

from the snows of the Alps—luxury had enervated them; not all the eloquence of their great Commander could prevent them from quailing before the dauntless Romans, or make them willing again to make forced marches in storms of rain and snow. The Romans in their turn elated by success entrusted a large body of troops to a rash man of whose abilities they had had no experience, and in consequence this army was soon destroyed by their more knowing opponent. Without following the detail farther it may be observed that success invariably caused the successful party in some degree to remit their exertions, while defeat had a contrary effect for a long time, upon both parties, but the Romans being the most persevering, finally triumphed, although there were few nations on earth who would not have yielded to such dreadful overthrow as they met the first years of the war. This history is in part the history of all men in whatever business they are engaged. We often see men by great industry and application acquire wealth, and then by negligence and extravagance let it slip out of their hands. We often feel disposed to wonder at their folly, yet should, most of us, probably, in the same circumstances have done the same, for we see the wisest of men have often behaved in this way. It is an infirmity in our nature, and we ought to know it, and be upon our guard against it. Unremitted application is very fatiguing, and he that has been successful naturally thinks he may now indulge himself in a little repose. But let him not push this too far, lest like Hannibal's troops in Capua he should disqualify himself for future exertion. He also who has once succeeded by industry and application and afterwards failed by remissness has no occasion to be disheartened and think he can never succeed again. He has been led by an insidious weakness attached to his race, to do a foolish action which many whose names are recorded among the great men of the earth have done before him. He can yet do as well as ever he has done if he will exert his abilities with a moderate portion of the resolution which the Romans displayed in the most desperate circumstances. The man who has lost all his property, will not, if he has saved his honor, have great cause to feel mortified, when he reflects how many, and what men he has to bear him company, nor when he considers the success which crowned the unyielding perseverance of the Romans, will he doubt that success may attend his efforts if conducted with the same determined resolution. Zeal is always more successful than even good sense. The ancient motto, "ye wretched hope; ye fortunate be cautious;" should never be forgotten.

GOOD IMPLEMENTS.

A Farmer should always work with good tools because he can do a much greater quantity of work with the same exertion of strength. The most ancient plough, one still used by the South American Spaniards, was made of two crooked sticks without any iron; but even this clumsy implement is preferable to the stone hoe or oyster shell of the Indian; great improvements have been made in farming implements long ago, yet even at this day many are in general use that are far from the best. It has always happened that men of talents have at certain periods applied their powers principally to one subject which became fashionable, and have made more improvements in a short time than had been made during many preceding Centuries. At the present time many are applying their talents to the improvement of agriculture and the arts necessarily connected with it. Among these arts the science of Mechanics holds an important place. It requires a person acquainted with this science and capable of reasoning upon it, to invent a good implement; when invented, others can make it.

The following experiment from Babbage shows how much it exceeds brute force. A roughly chiselled stone weighing 10600 lbs required to drag it along the floor of the quarry a force equal to..... 750

To drag it on a floor of planks..... 600
Placed on a platform of wood and dragged over the plank floor 600
After scraping the two surfaces of wood which slide over each other 150
Placed on three inch rollers it was moved on the floor of the Quarry by 34
To drag it by these rollers on a wooden floor..... 29
Laid upon a wooden platform and the rollers placed between that and a plank floor it required to move it only 22

The huge stones which compose the Pyramids of Egypt were raised to their present elevation by the use of the lever and the roller. Fortified towns were anciently built upon the tops of steep hills. The ancient Romans when besieging a strong walled and fortified town were accustomed to make at the foot of the hill a strong Frame of many stories in height, and of a size sufficient for ten thousand men to stand upon the upper floor. Upon this cranes were erected from which large spars were suspended by chains fastened near their middle, which being made to swing backwards and forwards were designed to shake the wall pieces by the heavy blows they gave with the butt end which was formed of iron in the shape of a ram's head. When this enormous frame was completed it was moved up the steepest hill to the side of the wall within three days. It is very certain that at a remote period the art of moving great weights was well understood; yet the ordinary implements that are used in many places have been often contrived with very little attention to the principles of mechanics. The value of the axe, the hoe, the pickaxe, the shovel, the drawing knife, and many other tools, depends much upon their form. Many of the descendants of the "Pilgrims" sixty years ago used axes made upon the model of those of the forefathers had brought from England which being three inches longer in the "bit" than was necessary, occasioned a great loss of strength. It is much more profitable to go thirty miles for a good axe, than to use a bad one, even if it cost nothing. A besythe should always be immediately thrown aside, if a good one can be procured. The scythe with the narrow blade is the best for heavy grass. There is reason to believe that scythes that will not hold an edge may be cured by burying them for several years in a swamp. When the mowing season is past if the scythes are left in the swamp mud they will neither rust nor have their temper lowered by the heat of the sun.

The common Dutch strawcutter is a very useful implement cutting fast enough for those who have not more than a dozen head of neat cattle, provided a strawknife can be procured made in Germany, or by the manufacturers of German scythes in Maryland and Pennsylvania; for it appears to be an art wholly unknown in England. We have indeed formerly seen tons of German scythes of English manufacture imported, but have never known a person who purchased one of them, to use it for more than one day. Great quantities of what are called improved farming implements are now manufactured both in Europe, and among our ingenious neighbours in New England. It is certainly a kind of produce in which not a little chaff is mixed with the valuable grain, nor would it be wise in this age of puffing to purchase immediately everything that is offered; yet it is most true that some valuable implements have been invented. Two men will do much work with the American spring steel manure forks as they can with those formerly in use. Some kinds of horse rakes are