Rachel Skipper* (skipper@math.binghamton.edu), Department of Mathematical Sciences, Binghamton University, PO Box 6000, Binghamton, NY 13902-6000. A generalization of the Hanoi towers group.

The Hanoi Towers group is a self-similar, regular branch group which acts as automorphisms of the infinite rooted ternary tree and models the game “the Towers of Hanoi”.

We generalize the algebraic construction of this group to produce a new infinite family of self-similar, regular branch groups and explore their algebraic and geometric properties. (Received September 18, 2016)