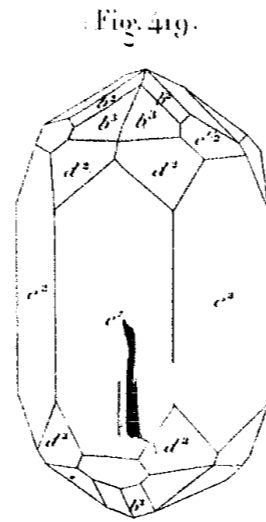
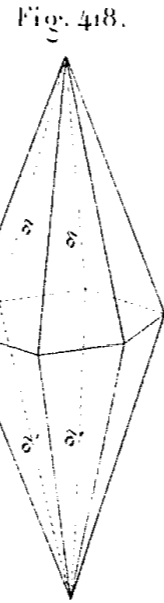
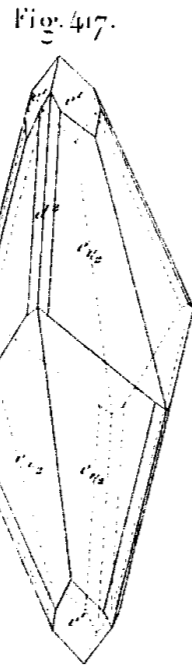
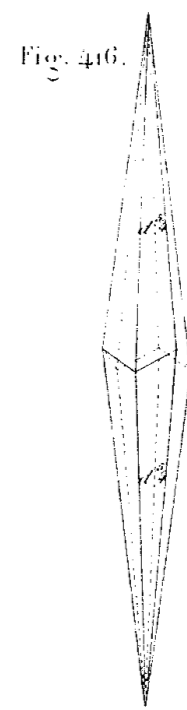
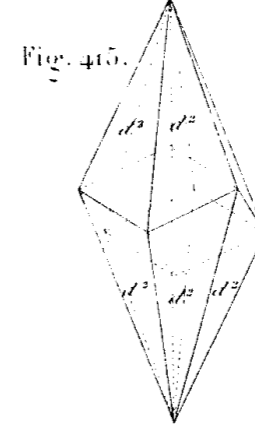
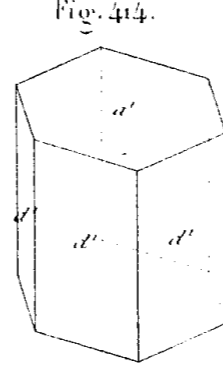
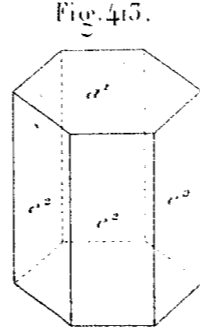
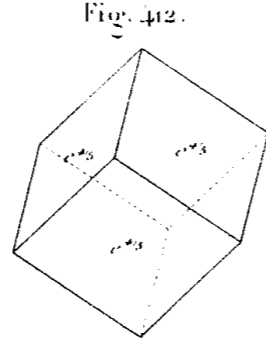
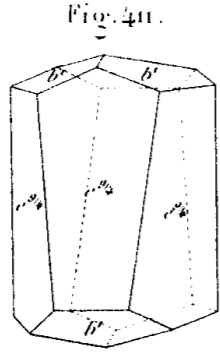
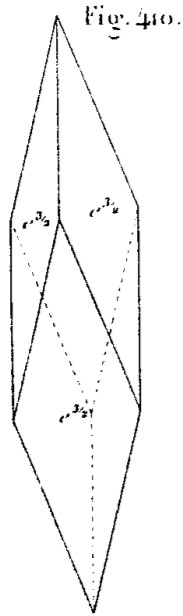
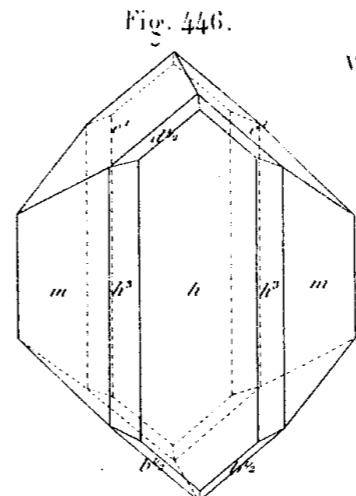
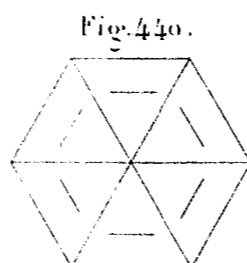
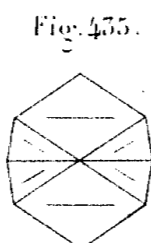
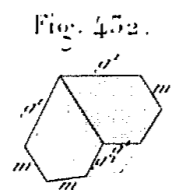
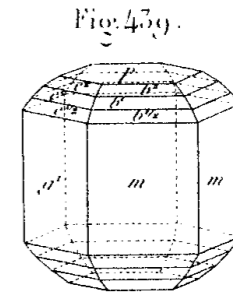
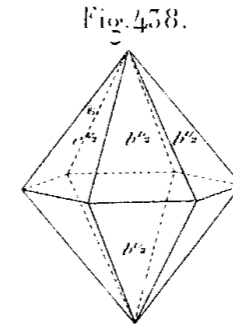
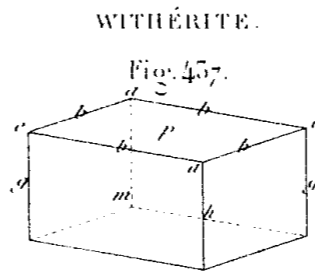
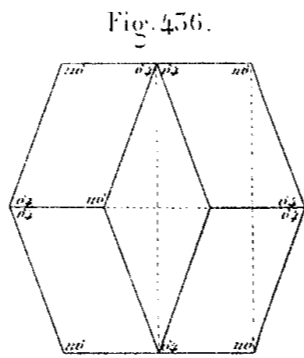
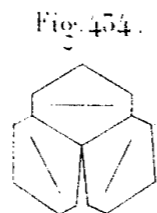
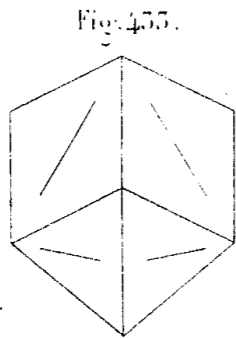
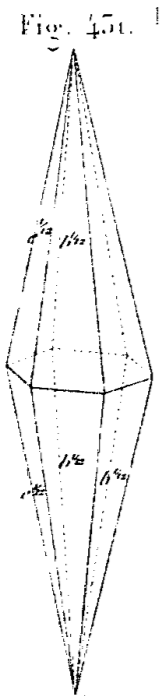


