by the use of them collected into the public treasury, it would have been sufficient to have discharged the public debt, defrayed the expense of government, and freed the people of the United States from taxes.

The report of the U.S. Senate Committee on Roads and Canals (1816)

The catastrophic results of the War of 1812 demonstrated the folly of the laissez faire *attitude demonstrated by Presidents Jefferson and Madison. The American System faction within Congress therefore presented their argument for a dirigist development of infrastructure, a policy which was not to reach complete fruition until the inauguration of John Quincy Adams in 1825.*

That a view of the extent of territory, the number and magnitude of navigable lakes, rivers, and bays; the variety of climate, and consequent diversity of productions embraced by the United states, cannot fail to impose the conviction, that a capacity exists in this country to maintain an extensive internal commerce. The variety of productions peculiar to the several parts, invites to the prosecution of a commerce of the most interesting kind. A commerce internal, subject solely to the regulations of the country, not dependent on, or materially affected by the vicissitudes of foreign competition, or collisions; the profits on which will rest in the country, and make an addition to the wealth of the nation. Such a commerce will in its natural tendency, create interests and feelings, consonant with the great interests of the community. Any practicable scheme, therefore, for the improvement of roads and inland navigation, having for its object the encouragement and extension of a commerce so beneficial, has strong claims to the attention and aid of a government, constituted to promote the general welfare.

Such improvement executed on an extensive scale, would unquestionably contribute to the general interest, and increase of wealth in the nation; for whatever tends to accelerate the progress of industry, in its various and particular branches, or to remove the obstacles to its full exertion, must, in the result, produce that effect. The contemplated improvement in roads and canals, by extending the communication for commercial and personal intercourse, to the interior and distant parts of the Union, would bestow common benefits, and give an enlarged faculty to the great branches of national industry, whether agricultural, commercial, or manufacturing.

The agricultural products, which at present from inconvenient distance, their weight, or bulk, are unportable, could then be carried to a distant market; the reduction on the charge for transportation would become an addition to the price; and a ready market, and increased price, enhance the value of the lands, from which the products were drawn.

To insure to the pursuits of useful industry in a nation, a state of the greatest prosperity, it is only necessary to protect their interests from foreign aggression, to leave them unrestrained by artificial provisions, and to remove, or meliorate, the natural obstacles to their exertion, by public works, rendering conveyance practicable and cheap.

Such public works, while they are calculated to subserve the pecuniary interests of every industrious class of the com-

Erasmus Peshine Smith: 'Man is lord of nature'

In 1858, Smith wrote his A Manual of Political Economy *(1858) as a means of popularizing the American System of economics, as opposed to the "English economists." In 1871, Smith was officially appointed an adviser to the Japanese Meiji government's Foreign Ministry on issues of credit, tariffs, education, and bilateral treaty arrangements with the western powers. Smith's work was decisive in the passage of acts that were the basis for the industrial revolution that occurred in Japan during the period of 1876 through 1886. The Japanese National Bank Act (1872) and the Gold Notes Conversion Bonds Act (1873) were explicitly modeled on the Hamiltonian notions of credit and national banking. The educational reforms that were enacted during this period were specifically based upon Smith's ideas of creating scientific and technological optimism in a system of universal education that was to become integrally attached to Japanese industry and its development.*

Ironically, Smith's work is still in print in Japan and he is more widely known there than in the United States. As his introduction beautifully displays, the idea that the real wealth of a nation comes from the multiplication and the intellectual, moral, and physical development of its population is the real basis upon which a science of economics must be constructed. Such a science is one of hope and progress, rather than the "Dismal Science" of the British apologists of usury and genocide. From the introduction to A Manual of Political Economy:

