

Pride of official place in 1876 at the Great Centennial Exhibition in Philadelphia went to George H. Corliss's magnificent contraption. The Rhode Island engineer's steam engine rose like the nation itself: 'not a superfluous ounce of metal on it', wrote William Dean Howells, the novelist and editor of Boston's *Atlantic Monthly* magazine. Its 56-ton flywheel whirred 'with a hoarded power that makes all tremble'. In fact it did not hoard its power but supplied it free to other exhibitors, if not on every day. The exhibition closed on Sundays, when Corliss would not allow his machine to be used.

Ten years after the end of the Civil War, the exhibition's principal intention was to announce the US's arrival among the industrial elite of nations. Its sixty-seven buildings spread across a square kilometre, the expanse of two hundred American football fields. Staged from May to November, it attracted eight million people in a country of forty-six million: 'sleek, confident and well-fed'. Most worked ten hours a day, six days a week, and with no paid time off. Many took unpaid leave to visit.

Entry cost was fifty cents, the average worker's daily wage a dollar twenty-one. The gates took five million dollars, one thousand and one of them counterfeit. Of the five hundred and four children lost, all but five were returned to their families the same day; the rest the next. Four people died, none from foul play. There were six hundred and seventy-five arrests, fourteen of which were for pick-pocketing. One person was also arrested for fornication, though with no indication as to with whom.

'The American invents as the Greeks sculpted and the Italians painted,' wrote *The Times* of London, worried about Britain's loss of technological supremacy. Scotsman Alexander Graham Bell, lately of Boston, displayed his newly invented telephone.

Thomas Edison presented his telegraph. The typewriter was seen for the first time, as was the Otis brothers' steam elevator machine. George Eastman, twenty-two, wrote home to his mother in Rochester, New York, that he intended to 'traverse every aisle'. No mean feat; this amounted to eleven miles in the main exhibition hall alone. Eastman was five years from perfecting his easy-to-carry camera with flexible rolled film.

The Line-Wolf ammonia compressor represented an important advance in the technology of man-made ice. Also on show was a new refrigerated type of railroad car for perishable freight. James Tufts, a Massachusetts entrepreneur, exhibited his soda fountain, which in a dozen years or so would be usefully employed by Coca-Cola.

Exhibits from overseas were held to be of poor calibre, save that from France, a sister republic and close historical friend. France sent the first completed part of the Statue of Liberty, the right arm and torch. Fifty feet high, it put other foreign offerings in the shade. Turkey sent a scarf dancer. Germany sent a few machines courtesy of Krupp, the German ambassador complaining they did nothing to brighten the dull image of Prussia. Japan, noted William Dean Howells, sent an exhibit of arts and crafts manned by a 'small lady-handed carpenter' who 'now and then darted a disgusted look through his narrow eye-slits at the observer'.

The Centennial organisers had planned an ethnology section to feature Native Americans. The Department of the Interior objected. The organisers offered to use only the 'cleanest and finest looking', who would be English-speaking and accompanied by a child, dog and pony. Their idea was rejected and they had to use life-sized plaster models. Even this was too much for Howells. In the 'extermination of the red savage',