

# THE CRYSTAL PALACE AND ITS LESSONS

Horace Greeley (1811–1872), Editor of the New York *Tribune*

November 1851

The Crystal Palace, with its contents and purposes, was the clearest expression yet given to the spirit and aspirations of our time—aspirations not wholly utterable nor even comprehensible as yet, but sufficiently so to demand and reward our deepest attention. That Palace was the first edifice ever built for and consecrated to the uses of Universal Industry. It was the first structure ever devoted to the advancement and diffusion of the useful arts throughout the world—the first in which, to the greatest extent consistent with individual selfishness, the arcana of skill and production were thrown open to all mankind, with an express invitation, “Come hither, and see how the most successful workers accomplish their ends, and learn to rival or excel them if you can.” Herein was assembled the first general convention or council of Captains of Industry—the first practical Peace Congress ever held. Magnificent in conception and most triumphant in execution, this grand and fruitful enterprise deserves something more than the journalist’s fleeting paragraph. We cannot waste the time that we devote to its contemplation, even though the speaker should succeed no further than in drawing your attention to the subject, leaving it to be pondered unaided, unembarrassed, by his crude and hasty suggestions.

Who first proposed a grand Exposition of the Industry of all Nations at London it were hardly worthwhile to inquire.... It was a natural sequence of the profound peace everywhere prevailing—of the all-pervading spirit of enterprise generated by commerce, of the rapid march of discovery and invention, of the steady growth and at length realized importance of the useful arts....

Nor is it worthwhile to attempt adjusting the measure of credit due respectively to Paxton and to others, for the idea of the Crystal Palace and its consummation. A solid, rather heavy, North-of-England horticulturist, employed in overseeing the Duke of Devonshire’s extensive gardens and conservatories, has a new tropical plant confided to his charge, which, by a perfect knowledge of his art and an unbounded command of means, he induces to vegetate and flourish in that high latitude—of course, in an artificially fervid soil and under shielding glass....

The first of May 1851 was a happy day for London. Her skies had relaxed something of their habitual sullenness to usher in the pageant whereby the Sovereign of the Realm, surrounded by her chief councilors and grandees, was to inaugurate the first grand Exhibition of All Nations’ Industry. The rain, which had dripped or pattered almost or quite daily for weeks, held up the evening before and promised not to return for this whole May Day—a promise which was only broken by a slight shower at noon, too late to mar the interest or pleasure of the festival. At an early morning hour, a strong current of human life set westward from the city proper toward Hyde Park and, long before the doors of the House of Glass were opened, they were surrounded by eager groups, though no admission was purchasable save at the cost of a season ticket—over fifteen dollars. Even thus, some thirty thousand enjoyed and swelled the indoor pageant, while perhaps ten times as many gazed from the parks and streets at the meager procession outdoors which escorted the Queen from her palace of Saint James to the airier, richer palace of the working millions, the hall of vastest prophecy....

So much of the Crystal Palace and its contents. And now of its lessons. I rank first among these that of the practicability and ultimate certainty of universal peace. There have been several amateur peace congresses, after a fashion, but I esteem this the first satisfactory working model of a peace congress. The men of the sword and their champions tell us that nations will not submit their conflicting claims and jarring interests to the chances of arbitration; but here they did it, and with the most satisfactory results. Individual heart-burnings there must ever be; cases of injustice, neglect of merit, and partiality there probably were, but as a whole the award of prizes at the Fair was discriminating and satisfactory. If the representatives of rival nations there assembled had set to fighting for the honor and credit of their several countries, hired all the bravoos and marketable ruffians they could find to help them, run in debt for more than they were worth, and finally burned up the Glass Palace with all its contents in the heat of the fray—who imagines that the result would have been more conclusive and

satisfactory than it now is? Yet the contrast between the settlement of national differences by war and by arbitration is as favorable to the latter mode as in the parallel case of rival pretensions to superiority in art and industry....

But the Crystal Palace has other lessons for us than those of political economy—it has social suggestions as well. Here are hollow brick, destined, I think, to supersede nearly all others, saving half the expense of solid brick for material and transportation, being far more quickly and cheaply burned, far more easily handled and laid, rendering houses entirely free from dampness, less susceptible to Summer's heat and Winter's cold, while proffering new facilities for warming, ventilation, etc. The invention and diffusion of this brick alone seem to me worth to mankind the cost of the Exhibition.

