FIRST ANNUAL REPORT

OF THE

DEPARTMENT

OF

STATISTICS AND GEOLOGY

OF THE

STATE OF INDIANA

1879.

TO THE GOVERNOR.

OHIO STATE
UNIVERSITY

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THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
GOVERNOR'S OFFICE.

Received March 1, 1880. Examined by the Governor and transmitted to the Secretary of State to be filed and preserved in his office and published as may be ordered by the Commissioners of the Public Printing.

SAMUEL R. DOWNEY, *Secretary.*

Filed in my office March 10, 1880.

J. G. SHANKLIN,
Secretary of State.

OHIO STATE
UNIVERSITY

DEPARTMENT OF STATISTICS AND GEOLOGY,
INDIANAPOLIS, March 1, 1880.

To His Excellency, JAMES D. WILLIAMS,
Governor of Indiana:

SIR—Herewith is submitted the first annual report of this department, as provided by act of the General Assembly of the State, approved March 29, 1879, "for the establishment of a State Bureau of Statistics and Geology; creating the office of Chief of such Department," etc.

Respectfully submitted,

JOHN COLLETT,
Chief of Bureau.

191695

ROSTER OF THE BUREAU.

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THE STATE OF INDIANA.

GENERAL INFORMATION FOR INTENDING IMMIGRANTS AND INVESTORS OF CAPITAL—SOIL, PRODUCTS, STONE, COAL AND NATURAL AND COMMERCIAL ADVANTAGES.

In the presentation of this first report of the Bureau of Statistics and Geology, it is proper that some statements should be made in regard to the general characteristics and advantages of the State. The following paragraphs, although containing much that is well known to old residents of Indiana, supply information which will interest non-residents, and prove serviceable in promoting the future prosperity of the State.

The State of Indiana is in the form of an irregular parallelogram, extending from the southern extremity of Lake Michigan and the State of Michigan on the north, to the Ohio river and the State of Kentucky on the South, with the State of Ohio for its eastern and Illinois for its western boundary. The average length from north to south is 246 miles, and its average breadth about 150 miles, with an area, exclusive of surfaces covered with water, of 33,809 square miles, or 21,637,760 acres. The surface is somewhat hilly in the southwestern parts, but all the central and northern portions are gently undulating or nearly level.

At the advent of the French explorers in 1702 this territory was a wilderness of heavy forests and grassy plains, occupied by nomadic tribes of savages, living in the valleys of the principal rivers, without domestic animals. Wild game, such as the deer, bears, birds, etc., was abundant; countless herds of buffaloes fattened on the natural meadows. These animals furnished food and clothing for the Indians.

The first territorial government was authorized by the ordinance of 1787, the great charter of free soil; the Territory of Indiana

was established by act of Congress May 7, 1800, when General William H. Harrison was appointed Governor.

In 1765 the population of the region now comprising the State was estimated at from 104 to 116 French families at Vincennes, Ouiatanon and the head of the Maumee river—say a total of 520.* In 1808 the white population in the same district numbered about 17,000.† The census of 1810 exhibited a population of 24,520, and there were in the Territory 33 grist mills, 14 saw mills, 3 horse mills, 18 tanneries, 28 distilleries, 3 powder mills, 1,256 looms, 1,350 spinning wheels; value of manufactures was $200,532, of which $150 worth only was by mill machinery.

In 1816 the population enumerated 63,897, a sufficient number to entitle the Territory, according to the fundamental ordinance, to admission as a State in the Federal Union, and during that year the State government was organized by the inauguration of Governor Jennings November 7, 1816.

At this date but few steamboats were in use. The principal mode of transportation was floating with the river current, or ascending by oars and pushing keel-boats with poles. The only roads were Indian trails. Commerce was impossible; for a long period the only articles of export were skins and furs of wild animals packed across the mountains on horses, until the large surplus found exit by the slow floating flat boats, down the Wabash and its tributaries, down the Ohio and Mississippi through the Indian country, a voyage of over 1,500 miles, to New Orleans and the Gulf of Mexico.

The forests of mighty trees were an impediment which required for each acre the labor of half a month to hew down, burn and prepare for cultivation; these obstacles were met and overcome by our pioneer fathers, while at the same time they protected with rifle and knife their frontier homes from the cruel savages. Within the period of three score and ten years allotted to man, within the knowledge and by the help of thousands of pioneers now surviving, the State of Indiana has grown from this humble beginning to the population, material wealth and progress tabulated in succeeding pages of this report, and especially contracted with six of the leading manufactories here tabulated:

*George Croghan's Journal.
‡Dillon's History, p. 435.

Six Leading Manufactories, 1879.

