I would think this program will compile but it increases the chance of failure thru the design choice that is stated.

The compiler will create a class when it sees the template. so it would need access to the implementation of the template as well. In a large scale problem, during the compilation, the linker needs to go through many files and might miss the template implementation when you want to use it (SINCE you did NOT include the implementation in the template header file) thus it can throw an error.

I believe that the compiler will be able to create the outline of the class and how the class would "Look"overall, however it will fail to bring in the implementation since the linker could not provide it to the compiler.