termined to adopt locomotive Engines : they have done so, altho' they have found it expedient to erect stationary Engines also, at the summit of the inclined planes on the road ; that the carriages may be impelled along the whole line at an even rate of velocity.

The line of road as we have seen, is completed, and Steam employed as the moving agent. The appearance of these Engines is at once singular and simple; the smoke and sparks supposed consequent on the production of steam, are not as visible as might be expected; for the heated air from the furnace traverses several tubes before entering the chimney, thus, purifying itself, and increasing the degree of heat acting on the boiler. They are each of about nine horse power, of exquisite workmanship, and give the necessary motion, by a rod from the piston attached to a spoke of the fore wheel ; so that with every stroke of the engine the wheel goes once round, and of course the engine and its load is impelled a length, equal to the circumference of the wheel, along its road. Attached to the Engine carriage, is its tender, a separate carriage, bearing a supply of water and fuel.

We have thus taken a cursory and general view of this undertaking, from its commencement, to its completion ; and have seen, that to make the triumph of art complete, the locomotive Engine has been adopted, as the power best fitted for the advantages of the Rail-road : these children of science are joined together, and the fact, proclaims to past and future ages, that the present is a time when mighty men are on the earth, men of renown —men, to whom the Sampsons and Solomons of former ages, were but baby's either for strength or wisdom. Let us now glance a little more closely, over the ground, which we have seen, as it were, from an eminence, and point out rather in detail the peculiar features of this grand work. Let it be recollected that the great object of a Rail-way is to obtain the best possible road. To obtain this the hardest and smoothest materials are chosen : cast or wrought iron slips of much strength are laid along the line, and on these the wheels of the carriages move. These slips weigh about 35lb, each lineal yard; they have a ledge on the outside to confine the wheels in the proper course, and are called rails ; and from them, the line on which they are laid, is called a rail road. This appears simple, but it must be recollected that great stability is to be observed in laying the rails, for the slightest motion of the rails under any pressure, would occasion raisings and sinking, bad joints, and impediments, and defeat the great object in view—that of removing every possible obstacle to a rapidly moving body : also, a line nearly level is essential—for the smoother the surface, the greater the difference between moving on a level, and on an ascending plane. The principle of a Rail-road is well illustrated by a person skating ; from the small degree of friction, occasioned by the smoothness of the surfaces in contact, the man impels himself perhaps 50 yards with the force necessary to move himself one yard, in the absence of skates and ice ; but the difficulty which a skater would meet