CLASSIFICATION OF MANUFACTORIES.	Number of Establishments.	Capital Invested.	Value Raw Material	Value of Manufac'ed Product.	Number of Employes.	Annual Wages Paid.	Other Expenses of Business.
Kingan's Pork House	1	$500,000	$8,000,000	$9,000,000	600	$230,000	$15,000
Cox & Fairbanks' Distillery	1	250,000	456,000	1,750,000	120	65,000	72,500
Hudnut's Hominy Mills	1	100,000	500,000	576,000	110	40,000	30,000
Studebaker's Wagon Factory†	1	3,000,000	1,250,000	2,550,000	955	468,000	50,000
DePauw's Plate-Glass Works	1	1,100,000	250,000	*1,000,000	1,000	450,000	150,000
Oliver Chilled Plow Works†	1	750,000	400,000	852,500	620	360,000	65,000
Total	6	5,700,000	10,856,000	15,728,500	3,405	1,613,000	382,500

*The value of the product was estimated by the census taker.
†Approximate statements from Indianapolis agency.

Population of Indiana January, 1820, *to* 1880, *With Per Cent. of Increase.*

Year.	Population.	Per cent. of increase.
1820	147,178	.....
1830	343,031	133.07
1840	685,866	99.94
1850	988,416	44.11
1860	1,350,428	36.62
1870	1,680,637	24.45
1880 (estimated)	2,052,163	22.10

The rapid increase of population at the admission into the Union was remarkable. It was not the result of chance, but due to the political and natural advantages of the young State.

During the Territorial Government, Indiana was a broad skirmish line; war was the rule and peace exceptional; the hardy riflemen from this region and adjoining States were ready at a moment's warning, or as often without official call, to march against the Indians and their bloody allies. The only roads were the military routes of defensive or avenging expeditions. Soldiers from neighboring States returning to their homes were filled with memories of the advantages of the region which they had battled to defend; they recounted to their neighbors marvelous descriptions of the new State; its fertile soil, wonderful production of corn, wheat, oats, etc., its native grasses, until they and many other emigrants decided to cast their lots in the fields of their late military

operations. A majority from the Eastern States embarked in boats at the head-waters of the Ohio, floated with the current to some tributary, up which their barges were propelled by human power alone.

Previous to this time lands had been disposed of by the General Government in large tracts or grants only, the proprietors surveying or subdividing the same by irregular natural bounds. Such surveys often overlapped so that titles were insecure and boundaries not certain. The Government determined to obviate this difficulty by surveying all the public domain before sale, under one general system. Two principal Meridian lines were established in the State running north and south from some fixed natural point, the first on the eastern boundary north from the mouth of the great Miami river, the second north from a point on the Ohio river 9° 29′ west from Washington; these are intersected at right angles by Base lines, the principal one for Indiana running west through the counties of Clarke, Washington, Orange, Dubois, Pike, Gibson and Knox. The country is then divided by lines parallel to the Meridian and Base lines into *Townships* six miles square, which are divided by established lines into *Sections* of one mile square, or 640 acres; and these are subdivided into quarter sections of 160 acres; such divisions are established by plain marks on trees in the forests, or by posts and mounds in the treeless districts. Ranges are divisions six miles wide counting east or west from the principal Meridian. Townships are numbered north or south from the Base lines. At first, lands were sold only by sections of 640 acres, but at an early date in the history of this Territory, the lands were offered for sale in tracts of 160 and 40 acres. Thus the title to lands was made certain, and at the low price of $1.25 per acre, farms were within the reach of any one who possessed fifty dollars. This gave a strong impulse to emigration, and was hailed as a blessing by men of moderate means.

The fertility of a soil is the surest promise of prosperity. The central States of the Union are comprised in a great valley. It is the valley of a continent, reaching from the Appalachians well toward the Rocky Mountains. During the glacial epoch a river of ice hundreds of miles in width advanced from the frozen North, planing down the irregularities of the surface, bringing with it immense quantities of bowlders, gravel, sand and clay, from the

paleozoic and crystalline beds of the North. "It is well known that that soil is most productive which has been derived from the destruction of the greatest variety of rocks; from this only is produced the due mixture of gravel, sand, clay and moisture necessary to form a good medium for the retention and transmission of nutritive fluids, be they liquid or aeriform, to the roots of plants."* At the close of the "Ice Age," as the glaciers withdrew, they left a vast bed of "boulder clay," composed of the comminuted materials of native and foreign rocks from every older strata, covering regions south of the upper lakes, for a space of 200 to 250 miles, to a depth of from 50 to 250 feet.

The soil of Indiana, consequently, is indicated by a mighty growth of giant trees and by the variety and quantity of its fruits and cereals, occupying as it does the heart of this area of ancient alluvion.

