When people ask for security holes as features: Hiding files from Explorer

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By default, Explorer does not show files that have the `FILE_ATTRIBUTE_HIDDEN` flag, since somebody went out of their way to hide those files from view. You can, of course, ask that such files be shown anyway by going to Folder Options and selecting "Show hidden files and folders". This shows files and folders even if they are marked as `FILE_ATTRIBUTE_HIDDEN`. On the other hand, files that are marked as both `FILE_ATTRIBUTE_HIDDEN` and `FILE_ATTRIBUTE_SYSTEM` remain hidden from view. These are typically files that involved in the plumbing of the operating system, messing with which can cause various types of "excitement". Files like the page file, folder configuration files, and the System Volume Information folder. If you want to see those files, too, then you can uncheck "Hide protected operating system files". Let's look at how far this game of hide/show ping-pong has gone:

	Show	Hide
1.	Normal file	
2.		Hidden file
3.	"Show hidden files"	
4.		Hidden + System
5.	"Show protected operating system files"	

You'd think this would be the end of the hide/show arms race, but apparently some people want to add a sixth level and make something invisible to Explorer, overriding the five existing levels. At some point this back-and-forth has to stop, and for now, it has stopped at level five. Adding just a sixth level would create a security hole, because it would allow a file to hide from the user. As a matter of security, a sufficiently-privileged user must always have a way of seeing what is there or at least know that there is something there that can't be seen. Nothing can be undetectably invisible.

If you add a sixth level that lets a file hide from level five, then there must be a level seven that reveals it.

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