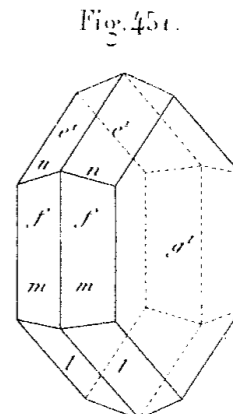
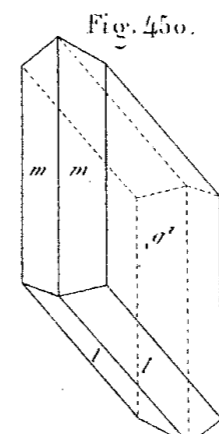
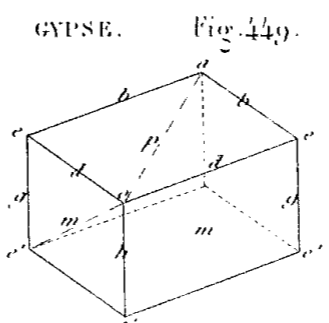
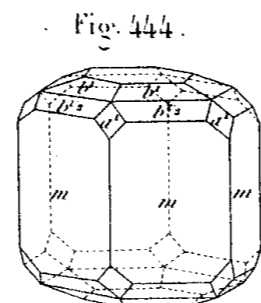
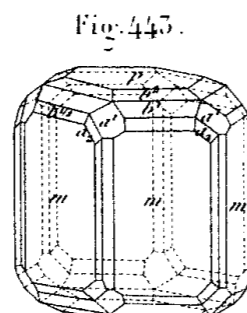
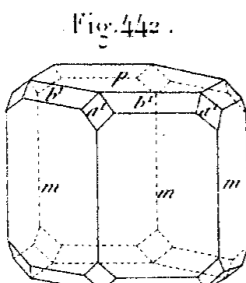
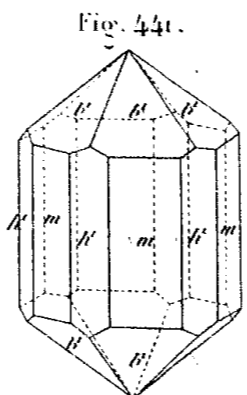
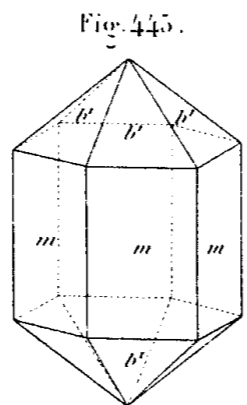
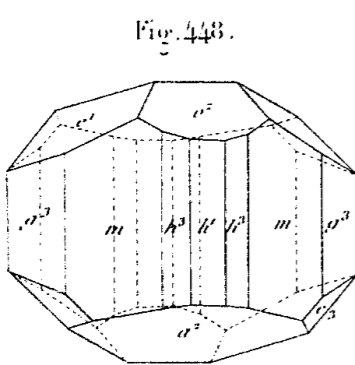
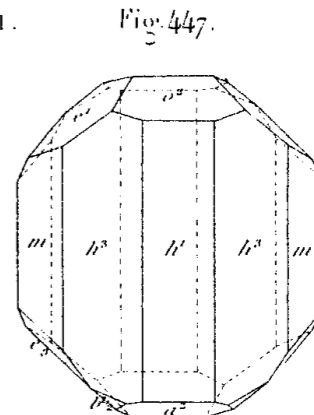
Fig. 409.