The surface of the glacial drift was left nearly level, but has since been modified by fluviatile and lacustral agencies, sorting the clays, sands, etc., so as to form generally a loose friable calcareous loam, deeply covering the gently undulating woodlands, plains and valleys. The great depth of the drift deposit allows it to act as a gigantic sponge, absorbing excess of moisture in the spring or winter, until the long sunny days of summer; thus insuring against any prolonged drought, and constituting a superior grazing district. For the perfect growth of grasses a rich soil and perennial moisture is required, conditions which do not prevail in many other States. Indiana is the native home of "Blue grass," *Poa pratensis*—the glory of our rich calcareous soils—an infallible "gold finder." It forms a permanent sward, thickening with age, so that with ten or twenty years the sod will withstand the hoof of heavy bullocks even in wet weather. It grows slowly under the snow of a cold winter, but bursts into new life with the first genial days of spring, carpets the earth with productive beauty through the summer, and, if reserved for winter, cattle, horses, sheep, etc., may be well kept, except in time of deep snows, on this food alone.

This advantageous soil invited the pioneer, and still exists to enrich present and coming citizens.

*D. D. Owen.

Crops of corn *(*maize*) range from 10 to 120 bushels per acre, according to cultivation and management—averaging over 30 bushels per acre. On fair fields corn is often raised by contract at 12 cents per bushel delivered in granaries, the contractor bearing all expense and work; net profits of crop from $7.00 to $10.00 per acre.

The current year (1879) wheat *ranges from 5 to 64 78-100 bushels per acre, averaging over 17 bushels per acre. Expenses for labor, seed, implements, harvesting (with self-binding reaper, now common), and threshing, $6 to $8.50 per acre; net profit about $7 per acre.

Crops of oats* range from 10 to 90 bushels, averaging in southern counties 20 and in northern 40 bushels. Cost of seeding, harvesting and threshing, $4 to $6; net profits from $3 to $5 per acre. Meadows produce from 1 to 2½ tons of hay per acre; average 1½ tons. Cost of mowing, care and stacking less than $1 per ton; profit from $4 to $8, according to locality of market.

Other crops, as potatoes, turnips, sugar corn, sorghum, buckwheat, rye, clover, etc., give good returns.

Apples, pears, peaches, grapes and the small fruits and berries are the home production of almost every farm, and so commonly abundant and cheap that none but an expert can afford to cultivate them for market sale.

Timber is too abundant; not more than one-half the tillable soil has been reduced to culture, according to assessors' returns.

The Indiana coal fields embrace an area of over 6,500 square miles, offering seven workable seams at a depth ranging from 50 to 220 feet, and averaging 80 feet below the surface; the seams vary in thickness from 2½ to 11 feet, averaging 4½ feet. The quality is

*NOTE.—Crops of 1879 as deduced from the reports of 627 Township Trustees (see table post), give the following average products for the State:

KIND OF GRAIN.	Acres Planted.	Bushels.	Bushels per Acre.
Wheat	2,578,710	44,753,208	17.35
Corn	3,837,853	115,575,888	30.11
Oats	861,282	19,445,043	22.58

fair to good, as shown by analyses in the Geological Reports; an area of 600 square miles in this field yields a superior block or "splint" coal, which is used in the blast furnace as it comes from the mine without coking. Our block coal is rich in carbon and remarkably free from sulphur and phosphorus, and well adapted to the preparation of Bessemer steel, etc. The abundance of coal and ease of access cheapen this fuel. It may be had on every line of railway at from 5 to 10 cents per bushel, or at from $1.50 to $2.80 per ton.

Indiana has inexhaustable beds of fire and potter's clay, brick clay, cement, lime, sandstone, paving stone and limestone of superior quality, with extensive mines of kaolin.

The State is traversed in every direction by a system of railways 4,819.17 miles in length, which, with the steamers on the Northern lakes and the Ohio river on the south furnish cheap and rapid communication. Many of the common roads are graveled or piked.

Indiana has a larger school fund than any State in the world in proportion to population, and schools and intelligence are the safeguard of a free people. Her school fund, school-houses, public buildings, bridges, roads and highways, churches, etc., have been built or constructed by taxation or donation. They constitute an immense commonwealth of accumulated capital, in which every new comer after a residence of six months, has a share. In some counties this fund amounts, as will be seen by the tables that follow, to a handsome sum to each acre of land, so that every person securing a farm with us, buys with his land an interest in this COMMONWEALTH.

In the newer regions of the west and south such public accumulations and improvements are yet to be made; they must be paid for by taxation, and our lands are cheaper from this point of view than farms in less favored regions as a gift.

In recapitulation, Indiana invites farmers to her rich soil, one-half of which is untilled. She has unoccupied fields of enterprise for more.

Many branches of agriculture are neglected, as dairying and cheese making, hop growing, gathering of clover and other seeds, and sheep husbandry.

