

driving storm, is provided; and that, if cows could be milked here and left through night as well as day, it would be found good economy.

7. I know the most of us are slashing down our trees most improvidently, and thus compelling our children to buy timber at thrice the cost at which we might and should have grown it. I know that it is wasteful to let White Birch, Hemlock, Scrub Oak, Dogwood, etc., start up and grow on lands which might be cheaply sown with the seeds of Locust, White Oak, Hickory, Sugar Maple, Chestnut, Black Walnut, and White Pine. I know that no farm in a settled region is so large that its owner can really afford to surrender a considerable portion of it to growing in different cord-wood when it would as freely grow choice timber if seeded therefor; and I feel sure that there are few farms so small that a portion of each might not be profitably devoted to the growing of valuable trees. I know that the common presumption that land so devoted will yield no return for a life-time is wrong—know that, if thickly and properly seeded, it will begin to yield bean-poles, hoop-poles, etc., the fifth or sixth year from planting, and thenceforth will yield more and more abundantly forever. I know that *good* timber, in any well-peopled region, should not be *cut off*, but *cut out*—thinned judiciously but moderately and trimmed up, so that it shall grow tall and run to trunk instead of branches; and I know that there are all about us millions of acres of rocky crests and acclivities, steep ravines and sterile sands, that ought to be seeded to timber forthwith, kept clear of cattle, and devoted to tree-growing evermore.

8. I do not know that all lands may be profitably underdrained. Wooded uplands, I know, could not be. Fields which slope considerably, and so regularly that water never stagnates upon or near their surface, do very well without. Light, leachy sands, like those of Long Island, Southern Jersey, Eastern Maryland, and the Carolinas, seem to do fairly without. Yet my conviction is strong that *nearly all land which is to be persistently cultivated will in time be underdrained*. I would urge no farmer to plunge up to his neck in debt in order to underdrain his farm. But I *would* press every one who has no experience on this head to select his wettest field, or the wettest part of such field, and, having carefully read and digested Waring's, French's, or some other approved work on the subject, procure tile and proceed next Fall to drain that field or part of a field thoroughly, taking especial precautions against back-water, and watch the effect until satisfied that it will or will not pay to drain further. I think few have drained one acre thoroughly, and at no unnecessary cost, without being impelled by the result to drain more and faster until they had tiled at least half their respective farms.

9. As to Irrigation, I doubt that there is a farm in the United States where *something* might not be profitably done forthwith to secure advantage from the artificial retention and application of water. Whenever a brook or runnel crosses or skirts a farm, the question—"Can the water