Year	Annual Growth Rate %	U.S. Total (except West Coast) of # Stationary Steam Engines
1776		1
	11%	
1803		4
	57%	
1820		43
	48%	
1833		313
peak	71%	
1838		1,420
	42%	
1850		8,592
	19%	
1860		25,329
(C.W.)	5%	
1870		39,196
	4%	
1880		54,773
	6%	
1890		87,876
	7%	
1900		149,069

annual population growth rate ≈ 3%

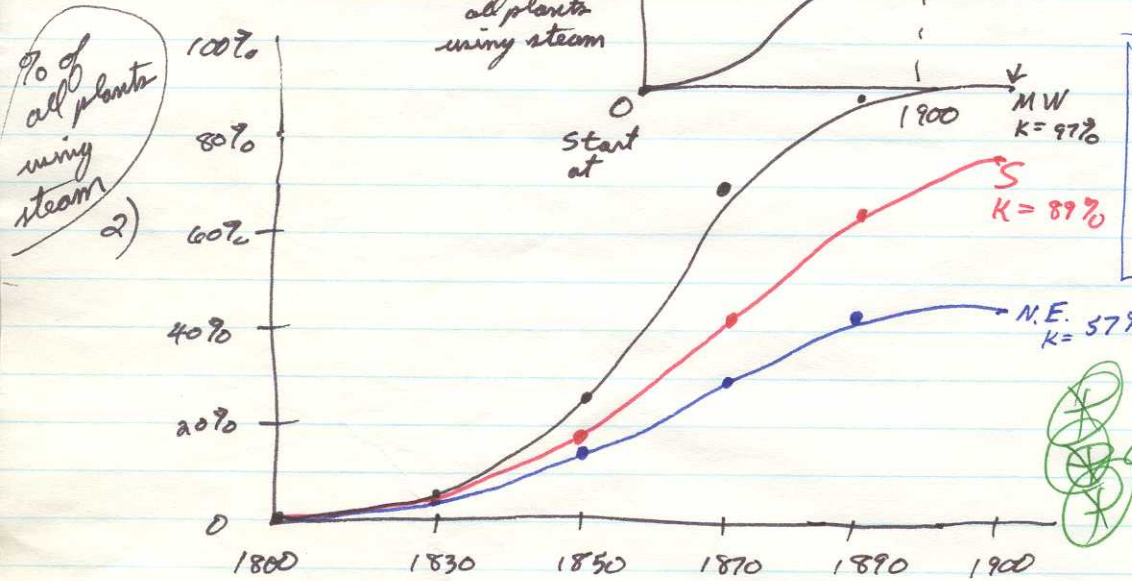
% Regional Distribution of Stationary Steam Engines

	(North-East)	(South)	(Midwest)	
	45%	35%	21%	
	58	37	5	Slave System
	61	31	8	
	50	15	35	
C.W.	43	17	40	
C.W.	43	16	41	
	43	17	40	Free Labor System
	45	19	37	
	38	28	33	

by far the most industrial region

C. Estimate Rate of adoption & displacement of Water ξ

1) $P = K/(1+e^{-(a+bt)})$



2)

$e^{-(a+bt)}$ ⇒ log shape S function

a = shifts right or left

bt = how curved is the S

Paradox

N.E. most industry but lowest % of new tech.