To the manufacturer and mechanic, she offers cheap, healthy homes, cheap food and clothing, cheap fuel, and a good market.

To the grazier, she offers her native Blue-grass, and ample returns.

Unimproved lands may be bought at from $10 to $20 per acre, and even at lower prices in the southwestern part; improved farms at from $20 to $60 per acre. With the latter, a practical farmer, who can pay one-fourth of the purchase money down, may, with economy and management, make the deferred payments from the profits of the farm within five years.

The succeeding report of lot and landholders exhibits a regular annual increase in the number of holders, and shows that large farms are willingly divided and that young men are constantly being enabled by their industry and economy to become proprietors.

Many of the owners of large farms have more land than capital, and would be glad to sell a portion of their property at moderate prices, especially to practical, energetic husbandmen.

Those will succeed best who have a capital of from $1,500 to $2,000, or $3,000 to commence with.

CLIMATE AND COMMERCIAL RELATIONS.

The following abstracts of meteorology recorded at Indianapolis, the capital of the State, are significant. They show that a temperate climate prevails, much freer from storms, floods, and such disastrous phenomena, than surrounding States; while Indiana is "at the center of a latitude in which has been, and farther is to be, developed the highest type of the human race and the most advanced civilization."*

Mean Monthy Temperature for Fourteen Years.† Fahrenheit.

MONTHS.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1865 to 1879.....	31.3°	36.7°	41.8°	54.1°	64.4°	74.3°	77.7°	75.6°	67.9°	54.7°	41.6°	33.5°

Annual Mean Temperature for Fourteen Years.† Fahrenheit.

YEARS.	1865.	1866.	1867.	1868	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
Means...	56.32°	56.46°	56.33°	55.56°	52.52°	55.25°	55.89°	52.75°	52.15°	55.04°	50.46°	53.20°	54.60°	55.40°

*Mayor J. Caven.

†Condensed from Signal Corps tables in Report of State Board of Agriculture.

Mean Precipitation (Rain and Melted Snow), in Inches and Hundredths, by Months for Fourteen Years.†

MONTHS.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Means.....	3.75	3.00	4.50	3.66	4.47	4.36	4.57	3.17	3.68	2.37	2.94	3.51

Annual Mean Precipitation in Inches and Hundredths for Fourteen Years.†

YEARS.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
Means...	50.69	52.44	48.54	45.05	42.98	35.13	36.05	37.95	52.32	43.60	54.58	56.56	39.08	38.62

These tables, the result of official observations and records by trained men, show an equable temperature, free from the sudden or violent changes or excesses which debilitate and weaken vitality; also insuring exemption from epidemics and destructive plagues. It is a notable fact that malarial diseases and their derivatives, which formerly prevailed and which so certainly exist in a new, fertile country when first improved and plowed, have in a very considerable degree disappeared. The conditions now invite labor, and crown it with health and rich returns.

The precipitation of moisture is remarkably adjusted. Winter rains and snows are not excessive; the months of April, May and June, in which vegetation vigorously grows, are, as a rule, well supplied with moisture, while the harvest months of July and August are bright and sunny.

Other parts of the world tremble at the unheard tread of advancing plagues, and fear the stealthy approach of contagious fevers, which have not penetrated our borders. From the still wilder horrors of famine, also, and its concomitants of disease, demoralization and death, the combined conditions of temperature, moisture and soil form an absolute protection to Indiana, and will always insure an ample surplus of food for export to those less fortunately located.

The peculiar commercial advantages of the State are due to natural causes. The southern boundary abuts or closely approaches the foothills of the mountains of Kentucky, over or through which

† Condensed from Signal Corps tables in Report of State Board of Agriculture.

railways may not offer cheap transportation; Lake Michigan forms part of the northern boundary, and stretches well up to the icy regions; hence the entire east-west commerce of the nation asks permit to cross Indiana, and willingly pays tribute with a trail of gold along each iron track. It is not only the highway of a people, but of nations. It is not unusual for cars laden with gold and silver bullion from the Pacific slope, trains filled with teas, spices and silks from China and Japan to meet on Indiana soil other trains bearing the rich manufactures of Europe and our own country to Pacific continents and islands.

Already the central point of the nation's population, Indiana is also necessarily the pathway of her commerce, and thus becomes an unrivaled center of cheap distribution, assuring competing rates and fair prices to the laborer and the proprietor, as well as to the farmer, tradesman, miner, mechanic and manufacturer.

THE VALUE OF STATISTICS.

Statistics are as ancient as history. The earliest books of Hebrew lore contain genealogies, catalogues of families, tribes and peoples, and the allotments of inheritance. Even in the sad journey from Egypt a census was taken and reported. Under David, the "Patriot King," and other rulers, the people were again numbered, and from the frequent mention of special amounts it is inferred that the census was taken with a sharp eye to details.