WOLFRAM.



EPSOMITE. Fig. 452.

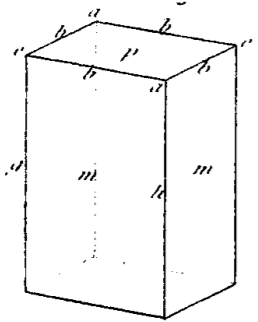


Fig. 453.

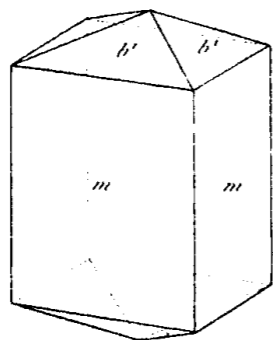


Fig. 454.

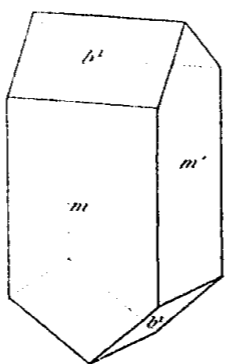


Fig. 455.

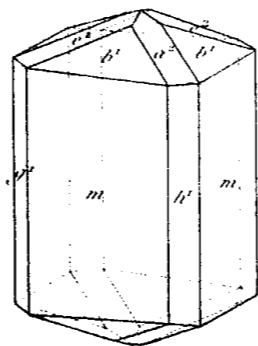


Fig. 456.

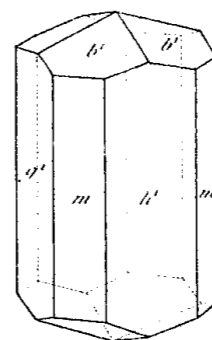


Fig. 457.

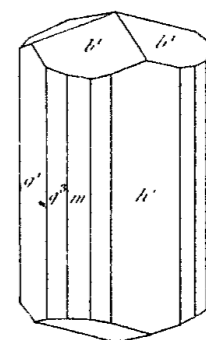


Fig. 458.

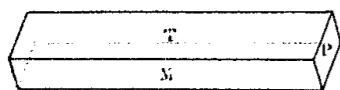


Fig. 459.

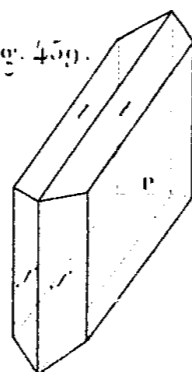


Fig. 460.

