



FIGURE 13.14. Recombination can be seen in the ancestry of the *Adh* gene of *Drosophila melanogaster*. Each haplotype is written as a sequence of + and –, which indicate the presence or absence, respectively, of the polymorphic variants shown in Fig. 13.11. The diagram shows the likely relationship between the different haplotypes, with adjacent haplotypes differing by a single change. Hypothetical intermediates are *dashed*, and the number of times each was found is indicated on the *right* (when >1). The fast and slow alleles (F, S) fall into two clusters. However, four haplotypes have clearly been formed by recombination. The likely sources of the left and right parts of these recombinant haplotypes are shown by *arrows*. Note that this diagram cannot be drawn as a conventional genealogy, because the **root** is not known (see Chapter 27 [online]).

13.14, adapted from Aquadro C.F. et al., *Genetics* **114**: 1165–1190, © 1986 Genetics Society of America