Later, when tribes and nations adjusted differences of opinion by the sword, and the battlefield was the only forum, military statistics were gathered carefully as of the greatest importance to the nation's life or destruction. Sometimes we suspect that the tables of bow and spearmen, chariots and mighty men of war were exaggerated, for it was early found that a good showing of resources was a more reliable protection than walls, forts and deeds of battle. Incidental mention in the histories of Greece, Rome and other powerful peoples shows that a careful enumeration of their resources was made the basis of successful enterprise; in other words, success and prosperity are not matters of chance, but the result of well digested plans, founded on known facts, efficiently carried out.

If a necessity in the warrior age of the past, statistics seem to obtain a higher importance in this age of progress, justice and "government of the people, by the people, for the people."

Ours is an age in which more research and executive ability is often requisite to conduct a single manufacturing or mining establishment, a railroad enterprise or commercial adventure, a grand charity or benevolent institution, than was needed for the migration of a people or the conduct of campaigns and conquests during past periods so prominent in song, romance or storied history. The miner and manufacturer must design his plant, knowing the resources and probable demands of his patrons; the importer be governed by

the needs of his customers; the trader by the wants of distant communities. A showing of our own accumulations and productions advertises to the world our surplus or our wants, and in either case brings purchases or sales at fair prices.

Of still higher importance to the intelligent legislator, who acts on questions of law, right and taxation, are statistical facts which will enable him to enact justice, not by guess, but from exact facts and figures.

Beyond dollars and wealth comes the higher plane of intelligence, morality and life, subjects in which the weal of the race is deeply concerned. Good and evil are not accidents. Law governs the mental as well as the material world—the law of causation. Effects may be generally traced to a tangible origin, and usually when the cause of evil or disaster is known, that evil may be averted, avoided or disarmed. Vital statistics are the base of national as well as family prosperity, and it has now become an acknowledged fact that with proper health and death tables, and charts carefully mapped by medical observers, the cause of epidemics may soon be localized, studied and removed.

OFFICIAL OPINIONS

Favoring the Establishment of a Bureau of Statistics—The Views of former Governors, Auditors and Secretaries of State—Legislative Action.

The early legislators of Indiana considered the importance of statistical information, the subject being brought under discussion by Hon. E. T. Spottswood at the session of 1854–55.

Hon. John D. Evans, Auditor of State, November 1, 1870, after a number of valuable suggestions as to changes in the laws for the just appraisement of property and plainly showing the injustice of existing laws, made the following suggestions as to a Bureau of Statistics, which are concise and to the point:

The creation of an office for the collection and deposit of statistics of the population, products, health, wealth, educational condition and industrial enterprise of the State has been frequently recommended to the attention of the Legislature. In this office one sees constantly the importance of it, and few questions of State policy can ever arise in which the knowledge accumulated by it would not be important or even indispensable. As it is, we have so little of this knowledge that to call it none would be hardly less than the truth. Except the National census, the enumeration for the distribution for the school fund, and the annual appraisement for taxation, we have no means of knowing anything of the subjects alluded to. The decennial census, however perfect, occurs at too long intervals to be of any value in determining legislative, or other public action, after the lapse of a year or two. *We grow beyond it almost before it has been fully published.*

Products shift from county to county. One increases in population, the other remains unchanged. It leaves us at fault, not only in reference to aggregates but their distribution over the State. We want information that shall furnish every year the condition of the preceding year. The school enumeration is made for a single purpose, and of course serves no other. The annual appraisements, as already shown, are utterly untrustworthy.

To illustrate the effect of this deficiency, the hog product of Indiana in 1860 was nearly 2,500,000 head, more by about 150,000 than any other State in the Union. It is an important element of wealth—so important that the statesman

can not afford to be ignorant of its quantity and its annual changes. But he can know nothing except in the years of the census. Estimates made on the business of pork packing houses are worse than useless. They are deceptive. Thousands of hogs are taken to other States, and they appear, if they appear at all, as products of those States, not of ours. More still are slaughtered by farmers for home use, and of those not even an estimate can be made. Thus of a product worth in 1860 not less than twenty millions of dollars the legislator and publicist knows just nothing at all during nine years, and can't count long on what he learns in the tenth year. Surely this is not a state of things that ought to be continued or admitted to be difficult to remove. We actually know less of our own condition than we do of that of countries in Europe where Bureaus of Statistics are maintained. This is not creditable to American intelligence, particularly when the remedy, though it may not be complete, is easy. Local assessors can be required to collect, as the United States census marshals do, facts in regard to population, amounts of grain, number of cattle and hogs, domestic manufactures, mortality, and the like, and thus furnish every year or two years as full information, and more reliable, than that furnished by the National Government every ten years. A department of this office can be assigned to the duty of supervising and preserving the statistics thus collected.