Here, too, is [Pierre] Claussen, with his flax discoveries and processes whereby the entire fiber of the plant is separated from the woody matter of the stalk and rendered as soft, fine, white, and tractable as the choicest sea island cotton, which it greatly resembles; while, by a little change in the mode of preparing it, it is made closely to imitate linen, cotton, or woolen, and to blend freely in the same web with either. The worth of this discovery to mankind can hardly be over-estimated. Here, too, is his circular loom, steadily weaving bags without a seam, and capable of infinite varieties of practical application.

Here is McCormick, with his masterly reaper, cutting as clean as Death's scythe, and almost as rapidly, so that the field of waving grain which the eye could scarcely measure in the morning has been transformed by it into a field of naked stubble before evening. Here is Ericsson, with his new caloric engine threatening to reduce steam to its primary insignificance...

A kindred improvement is about to be inaugurated in the more extended and diversified employment of gas. A hundred models of gas stoves, gas burners, gas cooking ranges, etc. were exhibited at the Fair, each warranted (as usual) to save half the fuel and render treble the service of any other. Yet I was not able to designate any one of them as particularly meritorious, nor did the jury on this department award a premium to any. All seems yet crude and infantile in this field of invention. Yet the study of the various models and contrivances for gas-burning there presented fixed me in the novel faith that gas is ultimately to be not only the main agent of illumination, but the chief fuel also of all cities and villages; that the time is at hand when the head of a family, the solitary lodger, requiring either heat or light will simply touch a bell in his own room and be supplied with the indicated quantity of gas, whether for culinary purposes, for warmth, for light, or all together; and that thus the cost, the trouble, the dust, of making fires in all parts of a building, carrying fuel thither and removing ashes therefrom will be obviated; and a single fire, constantly maintained, subserve admirably the purpose of them all, saving the labor and cost of five hundred wasteful kindlings and clearings, beside affording heat at the moment it is wanted, and stopping its consumption the instant the want is satisfied....

On every side the onward march of invention is constant, rapid, inexorable. The human reaper of thirty years ago finds today a machine cutting grain twenty times as fast as ever he could; he gets three days' work as its waiter where he formerly had three weeks' steady harvesting. The work is as well done as of old, and far cheaper, but his share of the product is sadly diminished. The planing machine does the work of two hundred men admirably, and pays moderate wages to three or four. The sewing machine, of moderate cost, performs easily and cheaply the labors of forty seamstresses, but all the seamstresses in the world probably do not own the first machine. And so muscular force, or mere labor, becomes daily more and more a drug in the market, shivers at the approach of winter, cringes lower and lower at the glance of a machine-lord or landlord, and vainly paces street after street with weary limbs and sinking heart in quest of "something to do."

The only effectual remedy for this deplorable state and still more deplorable tendency is found, not in destruction but in construction. Not in anarchy and war on the rights of property, but in order and the creation of more property by and for the poor. Not in envy and hatred of the rich, but in general study and imitation of the forecast and frugality by which they were made rich, which are as potent this hour as they ever were and which wise co-operation will render effective for the poor of today.... Labor working *against* machinery is inevitably doomed,

as the present condition of the hand-loom weavers all over the globe sufficiently attests. Labor working *for* machinery in which it has no interest can obtain on the average but a scanty, precarious, and diminishing subsistence, while to Labor working *with* machinery which it owns and directs there are ample recompense, steady employment, and the prospect of gradual improvement. Such is one of the great truths confirmed by the lessons of the Crystal Palace.

Another truth forcibly taught there is that of the steadiness of the march of invention and of the infinite capacity of the laws and forces of Nature to minister more and more readily and amply to the sustenance and comfort of Man. We are obviously as yet on the bare threshold of chemical discovery and mechanical contrivance for the benefit of Man. The inventor of the steam engine still lived within the memory of many of us; yet even he never dreamed of the stupendous improvements already made on his invention, and the infinite adaptations to human wants of which it is fully proved susceptible.... But, though the capacities of Steam are not half exhausted, we grow dissatisfied with its performance and impatient of its conditions; we demand its power without its weight, its bulk, its cost, its explosive tendencies, or rather those of the elements from which it is evolved—and electricity, air, gunpowder, and other potencies are analyzed and interrogated in quest of the most advantageous substitute—a search which will ultimately achieve success. The only question is one of time....

