

ENCOMIUM TO MODELS AND THEIR MAKERS

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Our good fortune in being able to open this exhibition and present this monograph to the public is first and foremost due to the foresight and persistence of Mr. Cliff Petersen, an aerospace engineer and a Cooper Union graduate (CE '43). Since 1979, when he acquired the largest collection of patent models in the nation, Mr. Petersen spared neither time nor effort in ensuring the preservation of these most valuable witnesses to one of America's most productive eras in the domain of invention and economic growth and indeed, to one of the world's great shifts in paradigm from the traditional to the industrial type of society.

This collection groups the survivors of a once honored and famous collection that was the pride of a young Washington, displayed in showcases in the halls of the National Gallery, "a Museum of the Mechanic's Art," listed in guide books for tourists and visitors, claiming in 1856 "more than 25,000 specimens of ingenuity and skill... judiciously arranged by subjects."

The collection has its origin in the first patent act passed by Congress in 1790, requiring patentees to submit a model along with drawing(s) and a description with each application. The model requirement was rescinded in 1793 but reinstated in 1836, when the patent system was overhauled. It remained in force until 1880, when, under the effect of a malthusian competition between the growth of space available to store the models and the near exponential growth of their number, the model requirement was definitively abolished. Except for a few thousand models selected at the time by the Smithsonian Institution, there began a sad odyssey of neglect and abandonment for the more than 200,000 models then extant.

In various fires, floods, and other calamities, more than 100,000 models were destroyed, while thousands of others were dispersed in auctions. The bulk of the some 60,000 which survived have been in the Petersen Collection since 1979. Most of the models in this exhibition come from that collection. This exhibition is not premised on the idea of an encyclopedic survey of nineteenth-century patent models, a task already expertly performed by the Cooper-Hewitt Museum in 1984 in an exhibition by that title, and by other exhibitions last year in Washington and across the land celebrating the 200th anniversary of the Patent office. Our purpose here has been to show something of the variety, ingenuity, playfulness, and indeed, quirkiness of the inventive mind at work in the matrix of the times. No area of life, or even of death, seems to have been preserved from "a better idea." From a hat-box shaped like a hat to chaotic swings and coffin torpedos, from pessaries and corsets to steam engines and boilers, the whole spectrum of human activities lay open to Yankee ingenuity.

"[The American] is no more attached to a particular system of operations than to another. He doesn't feel himself more tied to an old method than to a new one... The idea of the new is intimately connected in his mind with the idea of the better... The American [is], above all, an innovator. That spirit is to be found, in fact, in all his works... He carries it everywhere, to the deep of the woods as to the bosom of cities."
ALEXIS DE TOCQUEVILLE, 1832

One driving, overwhelming impression given by the models is their practicality: not necessarily in the sense of their usefulness, mind you—who needs one of these break-neck swings, or one of these washing machines that, no doubt, required more effort to run than doing the wash by hand—but in the sense of their concreteness. They address concrete, practical ends: swing a child, wash the clothes, blow out the brains of whomever is in the line of sight of your “Colt.” They do not appear, in themselves, to raise or answer fundamental questions of science or philosophy. They are of the moment and for the moment. They fit the traditional American frontier ethos. Hence, probably, their appeal then and their appeal now. But one also detects through their constant striving to “be different,” even in trite details, more in the line of fashion than science, in the sheer accumulation of trivia, a quantum effect that leaves a mark on a national scale, a monument to the restless spirit of change where all is relentlessly brought into question, modified, adapted, improved, expanded, made better, in a permanent flux whose only constancy is its law of change.

It is, it seems, that very mass of inventive activity, that need to reach a critical level for igniting the chain reaction of “progress,” to provide the ground where the significant emerges from the commonplace. The parallel with the Italian Renaissance is striking, when great art was sustained and nourished by an extraordinary level of competence among a large mass of artisans and people of “*métier*.”

Looking at these models—so many swings, so many washing machines, so many steam engines, mousetraps, and artificial limbs, all variations on a theme—we catch a glimpse of the utter delight of the inventors’ minds in coming up with their own versions: “useful,” though to whom and for what may not be any of our business, novel,” yes, but above all, “different.” That spirit of invention, crystalized in a state of mind, may not be due to the patent system itself, but the patent system miraculously helped preserve it by inducing inventors to record their inventions in these models, rather than leaving to future archeologists the task of digging out from the rubbles and heaps of the past signs of these inventions. And so, in that sense, they are a monument to an age and a free lesson to our own.

So salutations and respects to these Johann Sebastian Bachs in wood and metal, untiring improvers of the human condition, concretizers of ideas, and to Peter Cooper, Mechanic of New York, man of progress, their worthy companion, greatest among their leaders, whose 200th birthday we hereby celebrate.

PATENT NO. 271,952

T. B. Turley, Inventor 1883

“I claim as new and desire to secure by Letters Patent—
The combination, with the open-bottomed trap-body A, placed over a vessel of water, B, of the tilting platform C and the vertically-sliding bait hook H J, as and for the purpose specified!”

