

Fuel Crisis & Transport Problems

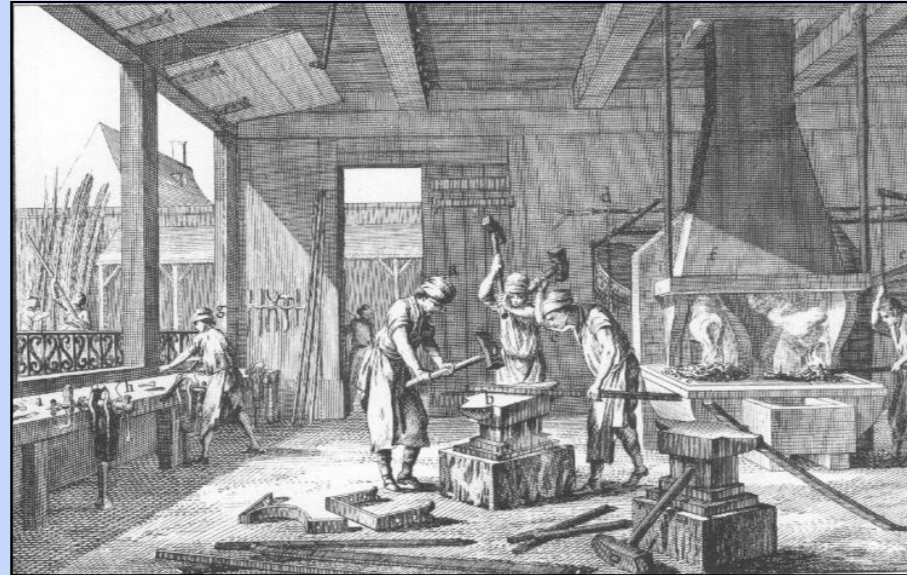


A typical 17th century road



Graham Cooper

By 1650 many forests in Britain had been cleared for agriculture while others were used as sources of timber for building ships - the 'wooden walls of England'. Henry VIII's favourite ship 'Mary Rose' sank in a battle near Portsmouth harbour in 1545 after 35 years' service.



This picture by French philosopher, Denis Diderot, shows a blacksmith's forge early in the 1700s. Every village would have had its own forge, where horses were shod and many of the tools and equipment needed by the community were made and mended.

A Crisis Looms!

The result of all this was that timber was in increasingly short supply after about 1650. As always when a shortage occurs, prices increased, and all commodities became more expensive - an economic crisis loomed unless a solution could be found. Fuel crises have happened before!



Guardian.co.uk

The process of charcoal burning used timber to make a fuel suitable for metal smelting. Stacks of timber were covered with earth and turfs to exclude air, then heated slowly so that the wood did not burn but turned into charcoal - it would then burn at a high heat.



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Fuel was needed for metal production. Coal was the obvious answer. It had been mined on a small scale in the Worsley area for 300 years - the family name Collier is recorded in Little Hulton in 1428.

The next problem was to get the coal out of the ground - deeper mines were needed. Then the coal had to get to where it was needed - mainly in towns such as Manchester which was beginning to establish itself as a centre of manufacturing.



Wielden Iron Group

Charcoal burning in Kent



The Rolling English Road

Transport was a serious problem - the road network in most places was not much better than farm tracks - rutted in dry weather and impossibly muddy in wet. Road repair was done by individual parishes, which had to appoint two men as highways inspectors each year. They decided what work was needed and householders were required by law to work on road repairs on four days between Easter and the end of June each year - the busiest time of the year for farmers. They also had to provide all the tools and the materials needed. Severe fines were imposed for those who did not comply, but even so, the roads were not well maintained. Most people walked and seldom went more than 5 miles from home. Richer people travelled on horseback or in stagecoaches, but travel was an uncomfortable business - journeys could take days with stops at coaching inns along the way and the risk of robbery by highwaymen and footpads. John Gilbert himself had an encounter with a highwayman while working on the canal. Records show that at this time, a journey from Preston to Colne by the rapid 'Invincible' stagecoach took nearly 5 hours. Goods were moved in wooden carts which were slow and awkward and often broke down or lost wheels. Fragile materials such as pottery often got broken in transit, so increasing costs.

Toll Roads

Turnpike Trusts were introduced in the early 1700s - money was invested by groups of businessmen who undertook to make highway improvements. They expected to make a profit by charging tolls on vehicles using the turnpike. Toll booths like the one below were built every few miles along the road and especially at junctions. These roads were better maintained but the tolls made them costly to use. The price of goods transported by road remained expensive.



Lancashire County Council

A possible solution?

Transport by water was quicker and easier than road transport. Goods had been moved by boat around Britain's coast for centuries - coal was usually called sea-coal in London because it came by sea from Newcastle. If navigable waterways could be made to link inland towns, they could be used to transport both goods and people. Several rivers were already used for transport but to build a canal where no river existed was a completely novel idea pioneered at Worsley by the Duke of Bridgewater, John Gilbert and James Brindley, the canal pioneers.

The canal age was about to begin.