Nor can we hesitate to class among the lasting benefits of this Exhibition the wider and deeper appreciation of labor as a chief source of human enjoyment and a ground of respect and honor for its votaries.... Here were tens of thousands gathered daily to study and admire the chosen products of the loom, the forge, the shop, the studio, nine-tenths of them from no other impulse than that afforded by the pleasure and instruction found therein. Can all this sink into the ground and be forgotten?... Shall not the dukes, the lords, the generals, the honorables who met from day to day to inspect, scrutinize, compare, and judge the rival products of England, France, Germany, and America, in order to award the palm of excellence to the worthiest in each department—who severally felt a thrill of pleasure when a countryman bore off the palm and a pang of disappointment and chagrin when none such was found entitled to commendation—shall they not henceforth hold in juster esteem the sphere of creative art wherein such trophies were lost or won? I cannot doubt the beneficent influence of this Exhibition, both in inspiring workers with a clearer consciousness of the quiet dignity of their own sphere and in diffusing, deepening a corresponding appreciation in the minds of others. If so, who shall say that the Great Exhibition was held in vain?

Yet one more lesson: The World's Fair shall teach us the cheering truth that there is rightfully no such thing as "Over-production", or a glut in the labor market. There may be mis-directed, wasted, useless, or worse than useless industry, like that devoted to the fabrication of implements of gaming or intoxicating beverages, but of the labor and skill devoted to the production of whatever is needful, is tributary to Man's physical sustenance, intellectual and moral culture, or material comfort, there are not and cannot be too much.... Not until every family shall be provided with a commodious and comfortable habitation, and that habitation amply supplied not only with food and fuel, but with clothing, furniture, books, maps, charts, globes, musical instruments, and every other auxiliary to moral and intellectual growth as well as to physical comfort, can we rationally talk of excessive production. There is no such thing as general over-production, and can be none. Immense as the collection of useful products which the Crystal Palace enfolds, it is yet but a drop in the bucket when compared with the far vaster aggregate required to satisfy the legitimate wants even of Europe alone, though that is by far the best supplied of the four quarters of the globe.... There is at no time a lack of employment because no more needed work remains undone, but only because the machinery of production has not yet been so adjusted and perfected as to bring the work and the workers into their rightful and fruitful relation.

But it is time the World's Fair were closed, or at least this meager account of it. The year 1852 has sterner work in hand, in presence of which this wondrous bazaar would seem out of place and incongruous. Haul down, then, those myriad banners, now streaming so peacefully from its roof in the common breeze and flapping each other so lovingly—they shall full soon be confronted in the red field where the destinies of Mankind must be decided, the liberties of nations lost and won. Roll out these lumbering cannon, sleeping here side by side so quietly,

uncharged, unmounted, the play-things of idle boys and the gazing-stock of country clowns, who wonder what they mean; their iron throats shall tell a fearful tale amid the steadfast ranks and charging columns of the battle Summer before us. Gray veterans from many lands, leaning on your rusty swords and stirring each other's recollections of Badajoz, Austerlitz, Leipsic, and Quatre-Bras—shake hands once more and part, for the skies are red with the gathering wrath of nations, and airborne whispers that Kossuth<sup>1</sup> is once more free are troubling the sleep of tyrants.

Ho! Royal butcher of Naples! You would not let your subjects visit or enjoy the Exhibition of 1851; rest assured that they will bear a part, and you with them, in the grander, vaster exhibition of 1852. False juggler of the Elyse Bourbon! Beware the ides of May and learn, while not too late, that Republican France has other uses for her armed sons than that of holding sacerdotal despots on their detested thrones. Kingly perjurer of Prussia! You have sworn and broken the last oath to observe and maintain a liberal constitution to which your abused and betrayed people will ever hearken from your lips. Prepare for a reckoning in which perfidy shall no more avail you! Grim Autocrat of the icy North! The coming summer has work in store for your relentless legions, not alone this time on the Danube, but on the Rhine, the Oder, the Vistula, as well.

Tear down, then, this fragile structure of glass and lath, too slight to breast the rugged shocks of the whirlwind year before us. Ere we meet again as workers to test the fineness of our rival fabrics, the strength of our metals, the draft of our plows, we must vindicate by the mailed hail our right as men to speak, and think, and be. Before us lowers the last decisive struggle of the millions of Europe for justice, opportunity, and freedom; let not its iron hail appall, its crimson torrents revolt us, for the bow of promise gleams through its lurid cloud and the dove of Peace shall soon be seen hovering over the assuaging waters, fit harbinger of a new and more auspicious era .for freedom and enduring concord—for Industry and Man!

Horace Greeley, *The Crystal Palace and Its Lessons* (New York: 1851)

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<sup>1</sup> After the Revolution of 1848 toppled the Hungarian government, Lajos Kossuth (1802–1894) became the leader orator of the short-lived Hungarian republic. After the Austrians crushed the rebellion, Kossuth fled to England.