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Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can download a free scanned copy of the original book (without typos) from the publisher. Not indexed. Not illustrated. 1893 Excerpt: .the case of a simply-connected area, the nature of the three branch-points, so that the forms of  $\sqrt{z}$ ,  $\sqrt[3]{z}$ , will be given by  $\sqrt{z} = (0 + \sqrt{-1})^m$ ,  $\sqrt[3]{z} = (0 + \sqrt{-1})^n$ , where the indices  $m, n, p$  are determined by inspection, and where, of the constants  $a, b, c$ , two, but not more, may be infinity, in which case the corresponding factors are replaced by unity. Assuming for simplicity that  $Z$  does not become infinite at any of the branch-points, it follows that  $\sqrt{z} = \sqrt{a} z^{m/2}$ ,  $\sqrt[3]{z} = \sqrt[3]{b} z^{n/3}$ ,  $\sqrt[5]{z} = \sqrt[5]{c} z^{p/5}$ ,  $\sqrt[7]{z} = \sqrt[7]{d} z^{q/7}$ ,  $\sqrt[9]{z} = \sqrt[9]{e} z^{r/9}$ ,  $\sqrt[11]{z} = \sqrt[11]{f} z^{s/11}$ ,  $\sqrt[13]{z} = \sqrt[13]{g} z^{t/13}$ ,  $\sqrt[15]{z} = \sqrt[15]{h} z^{u/15}$ ,  $\sqrt[17]{z} = \sqrt[17]{i} z^{v/17}$ ,  $\sqrt[19]{z} = \sqrt[19]{j} z^{w/19}$ ,  $\sqrt[21]{z} = \sqrt[21]{k} z^{x/21}$ ,  $\sqrt[23]{z} = \sqrt[23]{l} z^{y/23}$ ,  $\sqrt[25]{z} = \sqrt[25]{m} z^{z/25}$ ,  $\sqrt[27]{z} = \sqrt[27]{n} z^{a/27}$ ,  $\sqrt[29]{z} = \sqrt[29]{o} z^{b/29}$ ,  $\sqrt[31]{z} = \sqrt[31]{p} z^{c/31}$ ,  $\sqrt[33]{z} = \sqrt[33]{q} z^{d/33}$ ,  $\sqrt[35]{z} = \sqrt[35]{r} z^{e/35}$ ,  $\sqrt[37]{z} = \sqrt[37]{s} z^{f/37}$ ,  $\sqrt[39]{z} = \sqrt[39]{t} z^{g/39}$ ,  $\sqrt[41]{z} = \sqrt[41]{u} z^{h/41}$ ,  $\sqrt[43]{z} = \sqrt[43]{v} 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$\sqrt[665]{z} = \sqrt[665]{z} z^{h/665}$ ,  $\sqrt[667]{z} = \sqrt[667]{z} z^{i/667}$ ,  $\sqrt[669]{z} = \sqrt[669]{z} z^{j/669}$ ,  $\sqrt[671]{z} = \sqrt[671]{z} z^{k/671}$ ,  $\sqrt[673]{z} = \sqrt[673]{z} z^{l/673}$ ,  $\sqrt[675]{z} = \sqrt[675]{z} z^{m/675}$ ,  $\sqrt[677]{z} = \sqrt[677]{z} z^{n/677}$ ,  $\sqrt[679]{z} = \sqrt[679]{z} z^{o/679}$ ,  $\sqrt[681]{z} = \sqrt[681]{z} z^{p/681}$ ,  $\sqrt[683]{z} = \sqrt[683]{z} z^{q/683}$ ,  $\sqrt[685]{z} = \sqrt[685]{z} z^{r/685}$ ,  $\sqrt[687]{z} = \sqrt[687]{z} z^{s/687}$ ,  $\sqrt[689]{z} = \sqrt[689]{z} z^{t/689}$ ,  $\sqrt[691]{z} = \sqrt[691]{z} z^{u/691}$ ,  $\sqrt[693]{z} = \sqrt[693]{z} z^{v/693}$ ,  $\sqrt[695]{z} = \sqrt[695]{z} z^{w/695}$ ,  $\sqrt[697]{z} = \sqrt[697]{z} z^{x/697}$ ,  $\sqrt[699]{z} = \sqrt[699]{z} z^{y/699}$ ,  $\sqrt[701]{z} = \sqrt[701]{z} z^{z/701}$ ,  $\sqrt[703]{z} = \sqrt[703]{z} z^{a/703}$ ,  $\sqrt[705]{z} = \sqrt[705]{z} z^{b/705}$ ,  $\sqrt[707]{z} = \sqrt[707]{z} z^{c/707}$ ,  $\sqrt[709]{z} = \sqrt[709]{z} z^{d/709}$ ,  $\sqrt[711]{z} = \sqrt[711]{z} z^{e/711}$ ,  $\sqrt[713]{z} = \sqrt[713]{z} z^{f/713}$ ,  $\sqrt[715]{z} = \sqrt[715]{z} z^{g/715}$ ,  $\sqrt[717]{z} = \sqrt[717]{z} z^{h/717}$ ,  $\sqrt[719]{z} = \sqrt[719]{z} z^{i/719}$ ,  $\sqrt[721]{z} = \sqrt[721]{z} z^{j/721}$ ,  $\sqrt[723]{z} = \sqrt[723]{z} z^{k/723}$ ,  $\sqrt[725]{z} = \sqrt[725]{z} z^{l/725}$ ,  $\sqrt[727]{z} = \sqrt[727]{z} z^{m/727}$ ,  $\sqrt[729]{z} = \sqrt[729]{z} z^{n/729}$ ,  $\sqrt[731]{z} = \sqrt[731]{z} z^{o/731}$ ,  $\sqrt[733]{z} = \sqrt[733]{z} z^{p/733}$ ,  $\sqrt[735]{z} = \sqrt[735]{z} z^{q/735}$ ,  $\sqrt[737]{z} = \sqrt[737]{z} z^{r/737}$ ,  $\sqrt[739]{z} = \sqrt[739]{z} z^{s/739}$ ,  $\sqrt[741]{z} = \sqrt[741]{z} z^{t/741}$ ,  $\sqrt[743]{z} = \sqrt[743]{z} z^{u/743}$ ,  $\sqrt[745]{z} = \sqrt[745]{z} z^{v/745}$ ,  $\sqrt[747]{z} = \sqrt[747]{z} z^{w/747}$ ,  $\sqrt[749]{z} = \sqrt[749]{z} z^{x/749}$ ,  $\sqrt[751]{z} = \sqrt[751]{z} z^{y/751}$ ,  $\sqrt[753]{z} = \sqrt[753]{z} z^{z/753}$ ,  $\sqrt[755]{z} = \sqrt[755]{z} z^{a/755}$ ,  $\sqrt[757]{z} = \sqrt[757]{z} z^{b/757}$ ,  $\sqrt[759]{z} = \sqrt[759]{z} z^{c/759}$ ,  $\sqrt[761]{z} = \sqrt[761]{z} z^{d/761}$ ,  $\sqrt[763]{z} = \sqrt[763]{z} z^{e/763}$ ,  $\sqrt[765]{z} = \sqrt[765]{z} z^{f/765}$ ,  $\sqrt[767]{z} = \sqrt[767]{z} z^{g/767}$ ,  $\sqrt[769]{z} = \sqrt[769]{z} z^{h/769}$ ,  $\sqrt[771]{z} = \sqrt[771]{z} z^{i/771}$ ,  $\sqrt[773]{z} = \sqrt[773]{z} z^{j/7$