

SAW MILLS.

The old method of making boards and plank was to split up the logs with wedges, and then shape and smooth them with the axe. A great improvement upon this method was to saw the logs with a hand saw driven by two men,—the same method now in use in some ship-yards, to saw particular boards and planks. The log to be sawed is placed upon "ways," or stagings, erected over "pits," or trenches in the ground. The saw used is about the length of the cross-cut saw, the plate straight on either edge, wider at one end than at the other, and a stationary handle at the wide end composed of a round piece of wood some foot and a half or two feet in length, an inch and a half in diameter, and placed at right angles to the plate. The narrow end of the saw has a handle to be "shipped or unshipped," at will, so that the saw can be drawn, or thrust through the saw-kerf, at pleasure. In using this saw, one man stands upon the log with the stationary handle in his hands, while his assistant stands in the "pit," or trench,—and in this position they ply the saw up and down, making slow progress through the log.

In this manner, boards and plank were sawed almost universally in Europe, as late as 1500, and few were known in France even, for half a century after that date. As late as 1555, an intelligent Englishman travelling in France, saw a saw-mill for the first time in his life, and described it as a very great curiosity. More than a hundred years subsequently, in 1663, a venturesome Dutchman introduced the first saw-mill into England, but an infuriated mob of "sawyers," and their friends, broke up the mill, and forced the Dutchman to flee the country.

Saw-mills were introduced into the English colonies, however, at an earlier date. As early as 1633 one was set up at Newichewannock, now Berwick in Maine, by Ambrose Gibbin, the Agent of Mason & Gorges. This was the first mill erected in Maine, now boasting more saw-mills, and of nicer make, than any other country. But in England, they still *see-sawed* on in the old way, and in 1753, twenty years after a saw-mill had been built up here in the wilderness in what is now old Derryfield, there was not a saw-mill in England. In that year an extensive timber-merchant erected one in England, but the infuriated populace tore it in pieces. In fact, such is the prejudice in England against the introduction of labor-saving machinery, that saw mills were not generally introduced into that country, until about the commencement of the present century. And even now, in many of the lumber yards in England, their deals from American and Northern lumber are sawed by hand.—*Farmer's Monthly Visitor N. H.*

PERSEVERANCE AND GENIUS.

Perseverance is the distinguishing characteristic of great men. Do you ask for instances? The page of history abounds with them. Read the life of Demosthenes, and ask yourself what it was that made the poor, stuttering son of a cutter, become the most famous orator of ancient times. Read the life of Virgil, and then say

what it was that made him—the son of a baker—the most celebrated of Latin poets. Read the life of Æsop, and consider how it was that he, who was the son of a slave, and also a slave himself, managed to acquire so imperishable a fame. Read the life of Thomas Wolsey—son of a butcher—Cardinal of the church of Rome, and next to the King, in his day the most powerful person in the English dominions. Read the life of William Shakspeare, also the son of a butcher, and one of the most famous poets the world has ever beheld. Read the life of Oliver Cromwell, a man who rose from a comparatively humble station to be the Protector of the English Commonwealth, and who was assuredly the greatest man that ever ruled the destinies of this empire. Read the life of Benjamin Franklin, who, in his early days, was a journeyman printer, but afterwards one of the most celebrated of American philosophers and statesmen. Read the life of William Gifford, the editor of the *Quarterly Review* in after times, but in his youth an humble shoemaker's apprentice, and for want of paper was obliged to work his algebraic problems on leather with an awl. Read the life of Robert Burns, a ploughman of Ayrshire, in Scotland, but perhaps the greatest of Scotch poets. Read the lives of Allan Ramsay and James Hogg, both of whom were sons of agricultural laborers, but who, as poets, were bright ornaments of the land of Robert Burns. Read the life of James Cook, who for a long time was nothing but a common sailor, but who afterwards, on voyages of discovery, sailed three times round the world. Read the life of Jeremy Taylor, who was a barber's boy, and afterwards a D.D. Read the life of Thomas Telford, the great civil engineer, who was once a shepherd's boy. Read the life of Inigo Jones, who was first a journeyman carpenter, and then the chief architect of his age. Read the life of Halley the astronomer, and son of a poor soapboiler. Read the life of Huiy the chemist, the son of a poor weaver. Read the lives of Smeaton and Rennie, both eminent engineers, and both of them at one time merely makers of mathematical instruments. And when you have read all these, ask yourself whether perseverance had not as much to do in making those great men as any other quality which they possessed.—*Working Man's Friend.*

WINTER THE TIME TO THINK.

Winter is the time for farmers to *think*—spring, summer, and fall, to work; and the three latter seasons' labour will be to little profit, if the time of the first shall have been misspent. All the plans of the next season's operations should be laid and well considered during winter. All improvements, all designs for new operations; all the work to be done, should then be considered and prepared for; so that, when the time for work arrives, he will have nothing to do but to "go ahead." Then he has no time to think; but if he has been wise during winter, he will have no need of it. It is a pitiful sight to look at in the spring, when all nature is in an ecstasy of delight, to see a farmer flying about "like a hen with her head cut off," trying to do a thousand things at