MANUFACTURES
OF
THE UNITED STATES
IN
1860;
COMPILED FROM THE ORIGINAL RETURNS
OF
THE EIGHTH CENSUS,
UNDER THE
DIRECTION OF THE SECRETARY OF THE INTERIOR.

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PRELIMINARY VIEWS.

MANUFACTURES.

"In places wherein thriving manufactories have erected themselves, land has been observed to sell quicker, and for more years' purchase, than in other places."—LOCKE.

NATURE, in the wide dominion allotted to man, has given him the means, in some latitudes spontaneously, but everywhere through labor, of supporting life from the products of the soil, whilst he has been invested with the faculty of reason and invention, whereby to discover the secret agencies of the material world, and so direct them as to change its products into new forms—forms of utility, endless variety, and beauty—all ministering to the end of promoting the comfort, prosperity, and happiness of our race; and these are classed by political economists under the general name of Manufactures.

The agriculturist opens the earth, and so disposes the seed that, aided by heat, moisture, and the silent but ever active agencies of nature, he secures the reward of his diligence and skill.

The preceding volumes of the Census of 1860 indicate the population in that year of this Empire-Republic, and the agricultural products which the labor of our people, in the diversity of our soils and climate, has brought from the bosom of the earth in such abundance as not only to support thirty-one and a half millions of inhabitants in 1860, but with an immense surplus for foreign markets.

The statesman or historian, in glancing over the past seven or eight generations to the period when feeble settlements were first established on these then barbarous shores, and in an unopened wilderness, will trace the causes of our progress and advance in civilization. He will find in our Constitution and laws security to persons and property—the incentives to individual enterprise.

It has been forcibly said that the "accumulation of capital which has taken place in England during the last hundred years, and which, besides enabling that nation to defray, with little difficulty, the cost of so many protracted and destructive wars, has covered the land with cities and all sorts of improvements, and the ocean with ships, would either not have taken place at all, or but in a very subordinate degree, had there been any serious doubt about its present or future security, or about the ability of the owner to employ it, or bequeath at pleasure."

These elements of steadiness and security are found in our political system, the spirit of which is against monopolies, and favors freedom of industry and trade. Our policy is in no respect exclusive in dealing with great industrial interests; it invites competition at home and from abroad, encourages immigration, conceding to foreigners, after a limited period of residence, the privileges of a native-born citizen. It opens up to all the vast fields of the public domain, the common inheritance of our people, and presents a surface of every variety of climate and soil equal to the support of the human race, according to the ratio to a square mile of the Belgian population. From these broad acres liberal donations have been conceded for the establishment of schools, colleges—agricultural and mechanical—universities, and works of internal improvement on a stupendous scale.

We have within the bounds of the Republic the raw material for almost every branch of manufacturing industry. In veins of gold and silver are found wealth unmeasured and incalculable. These,
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the universal representatives of values, predominate in intrinsic worth over the labor in any form bestowed upon them in manufacture. The Union also holds in its territory the useful metals of iron, copper, lead, and tin, of untold extent, in which labor constitutes the chief value, as shown in the diversified forms in which skill has fashioned these metals, from the mainspring of a watch, where the artisan's genius imparts a hundred-fold value over that of the raw material, to articles of domestic use, and from these up to the complex and gigantic machines which do the manual labor of hundreds of thousands of men. Other products, as sand and soda, of inconsiderable value in their crude state, are capable of transmutation into beautiful and useful forms, subservient to domestic use—in the adornment of temples of worship, in stained and colored glass of living hues, and in other forms of excellence and taste, embellishing palatial edifices, and giving light and comfort even to the lowly cottage; then in the form of telescopic power, whereby the eye of science watches the sidereal procession by land and sea, and realizes the value of the teachings of these celestial objects. Even rags, valueless in their crude state, the skill of the manufacturer transforms into paper, the medium of recording the doings of man in social and business life, and perpetuating, in written forms, the results of scientific, philosophic thought, the rise, progress, decline, and fall of nations, the means whereby the people, through the press, are continually in council in our own land, and the great truths of natural and revealed religion are everywhere disseminated. The man of observation sees our prosperity in the driving of the ploughshare over wide fields between the two great oceans of this half continent, and from the inland seas of the North to the Tropics; in establishing over two millions and forty-four thousand farms, and in creating cities rivalling some of the proud capitals of Europe which had been founded a thousand years ago. These, with towns and villages, number twenty-eight thousand, and contain a fraction less than five millions of houses. Our manufactories number one hundred and forty thousand four hundred, besides machine shops of great capacity and value, the former converting the raw material of wool, cotton, hemp, hair, hides, and other products, into the multitude of forms known to civilized life, the latter creating machinery of immense strength, of exact movement, huge engines of labor, moved by the irresistible force of steam, indicating the intellectual power and skill of our citizens, whilst our shops and shipyards are continually renewing and increasing the commercial and naval tonnage. The industry of our people has linked our cities, manufactories, and machine shops by lines of railway much greater in lineal extent than the circumference of the globe, and connected by the electric telegraph the most distant points of the republic. Not content with these triumphs of manufactures and machinery, the genius of man has demanded of the earth her oily treasures, and, by powerful engines, is enriching the country by securing this valuable product, the element not merely of light, but of permanency and lustre in color in the manufacture of woollen and other fabrics.

