

But the willing giant stands idly panting and smoking; for nobody can agree to tell him what to do. One says 'go and *plough*!' another says 'go and *dig*!' each mistaking the means for the end, and trying to yoke this youngest born of human genius to the peddling routine of manual or equine capacity; out of the very perversity of backsightedness that clings to forms and modes which belonged to the *implements* not to the *task*—backsightedness that would with equal reason puzzle its brains in looking for the pole and splinter-bar of a locomotive, the pendulum of a watch, or the paddle boxes of a screw steamer.

But if it is not ploughing, and it is not digging, what is it? 'Go to the Mole, thou dullard,' (the old proverb might be travestied,) 'consider her *ways* and be wise'—who without any coulter, share, or mould-board, without spade, hoe, or pickaxe, leaves behind her, in her rapid track a finer mould than ever RANSOME, HOWARD, or CROSSKILL—than ever spade or rake produced, or the most careful-handed gardener chopped up to pot his plants with. The very rabbit that scratches his hole in the ground, or the fox that scratches after him—like the king-crab, to *eat the kernel and lie in the shell*—or the dog that scratches after both—the whole tribe of 'claw foot,' in fact—had scratched hard earth into soft mould, before ever the plough or the spade, or even the more ancient hoe, had broken ground on this planet.

Let us begin from the beginning: let us take 'cultivation' itself into serious thought for a serious moment, and analyze it into its simplest elements, dropping all conventionalities of plodding custom. What is it? How would you do it, if you had neither plough, nor spade, nor hoe nor, rake to help you? With the same tools that the monks of La Trappe used to dig their graves with, and in the same manner! If the mole, the rabbit, the fox, the dog, are not sufficient indicators, take the hand of a man, glove it with hardened steel, multiply it a dozen or twenty times, till you have an instrument as broad as Crosskill's clod-crusher, each hand or claw with its separate arm forming the radius from a central shaft, which bristles all around with a forest of such arms, a sort of revolving Briareus, *not rolling*—let that be especially remarked—but steam-driven, a thousand dog power, if you please, for we must not even mention horses, or we shall drop back into the old Seylla and Charybdis of 'traction' and of 'rolling,'—two ideas to be eschewed like poison.

Let us suppose the picture of this formidable looking cylinder of claws to be sufficiently described for the moment—reminding one, at a distant view, of a half-breed between a hay-tedding machine and a Crosskill's clod-crusher—but unlike them, fundamentally distinct from any and every instrument that was ever seen a field, as doing its work not by traction, nor by its rolling weight, but *driven* by its axis, as the steam-paddle, the circular saw, the driving wheel of the locomotive, are driven, supported by its own apparatus, and abrading the soil with its armed teeth, first cutting its own trench, burying itself to the required depth, and then commencing its onward task, *tearing down the bank* (so to speak) on the advancing side, canting back the abraded soil, earth's sawdust, comminuted, aerated, and *inverted*, into the trench it leaves behind.

When Mr. Romaine first attempted to carry his "idea" into practice, he adopted the singular expedient of placing a steam-engine in a cart to work the "formidable looking cylinder of claws," while the cart and the engine were to be moved about the field by means of horse-power! This arrangement was evidently an absurd one; but we find a passage in "Talpa," which *might* have suggested this idea also. He says:—

When we have in idea and in fact detached the *work of cultivation* from the mere progression of the implement, made them perfectly *separate and independent*, so that if you ceased to proceed, your 'coffee mill' would be still *at work*, and only wanting fresh coffee to grind; then, and only then, shall we have laid hold of the end of the 'clue that leads to cultivation by steam;' for then, and only then, shall we have begun to appreciate the real and unique value of the new agent we possess. To suppose that it would gear its noble faculty to the dragging of ploughs, or the redoubled solecism of a rolling spade machine, is to transgress the elementary axioms of natural law, the fundamental relations and *exactions* that govern all physical progress and discovery.

Talpa never meant to recommend any other power than steam for the two pur-