

Ralph Waldo Emerson, *The Conduct of Life*, 1860.

On “steam,” from the essay “Fate”:

Steam was till the other day the devil which we dreaded. Every pot made by any human potter or brazier had a hole in its cover, to let off the enemy, lest he should lift pot and roof and carry the house away. But the Marquis of Worcester, Watt, and Fulton bethought themselves that where was power was not devil, but was God; that it must be availed of, and not by any means let off and wasted. Could he lift pots and roofs and houses so handily? He was the workman they were in search of. He could be used to lift away, chain and compel other devils far more reluctant and dangerous, namely cubic miles of earth, mountains, weight or resistance of water, machinery, and the labors of all men in the world; and time he shall lengthen, and shorten space.

On “steam” and “coal,” from the essay “Wealth”:

Wealth has its source in applications of the mind to nature, from the rudest strokes of spade and axe, up to the last secrets of art. Intimate ties subsist between thought and all production; because a better order is equivalent to vast amounts of brute labor. The forces and the resistances are Nature's, but the mind acts in bringing things from where they abound to where they are wanted ... One man has stronger arms, or longer legs; another sees by the course of streams, and growth of markets, where land will be wanted, makes a clearing to the river, goes to sleep, and wakes up rich. Steam is no stronger now, than it was a hundred years ago; but is put to better use. A clever fellow was acquainted with the expansive force of steam; he also saw the wealth of wheat and grass rotting in Michigan. Then he cunningly screws on the steam-pipe to the wheat-crop. Puff now, O Steam! The steam puffs and expands as before, but this time it is

dragging all Michigan at its back to hungry New York and hungry England. Coal lay in ledges under the ground since the Flood, until a laborer with pick and windlass brings it to the surface. We may well call it black diamonds. Every basket is power and civilization. For coal is a portable climate. It carries the heat of the tropics to Labrador and the polar circle: and it is the means of transporting itself whithersoever it is wanted. Watt and Stephenson whispered in the ear of mankind their secret, that a half-ounce of coal will draw two tons a mile, and coal carries coal, by rail and by boat, to make Canada as warm as Calcutta, and with its comfort brings its industrial power.