Abstract. S. Alpern has proved that an invertible antiperiodic measurable measure preserving transformation of a Lebesgue probability space can be represented by $k$ towers of heights $n_1, \ldots, n_k$, with prescribed measures, provided that the heights have greatest common divisor 1. In this paper we give a simple proof of Alpern’s theorem. It is elementary in the sense that it involves no limits and uses Kakutani’s easy proof of Rokhlin’s Lemma.