Dr. Adam Smith, in his treatise on the "Division of Labor," states that "the most opulent nations, indeed, generally excel all their neighbors in agriculture, as well as in manufactures; but they are eminently more distinguished by their superiority in the latter than in the former."

This declaration of the great political economist is illustrated in the vast wealth brought to the British shores by manufacturing instrumentality.

In 1837, five and a quarter centuries ago, the English were nothing more than shepherds and wool-sellers. An act of Parliament in that year interdicted the exportation of wool, and the use of any but English cloth, forbidding the importation of foreign cloths, yet inviting foreign manufacturers to domiciliate in the country. The wonderful progress and wealth of that nation are traced from the time
of the establishment of manufactories in the kingdom, and to the use of their machinery, the aggregate capacity of which is equal to the manual labor of the whole human race.

What strides in that direction have the United States taken in the last half century!

In the year 1810, by order of the Secretary of the Treasury, the returns of marshals in relation to our manufactures were then arranged by a skilful agent. The results are, that the goods then manufactured by the loom from cotton, wool, flax, hemp, and silk, besides instruments and machinery manufactured—hats of wool and fur; manufactures of iron, gold, silver set-work, lead; of soap, tallow candles, wax, spermaceti, and whale oil; of hides, shoes; of wood, oils, refined sugars, paper, marblestone, slate, glass, earthen manufactures, tobacco, dye-stuffs, drugs, paints, cables, and cordage—

Amounted to ........................................ $127,694,602
Omitted articles, or those imperfectly returned, estimated at .......... 45,068,074
To which add value of "doubtful articles," having connection with agricultural pursuits, cotton-pressing, flour and meal-mills for grinding grain, &c., estimated at ........ 25,850,795

Making, in the year 1810, the aggregate manufacturing values of ........... $198,613,471

What were the values of this branch of American industry in 1860? The exact figures, according to the Census tables, are $1,885,861,676.

To this amount, obtained from actual census returns, let there be added a moderate estimate for omissions, and for non-return of minor and inconsequential establishments, and the aggregate values, in 1860, of our manufactures, reach the enormous sum of two thousand millions of dollars, having been multiplied ten times within the fifty years ending in 1860, whilst our population in the same period has increased four and a half fold.

These amazing results, whilst measurably affected by the wealth of our soil, its successful tillage and abundant harvests, are yet directly traceable to the science, artisan-skill, industry, and energy of the American people in the great department of manufactures; results, realizing to the nation the truth hereinbefore mentioned, that the most opulent nations are more distinguished by their superiority in manufactures than in agricultural interests; and yet, in the ratio in which the former are increased, is the landed estate enhanced in value—these great interests reciprocally acting upon and advancing each other.

With unlimited raw material at hand to supply almost every variety of manufactures; with a railway system completely connecting every important point east of the Mississippi, and rapidly extending so as to carry the work to the Pacific; with a line of river and canal communication reaching the principal interior marts of the country, we have the elements and the means within ourselves of a domestic trade of surpassing value; and, with a river and ocean commerce equal to thirty thousand vessels, the United States have become a formidable competitor for the lion's share of the trade of the world.

Carnot, the war minister of France, the man who "organized victory," in resisting, in 1802, the decree creating Napoleon consul for life, spoke generally of the instability of republics, tracing the same to the fact of "being hastily put together in the midst of civil commotions, enthusiasm always presiding over their establishment." But that distinguished statesman singled out from these the American republic. "One only," said he, "has been the work of philosophy." Organized in the calm of peace, this republic subsists, full of wisdom and vigor; the United States of North America present the phenomenon, and their prosperity constantly receives accessions, which excite the wonder and admiration of other nations.
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Thus was it reserved for the New World to teach the Old that "nations may tranquilly exist under the dominion of liberty and equality."

Such was the Union at the opening of the present century, in the infancy of its political being. What has it accomplished since? It has advanced with gigantic strides towards its high destiny in the three elements of a nation's power—agriculture, manufactures, and commerce. The results are recorded in the census volumes of 1860; but it has gone further: it has successfully quelled the greatest revolt known to ancient or modern times.

The insurgents were fully prepared, having twelve millions of people, a vast territory, genial climate, and united councils. They were confident of supremacy in the art of war, and encouraged by partial successes. The national Executive, on the other hand, was stripped of almost every governmental resource except the moral power of the law and constitutional administration, and it was not until exhaustion on the one side, and the constant and rapid development of resources on the other, quickened by unflagging patriotism, that the strength of the general government began to tell in favor of the national cause, and that even sanguine patriots hoped for success.