It has been objected to this measure, that very many of our people uninformed as to the object of the inquiries relating to these matters, and suspecting them, as many do the inquiries of the census marshals, to be intended to trick them into admissions which will be used to increase their appraisements for tax purposes, will give false answers or refuse to answer at all. But this objection, though not without weight, is certainly not too weighty to be removed. The proportion of our people who are too ignorant or stupid to comprehend the purpose of statistical inquiries is not large, and it is not made up of those whose wealth or annual products are apt to constitute an important item of statistical tables. Their refusal to give information would of itself constitute about the most important information they could give—their deplorable educational condition. But this interference of ignorance could not last long. In two or three years the uninformed would find out from his wiser neighbors the real character of the visits of appraisers, and his obstinacy would disappear with his ignorance. It would not require more than the interval between two real estate appraisements to make every man in the State fully aware of the innocent intention of those he had mistaken for "inquisitors" and "smelling committees," and the deficiency of statistics he would produce during this period of instruction would not, as above remarked, be of vital consequence. The Legislature might contribute materially to avert or remove those suspicions by declaring that the information thus obtained, like that of the national census, was to be used solely for purposes outside of and unconnected with taxation, and that no assessment should be made or modified by it. This, with the inevitable diffusion of correct ideas, sooner or later would secure the Statistical Bureau against any considerable obstruction of its operations; and even if it could not, the question is worth considering carefully whether the information that could be obtained would not be very much better than none at all.

In his report for 1874, Hon. James A. Wildman gives the following conclusions derived from his experience in the State Auditor's office on State statistics:

The following chapter on State statistics was prepared for and published in the annual report of this office for the last fiscal year; but the matter is of such vital interest to the people of the State, and the exhibits and statements published from advanced sheets of this report during the present year were so eagerly sought for, that I deem it essential to present the matter again, trusting that the General Assembly will take such action as will secure the collection of all statistics of value, and the publication of tables and abstracts as early as practicable after the returns have been received from the several counties.

The importance to all classes of business, and to intelligent and prudent legislation, of a full and accurate exhibit of the annual products of the industries of the State, not only of the agricultural, but the manufacturing, mining and commercial industries, is so obvious, yet so inadequately provided for in this and most other States, that a few suggestions as to the information needed and the mode of obtaining it can not be out of place in this report.

At the present we are dependent on three sources for the little we may learn of this vital subject. First, the National decennial census; second, the reports of the National Agricultural Bureau; third, the collection of facts and estimates in use by commercial papers in the interests of special classes of business.

Of the *first*, it is enough to say that it is worse than inadequate; it is practically false, in that it rarely reaches the public in detail until the State generally, and most of its political divisions, have *outgrown* its statements; and, being decennial, it supplies no information, good or bad, for the intervening years. It is quite useless to business and misleading to legislation. *Second*, the reports of the Agricultural Bureau are limited to the industry it is especially charged with, and they never pretend to give even of that more than an average estimate of annual results, made up of information gathered at different points of the State. Accurate enough they probably are, as averages, but that is not the kind of information, even if it embraced all forms of industry, that the business man, and especially the legislature, want. Both need to know the industrial condition and products of localities, what they have done and what they require. *Third*, the facts and estimates—mere guesses, however shrewd—of papers devoted to special industries fail at the same points where the Agricultural Bureau fails. They give us a general view of the State's industries, and not very safe views even of those they practically apply themselves to.

In this condition of knowledge of our own labors, achievements and resources no man can guide his action by better directions than conjectures. What a particular county has produced in corn, or wheat, or root crops, or mining products, or in manufactures, or what the amount of its commercial business has been, he does not know, except by vague comparisons of individual statements with each other, and by conclusions loosely built upon them.

It can not be necessary to enlarge upon the value to a legislator of such an exhibit as has been indicated, by which he may know exactly the industrial condition of his own county, or district, and of all the counties of the State.

To a business man its value is even more appreciable. But this is not all. More is needed than a knowledge of the State's industries. Its health, its educational and moral condition, its crimes, and all that facts can display of the domestic concerns of the people, ought to be fully reported. We ought to know the diseases, the localities especially affected, and their fatality. We ought to know the crimes committed, the nativity and previous condition of the criminals, the terms of punishment and the periods within which the convictions are made. We ought to know the intellectual state of each county, so far as it is exhibited by the support of and attendance upon schools. These and other points of information that will readily suggest themselves to all intelligent men are indispensable to the proper direction of legislation and the wise application of public charities. We know practically nothing about them. This great and urgent need should be met by the provision of adequate means to collect all desirable information, to prepare it promptly, by careful condensation in tabulated statements, or otherwise, for publication, and to give it as speedily as possible general diffusion among the people.

