What can be said about the set of all finite subgraphs of a graph G when it is known that its chromatic number $\chi(G)$ is greater than $\varkappa$, a given finite or infinite cardinal? For finite $\varkappa$, there are finite graphs G without any short circuits, but for infinite $\varkappa$, G has to contain all finite bipartite graphs. This result from 1966 is here extended in various ways. For instance, bounds are given for the chromatic numbers of the finite subgraphs of G when special restrictions are imposed on G. Some open problems are also given.

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