Starting from the central highlands of Asia—the loftiest habitable region of the globe, where the great rivers take their rise that flow into the Frozen Ocean, and the Bay of Bengal, the Mediterranean, and the Chinese Sea—the human race has descended in an ever-widening flood, to spread over the earth and to subdue it. Sacred history and Hindu tradition point to the same region as the cradle of mankind. They are confirmed by the reflection, that it must have been the first to emerge from the primal waste of waters; and the belief, that here it is that wheat and

barley are of indigenous growth, and that the animals run wild who have been tamed by man, and have followed him in his migrations through every clime. . . . As the different offshoots of the race descended to the lower tracts that the receding waters gave up to culture, and as each little tribe waxed in numbers, it has taken a higher social organization, with a vast increase in the command of the individual members over the elements of physical comfort, a vast accession to their realized property, and to their power to elaborate yet more from the materials and the forces which nature gives without stint to those who know how to ask her. With diminished toil for the satisfaction of the material wants, and diminished fear of inability to meet them in the future, man has acquired leisure for the cultivation of his intellect, and increased freedom to indulge the social affections, which lift him out of the domain of selfishness, soften and refine his nature, and make it capable of moral improvement. Physical, intellectual, and moral progress, inseparably interdependent, is the historical fact characteristic of our species, and union in societies, its observed condition.

To investigate the laws which explain man's attainment, through association, of enlarged power over matter in all its forms, and the development of his intellectual and moral faculties, in virtue of that power, is the object of Political Economy. . . .

Every accession to knowledge diminishes the catalogue of things thus regarded as outside the pale, within which certain effects are confidently anticipated to result from given causes, and arranges them in relations with each other, no longer imagined and fluctuating, but distinctly seen to be constant and invariable. Knowledge gives power, because when a law is once perceived and understood man can conform to it, for the purpose of producing an effect he desires, by arranging the ascertained causes in that method of grouping which the law dictates, instead of wasting his energies and missing his object, in blind endeavors to obtain it in a way other than that which the Lord of Nature has appointed. . . .

Is it possible to construct a science of Political Economy? In other words, are there laws grounded in the constitution of things and of man, fixed and invariable succession of effects determined by the causes which precede them,—regulating the progress of men in association with each other, in extending their dominion over matter and their concurrent improvement in intellect and morals?—and are these laws discoverable? What and how many of them have been discovered, is a different question. What is unquestionable is, that there are professors of what is styled a science of Political Economy, teaching in the schools and through the press a body of precepts, tending more or less to the object we have assigned as that of its investigations. On the other hand, it is denied that there is yet such a science. . . .

[The British System] would not, perhaps, be Political Economy such as we have described it. It would be, as it has been called, "the Dismal Science," instead of a science of Progress and Hope. . . .

The strongest instinct of man is that which leads to the increase of population. The European Economists, since Adam Smith, have very generally believed, that the laws of matter were such as to make the repression of this instinct essential to the prosperity of communities. Their system presents a controlling law of humanity as conflicting with the immutable laws of brute matter. It is impossible for them, upon this basis, to construct a science which contemplates the human faculties as acting freely in accordance with their own laws; and to contemplate them as acting under partial and uncertain restraints, is to clog the problem with an insurmountable difficulty. (In reading certain Economists, one might be led to think that the products of industry were not made for man, but that man was made for the products.) If the difficulty is purely suppositious we can proceed with good hope, regarding man as he is, and trusting that we may safely infer the uniformities of the future from the uniformities of the past. . . .

We are to regard man then as the lord, not the slave of Nature, but no arbitrary lord—as acting in accordance with fixed laws of his own being, all of which exercise their due force, and none of which are suspended, any more than the law of gravitation—as securing freedom for that harmonious exercise of all his faculties, in which happiness consists, by means of the intelligence which enables him to apprehend the inevitable necessity that the physical laws must operate, and teaches him how to avoid opposing the irresistible, and how to make it work for him. . . .

munity, are highly important in a political point of view. The citizens, in the most remote parts, would be brought into close connexion, by a facility to commercial and personal intercourse. The common interests and identity of feelings thence arising, would, as a cement to the parts, bind together the whole, with the strong bond of interest and affection, giving stability and perpetuity to the Union. And as a means of security, tend to increase our capacity for resistance to foreign aggression by rendering less expensive, and more effective, our military operations. The disadvantages experienced, and heavy charges incurred, during the late war, for want of inland navigation along the seacoast, connecting the