An attempt to supply this want was made a number of years ago, but the collection of facts was entrusted to the local assessors, under no penalty for neglect or refusal to act, and it failed so utterly that the enterprise was abandoned as impracticable, except at a cost deemed too great for the service.

A general but ill-founded apprehension that the information solicited was to be used to increase the assessment for taxes, or to impeach the returns they were to make or had made, also greatly obstructed the operation of the law. No successful attempt to reinstate the work was made till 1872, although attention was directed to it repeatedly by the Executive in messages, and by my predecessors in this office. Measures were devised in one form or another, but in the press of what was deemed more important business, they were overlooked or pushed aside.

Last December, however, at the special session of the Legislature, a provision was inserted in the act reconstructing the system of assessing property for taxation, requiring a return to the County Auditors from local assessors, and from County Auditors to this office, of "the number of domestic and farm animals of all kinds, and the quantities in bushels and tons of every kind in each civil township of agricultural products, also manufactured products, bushels of coal mined, and such other items of product as may be directed by the Auditor of State," and of the number, names, age and parentage of the deaf and dumb and blind.

This provision, with the discretion allowed the State Auditor to enlarge the items of product to be reported by the Assessors, and with the exaction from him of a speedy preparation of the returns in a tabular form, exhibiting the products of each county, and of the aggregate of the entire State, and its subjection to public inspection and embodiment in the annual report of this office, would seem to meet the larger portion of the necessity. But, admitting the successful operation of the law, it still leaves an indispensable class of information unprovided for. The diseases and death, the prevalence of disease in particular localities and at particular times, and their comparative fatality, can only be learned by a stretch of construction of the State Auditor's authority, which he can not assume the responsibility of making.

The language of the act clearly confines his discretion to industrial products and to the addition of such as the Legislature did not deem it necessary to name specifically. He can not safely require assessors to report the number of sick, of

deaths, and the kinds of diseases as a part of the permission to add "other items of product."

The educational or intellectual condition of the State may be accurately learned from the reports of the Superintendent of Public Instruction, so far as it is exhibited by the condition of the schools; but there are other indications, as the number of newspapers circulated, which can not be ascertained from any authentic source. Besides, the annual "tabular statement" required of the State Auditor should embody a condensed view of the details presented by the reports of the Superintendent of Public Instruction. It should contain, also, a condensed statement of the criminal statistics obtained by the Attorney General, enlarged by the additions above suggested.

The local taxation of the State, county, township and municipal, should be required of the proper authorities in full, as it is now in part.

The operations of railroads, as more fully set forth elsewhere, should be presented. In short, the annual exhibit should display, as far as possible, the year's work—health, wealth, progress and general condition. The existing conditions of the law are inadequate to this object, though better than those previously made. But these, like the former, are made dependent on local assessors, who are not compelled to regard them, and they are open to the same misconstruction that so greatly impaired the operations of the former—that is, the belief that the information required is meant to affect taxation. This misapprehension is probably, in a measure, corrected, but it will remain more or less an obstruction to any attempt to gather State statistics by local assessors. Whether the value of full and accurate information of the kind described is sufficient to warrant the expense of a special organization, or the popular misapprehension may be so far disabused as to make no serious obstruction to the existing one, is for the Legislature to determine.

The Bureau is indebted to the Hon. W. W. Curry, former Secretary of State, for the following notes of proceedings in the Legislature:

At the special session of the Legislature in the fall of 1872 efforts were made to secure the establishment of a Bureau of Statistics, and for this purpose, on the 22d of November, Senator Haworth, of Fayette and Union counties, offered a bill in the Senate, which was referred to the Committee on Emigration and Statistics. At the regular session immediately ensuing, January 17, the committee reported a substitute bill to establish such a bureau in the office of the Secretary of State, which passed the Senate February 13 by a vote of ayes 28, nays 16. It was reported to the House of Representatives the same day, read on the 17th, and referred to committee. Two days afterwards it was reported favorably. The House Journal, as printed, fails to show the fact, but on the last legislative day, Saturday, March 8, it was brought to a vote, and, while receiving a majority, failed for want of the constitutional number of votes. At the same session a bill was introduced by Hon. J. E. Woodard, Representative of Parke county.

At this session an act was passed to further define the duties of the Secretary of State, authorizing that officer to divide his office into four bureaus, one of them for statistics; but the failure of the preceding bill left him without any material for such a bureau.

During the session of 1875 Senate bill No. 20 was introduced by Hon. John D. Sarninghausen, of Allen county, who has, during his long and laborious service in the Senate of the State, shown an intelligent and decisive interest in the matter of statistics. The bill was referred to the standing committee on Emigration and Statistics, consisting of Senators Johnson, of Floyd, Haworth, Sarninghausen, Roe, Peed, Scott and Oliver. After full consideration, it was reported with amendments, which were concurred in, but it failed receiving a constitutional support, with a vote of 25 to 16.

