In 1839, the Bulfinches were invited to live with their nieces in the Bowdoin Square mansion of Bulfinch's childhood, where he stayed until his death in 1844. The Bowdoin Square of Bulfinch's youth, pasture land dotted with wooden structures, small shops and a few mansions, was much changed by 1839. A dramatic difference in infrastructure, which Bulfinch had a hand in, turned Bowdoin Square into a busy intersection. As selectman he oversaw the construction of the West Boston Bridge (1793), and other projects that opened the way for developers to build new streets in the West End. A number of high-profile, brick and granite houses now clustered around the intersection of New Chardon, Cambridge and Bowdoin streets, leaving little open space. Bulfinch contributed designs for many of these buildings including, the Blake-Tuckerman house, the Kirk Boott house, the Joseph Coolidge mansion; and the nearby Harrison Gray Otis house, as well as his own house on Bulfinch Street.

The earliest of these houses is the Joseph Coolidge mansion (c. 1792) at Middleseot Street, now Bowdoin Street. It was the first privately commissioned mansion that Bulfinch designed, shortly followed by Joseph Barrell's mansion. It is described as a three story brick mansion, proportional and with extensive gardens stretching from Cambridge Street down Temple Street. A description survives, praising its beauty:

"This house and garden was altogether one of the most beautiful residences which have existed in our city within my memory," Mr. N.L. Bowditch.

Only a few hundred feet down Cambridge Street is one of Bulfinch's most famous surviving private commissions, the first Harrison Gray Otis house (1796). The house was highly ornamented and influenced by the William Bingham house in Philadelphia. The façade is quite similar; three stories with upper and lower string-course, ornamental tablets decorating the high Palladian windows with balconies on the second story. The house is also notable because of its original wooden cornice, built around the time when Bulfinch first started implementing this architectural feature. The original location of the house was in the middle of what is now Cambridge Street: in 1929 it was moved back 40 feet by the city of Boston to accommodate a widening of the street.