Although memory processes and systems usually operate reliably, they are sometimes prone to distortions and illusions. Here we review evidence indicating that cognitive aging is often associated with increased susceptibility to various kinds of false recollections. Accumulating data indicate that older adults frequently have special difficulties recollecting the source of information, which in turn renders them vulnerable to confusing perceived and imagined experiences, and to related kinds of memory distortions. Evidence from studies of false recall and recognition indicate that older adults are sometimes more likely than younger adults to remember events that never happened, reflecting the influence of indistinct encoding of events and the use of lenient criteria during retrieval. Neuroimaging studies suggest that age-related changes in medial temporal and frontal regions may play a role in the altered functioning of specific encoding and retrieval processes that give rise to memory distortions. Future studies of aging and false memories are likely to provide a promising avenue for illuminating basic mechanisms of memory distortion.