

Compulsory Human Power

Since antiquity, humans have coerced others into generating power. Slaves and prisoners served as oarsmen for early European war vessels or were conscripted as miners, toolmakers, or textile workers. In Britain, forced labor became part of a prisoner's penance when King George III signed into law the Penitentiary Act in 1779. Also known as the Hard Labour Bill, this act sanctioned "labour of the hardest and most servile kind in which drudgery is chiefly required..., such as treading in a wheel, or drawing in a capstan, for turning a mill or other machine or engine, sawing stone, polishing marble, beating hemp, rasping logwood, chopping rags, making cordage, or any other hard and laborious service." Religious activists and reformers supported the policy. They reasoned that idleness led to sin, and that while busy, prisoners would have plenty of quiet time to consider their misdeeds (talking was strictly forbidden).⁷ The first such treadmill was installed at the Suffolk County jail in 1819. It was invented by William Cubitt, a millwright and civil engineer better known for designing bridges and railways. His was the first-known machine conceived "specifically to harness the collective muscle power of jailed criminals."⁸ The treadmill, shaped something like a steamship's paddle wheel, was described as a "big iron frame of steps around a

revolving cylinder."⁹ Prisoners held on to a bar while stepping on the treads that were 8 to 10 inches apart. Some treadmills were connected to grain grinders. However, others, also known as endless ladders or treadwheels, simply spun in the air or turned a wheel that jutted from the top of the prison and most likely acted as a crime deterrent as it reminded passersby of the drudgery taking place inside.

The most famous prison treadmiller was author Oscar Wilde, who was sentenced in 1895 to 2 years of hard labor for "gross indecency." After his sentence, he emerged thin and bankrupt, but not too broken to move to France and later write a famous poem about his experience, "The Ballad of Reading Gaol," which included a reference to his time on the treadmill:

We banged the tins, and bawled the hymns
And sweated on the mill,
But in the heart of every man
Terror was lying still.

Depending on the prison, inmates were required to walk the treadmill up to 10 hours per day, stepping for 10 to 30 minute intervals, then resting for 5 minutes. Despite cases of injury and even reports of death caused by the treadmills, wardens testified that the forced labor was beneficial, as it reduced recidivism and contributed to the prisoners' good health.¹⁰

In 1885 a *New York Times* reporter wrote of visiting the Coldbath Fields House of Correction in London's most murderous neighborhood, a place Charles Dickens researched before writing *Oliver Twist*:

But now we come to the strangest of all the sights in this great prison – the gallery where the great treadwheel continually revolves with a dull, resounding clank. It is a fine, well-ventilated hall, lighted from above, and on either side are rows of gray-coated prisoners, the



Figure 1.6 Treadmill at Brixton Prison, London, Installed in 1821

strangest collection of human scaramouches, as clinging to a wooden bar above them, they skip from step to step of the slowly turning wheel and are never an inch the further advanced for all their skipping. A sad, terrible sight of human degradation – as painful to witness, perhaps, as to endure – with a ludicrous touch about it, too, that seems to add to the degradation.¹¹

The same reporter might have been surprised to learn that four prison treadmills had operated in the United States from 1822 to at least as late as 1841. Most remained in service only a few years, including one in New York, which was used to mill corn and averaged 50 bushels ground per day. Charleston, South Carolina's treadmill also ground grain, though it was used primarily for punishing slaves. In addition, local slave owners could hire out their slaves to the jail's treadmill. The owners would receive 18.75 cents per day for the captives' labor.¹² However, treadmills never caught on in the United States, not because of a greater sympathy for the incarcerated, but due to a shortage of labor. Prisoners were better put to use in light manufacturing, producing shoes, clothing, hardware, furniture, arms, and more, for which the institution could take profits. In Great Britain, treadmills continued to operate until as late as 1901, although their use was abolished by the Prison Act of 1898.

Walking on a prison treadmill would not feel like walking on a health club treadmill, but more similar to using a stairstepper machine. In case you want to test the comparison, you can hop on a prison treadmill in Wales at the restored Beaumaris Victorian Prison. In 2007 *TimeOut London* listed "Run on a prison treadmill" as No. 44 in their list of "50 best British summer holiday breaks."¹³

Recently, the controversy of forced human power has resurfaced. In a September 2007 commentary, Brendan O'Neill, editor of *spiked*,

criticized prominent figures in the UK, including Prince Charles, for abetting what he termed "eco-enslavement." To make up for the carbon emissions of their flights, for example, they had participated in a carbon offsetting program managed by Climate Care. Climate Care's strategy includes funding a program in rural India that provides treadle pumps to poor farmers. "It seems that what was considered an unacceptable form of punishment for British criminals in the past is looked upon as a positive eco-alternative to machinery for Indian peasants today," O'Neill wrote. "What might once have been referred to as 'back-breaking labour' is now spun as 'human energy.'"¹⁴ An article in the *Times* titled "To cancel out the CO₂ of a return flight to India, it will take one poor villager three years of pumping water by foot. So is carbon offsetting the best way to ease your conscience?" shared O'Neill's view.¹⁵

Climate Care responded to the criticisms, defending its distribution of treadle pumps. With the pumps, it claimed, farmers greatly improved their families' nutrition and increased income, thanks to on-demand crop irrigation. Where motorized agricultural machinery was too expensive or unavailable, this intermediate technology served a critical function. Further, the company stated, "It is very important to understand that no one is forced to have a...treadle pump.... It is up to an individual farming family to decide whether to buy and use a treadle pump, buy or hire a diesel pump, or just grow a single crop during the rainy season."¹⁶

It is not surprising that readers of the online article voiced strong opinions on the topic. Most agreed with the authors and railed against the class issues they perceived in British aristocracy relegating rural farmers to hard labor. One American reader sounded off, "The treadle pumps would be better placed in parks as devices where [overweight] kids of the first world could get some exercise...."¹⁷