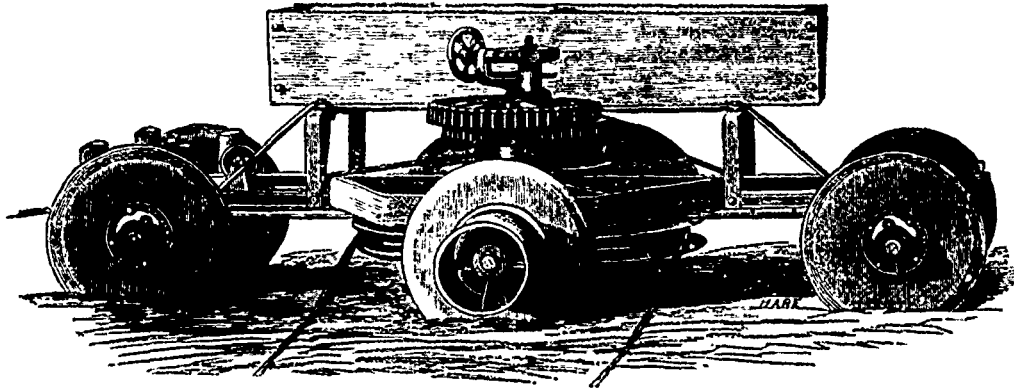


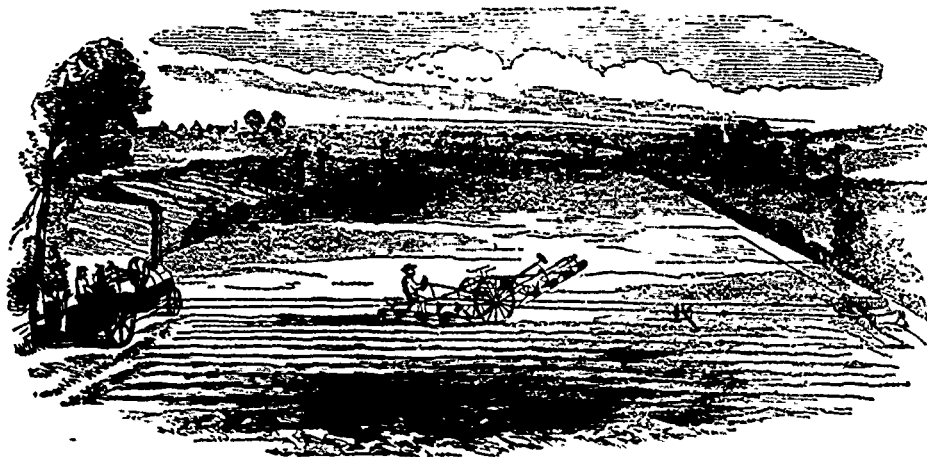
The novel features of these two sets of course attracted a great deal of scrutiny. Every one wished to see how the Howards had surmounted the difficulty which acted against them at Leeds. Some said that the new snatch block perfectly economised the power lost in holding up and dragging out the slack rope, while others considered that the rope must needs be much worn and bent in passing through it. As this is a question which will be decided in a very short time by experience there is not much need for an opinion. The wear, at any rate, cannot be so great in the case of the travelling windlass with the eight hundred yards of endless rope making a half turn round two sheaves. A good deal

is said because Fowler does not plough his headlands. The fact is, not that he cannot do so, but that it proves to be most economical to let the tackle go on to another field rather than be flogging about a little bit of land which can be ploughed by a team of horses for less money. If we look far enough, too, it requires no great gift of prophecy to foresee the time when these headlands will be permanent roads, hedges being done away with. Where will the present objection then be? The support of the rope has been more an object of attention than ever, since it is in the wear of this member of the apparatus that the chief expense lies. Howard and Fowler now sustain it thoroughly. Their competitors were some-



what careless in this respect, and their expenditure of power compared with work done was consequently much greater. Mr. Smith and those who worked on his plan were upon heavy land at a considerable distance from the station. They experienced however no lack of attention. Their work was useful but it lacked that superiority which belonged to the ploughing, cultivating, and digging already noticed. By way of summary we may say the Farningham

exhibition indicates a very considerable advance, tending to further the practice of steam culture amongst the ordinary tenant farmers of this country. This conclusion is confirmed by the numbers of orders taken, especially by Mr. Fowler and Messrs. Howard. We believe between forty and fifty sets have been purchased, many to go abroad, and some to lend their efficient aid for the pulverisation of our tenacious clays.—*L. C. Agricultural Review.*



EDUCATION.

The Glory of Physical Geography,

Physical geography makes the whole world kin. Of all the departments in the domains of physical science, it is the most Christianizing. Astronomy is grand and sublime; but astronomy overpowers with its infinities, overwhelms with its immensities. Physical geography charms with its wonders, and delights with the benignity of its economy.—Astronomy ignores the existence of man;—physical geography confesses that existence, and is based on the Biblical doctrine that the earth was made for man. Upon no other theory can it be studied; upon no other theory can its phenomena be reconciled. The astronomer computes an ephemeris

for his comets; predicts their return; tells the masses of the planets, and measures by figures the distance of stars. But whether stars, planets or comets be peopled or not, is, in his arguments, theories and calculations, of no consequence whatever. He regards the light and heat of the sun as emanations—forces to guide the planets in their orbits, and light comets in their flight—nothing more. But the physical geographer, when he warms himself by the coal fire in winter, or studies by the light of the gas burner at night, recognizes in the light and heat which he then enjoys the identical light and heat which came from the sun years ago, and which with provident care and hands benignant have been bottled away in the shape of a mineral, and stored in the bowels of the earth for man's use, thence to be taken at his convenience, and liberated at will for his manifold purposes. The masters of this newly ordained science will teach our sons to regard some of the commonest things as the most important agents in the physical economy of our planet. They are also mighty ministers of the