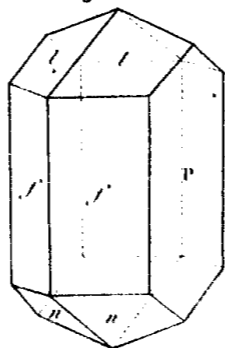


Fig. 461.

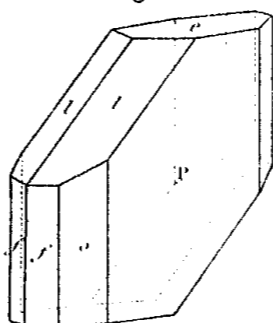


Fig. 462.

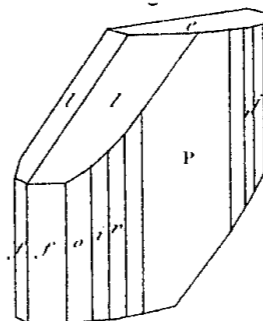


Fig. 463.

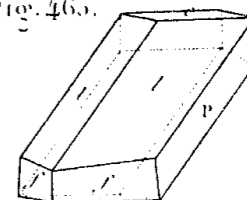


Fig. 464.

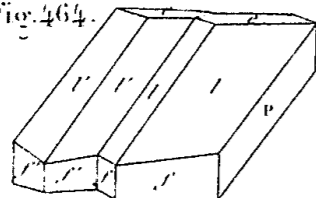
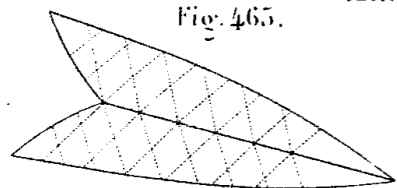


Fig. 465.



KARSTÉNITE.

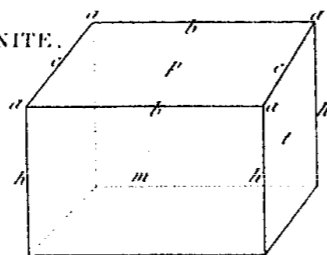
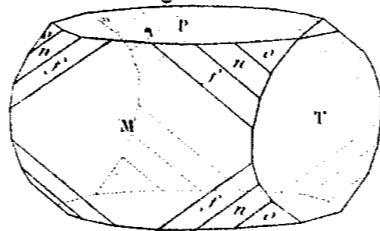


Fig. 466.

Fig. 467.



CÉLESTINE. Fig. 468.

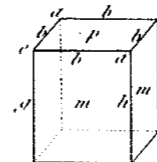


Fig. 469.

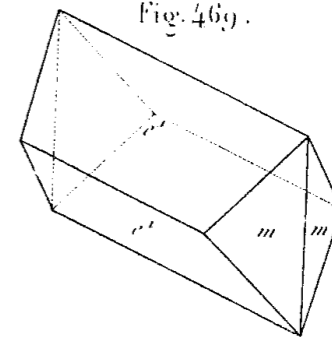


Fig. 470.

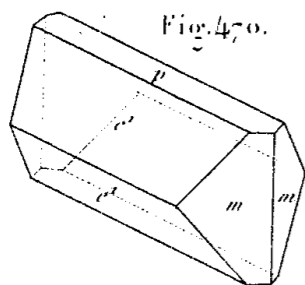


Fig. 471.

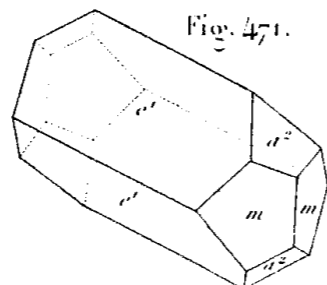


Fig. 472.

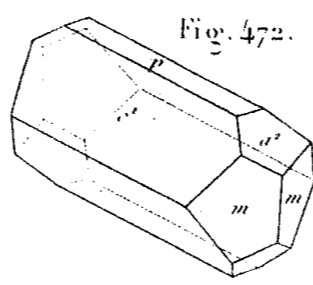


Fig. 473.

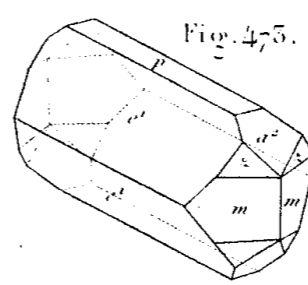


Fig. 474.