Without our manufacturing capacities whence could we have drawn the materials of war? Not from abroad, for there was hostility of sentiment. Who would have taken our loans? Not the capitalists of England or the Continent, for there the sympathy generally was with the other side. No, it was manufacturing and mechanical resources and the granaries of the West which enabled the republic to arm, subsist, and pay immense armies, and create iron-clad fleets to meet the emergency. It was mainly for the want of these, and not for lack of courage, will, or skill, that the revolt failed. A more striking illustration of the value and power of such resources is not to be found in history; and from it, now that the cause of discord is at an end, the integrity of the Union vindicated, and the reign of peace begun, all sections of the country, States, counties, and parishes may derive lessons of wisdom and profit in regard to the value of manufactures and the mechanic arts.

In glancing at the results incident to the development of manufactures, the mind naturally rises to the contemplation of other and varied relations of our people.

Covering, as our country does, the whole belt of the northern temperate zone on the continent, including within its out-boundaries an area of three and a quarter millions of square miles, equal in extent to the arable surface of the British empire, with all its Asiatic, Australian, American, and island possessions, and having a coast line by river, lake, and ocean of twenty-nine thousand three hundred and twenty-eight miles, our institutions are capable of and point to indefinite extension. The popular power is centralized for the security and promotion of national greatness, prosperity, and unity, whilst localized for State, municipal, and intellectual advancement, both defined and united by a common language, ancestry, history, climate, natural and artificial boundaries, with means of rapid and continual intercommunication. Ought we not, therefore, at the National Capital, now, to lay the foundation of an institution which shall annually present complete statistical information of the progress of our people in all the pursuits of life? Such an institution should also gather, into separate apartments or divisions, designated by the names of the States and Territories, a complete representation of their boundaries, subdivisions, history, progress, and advancement in the arts and sciences; their towns, cities, and villages; laws, institutions of learning; their agricultural, manufacturing, and mineral products; to the end that all who, for pleasure or business, visit the centre of political power may not only see the greatness of the nation through its public buildings, departments, and institutions, but may also see and learn as accurately of each State, its people and productions, as could otherwise be seen and learned by the most extended travel and observation.
In such an institution the representatives of the people and the members of the government could and would be educated to a better understanding and appreciation of the value of the Union, and of the vast and varied interests over which they are called to preside; and our own citizens, and immigrants from distant lands, would study our progress and learn to appreciate the extent of our country—the industry, enterprise, and intelligence of its people.

It would be the great republic in miniature, presided over by the national statistical commission, where would be aggregated annually all important facts connected with our industrial and intellectual pursuits and progress, to be disseminated through the press to the advantage of every State and each portion of the republic, and to our people individually. Here our progress in all that concerns art, science, or use could be studied in aggregate or in detail, by figures or example, and demonstrated by products and results.

It would be a perpetual national and State industrial and intellectual exhibition. It might be called the "National and State Art and Industrial Academy," or any other appropriate name.

Such an institution may be established with little cost to the government, other than the preparation of suitable apartments and the payment of a small force of competent men to be engaged in gathering, systematizing, and publishing an annual statistical report of our agriculture, manufactures, and population. Information for other years than those of the decennial enumeration required by the Constitution could be obtained through the various local federal officers without cost, except for blanks, and with greater accuracy as to all taxable articles than has ever yet been obtained through the census returns. This would be published so promptly as to be available and valuable to business and public men within each year.

The contributions to the respective State divisions or departments would be promptly and freely made by States, corporations, and individuals, as it would become the best means of advertising the interests of any State, or the productions, industry, art, or learning of any individual or association throughout the country.

In the years of the decennial census the collection and arrangement of statistical tables would be on a more extended scale, and consequently involve greater expenditure than the intermediate years; but being thoroughly systematized, and directed by experienced and earnest men, the greatest possible economy would be attained, and the results promptly presented to the country, while the information was still valuable in other than a historical sense.

The census of 1860 affords a proper and suitable starting point for the proposed system, and will become of historic interest and importance, in view of the great events and changes which immediately followed its survey of the country. The facts presented by this compilation were gathered near the close of a period of long and uninterrupted domestic tranquillity, and will, when another such compilation shall be made, afford a satisfactory basis for ascertaining with reasonable accuracy the effect of this protracted and desolating war upon the material, moral, and intellectual condition of our country.

A measure like this, when adjusted and perfected by the lights of experience, would furnish materials of the highest interest to our citizens, creating emulation, commendable rivalry, operating as incentives in the progress of civilization, inspiring our people with confidence in the strength and perpetuity of our institutions, and demonstrating their complete adaptation to all the ends of good government.

J. M. EDMUNDS,
Commissioner General Land Office, and in charge of the Census.
WASHINGTON, D. C., August 14, 1865.