Hon. E. Henderson, late Auditor of State, in his report for 1875, under the head of *Statistics*, makes the following suggestive statement, which explains the difficulties and inaccuracies resulting from the present system in this plain language:

The importance of an Auditor of State being able annually to lay before the people a complete and perfect statistical report as required by law (1875) seems to be greatly undervalued by the public. The tabular statement I herewith present I feel satisfied is imperfect in many respects, while it no doubt approximates correctness as closely as any in former years, yet to the man of enterprise, who studies and takes an interest in the great resources of Indiana, it will be very unsatisfactory. But as I am entirely dependent on the reports which come from the different counties, through the County Auditors, for the figures which compose the statement, I can but lay before the public such material as is furnished me. The County Auditors are, of course, compelled to furnish this office with just such statements of figures as are furnished them by the Assessors; and they (the Assessors) are forced to report just such figures and facts as the tax-payers may see fit in their pleasure to give them. I find there are many difficulties which lie across the pathway of a faithful execution of the law for gathering statistics by Assessors. I will briefly state a few of them. The first and most prominent one is that there exists in the minds of the farmer and many manufacturers, an ill-conceived idea that the gathering of statistical facts is for the purpose of increasing taxation, or to be used in impeaching any statement they have made or will make as to the amount of their taxable property. While this silent but impressive error exists in their minds, it is folly to undertake to carry out the provisions of the law and meet the beneficial purposes for which it was designed.

Tables showing correctly the agricultural and mineral products, manufactured articles, live stock, etc., on the 1st day of April of each year, for comparative purposes, would certainly be of inestimable value. But before this desirable object can be attained the co-operation and sympathy of the farmers and manufacturers will have to be enlisted. To them the State is compelled to go for knowledge concerning her aggregate labors and achievements, her commercial and agricultural condition at the close of the year.

At the Legislative session of 1877 Senator Sarninghausen introduced the bill passed by the Legislature of 1875, so modified as to tally with the changed duties of Township Trustees and Assessors,

but it was lost to sight during the high temperance excitement of that winter. This bill received the earnest support of Hon. John E. Neff, Secretary of State, and was in part due to his preparation.

At the annual meeting of the Delegate and State Board of Agriculture at the close of the year 1878, Hon. Williamson B. Seward, in his annual address as President, gave the following results of his observations:

The Statistical department of the State as now constituted (1878) is of no value whatever. We had better make no attempts at getting this kind of information, if we can not make it more accurate than a poor guess. Parties in this and other States and counties desiring statistical information as to our products almost invariably apply to the Secretary of this Board for the information wanted, and in all cases that officer is compelled to inform them that we have no reliable statistical information as to the products of this State. We are compelled to say to the world that here in Indiana we never strike a balance sheet. We do not know whether, as a State, we are going backward or forward. We do not know what we have produced, what we have sold, or what we have bought.

The business man who conducts his business in this way seldom, if ever, succeeds, and the same rule may, with propriety, apply to States and nations."

In 1879 Senator Sarninghausen introduced Bill No. 168, which had received a majority vote from two Senates, had met the approval, with slight amendments, of a previous House of Representatives, and in general plan of the Auditors and Secretaries of State successively for a long period.

It is here inserted:

AN ACT creating a Bureau of Statistics, prescribing rules and regulations for the government of the same and declaring an emergency.

SECTION 1. Be it enacted by the General Assembly of the State of Indiana, That the Secretary of State be, and he is hereby authorized and directed to establish in his office a Bureau of Statistics and to collect information and prepare tables concerning agriculture, mining, manufactures, education, crime, public taxes and expenditures, corporations, immigration and vital and social statistics in this State, and to collate, record and report to the Governor all statistical information so obtained at the close of each civil year, and cause the same, or so much thereof as may be in his judgment of public utility, to be printed and distributed.

SEC. 2. It shall be the duty of the Secretary of State to prepare and cause to be printed specimen sheets of blanks and registers, such as may be required for the purpose of this act, and to furnish them to the county auditors and clerks, township assessors and trustees, and all other persons requiring the same, and to give all necessary information and directions to all civil officers and other persons, required by law to collect, register or return statistics. He may also procure such blanks

and registers in quantities, and furnish them at cost to all such officers and persons when they require him to do so. He shall use due diligence to secure from all persons a prompt obedience to the provisions of this act. He shall be furnished by all civil and corporation officers as promptly as possible with copies of all annual and other reports required by law to be made for public information; and he shall have a right of access to all public records, reports, schedules and statements of officers of the State which may assist him in the discharge of the duties of this act.

SEC. 3. It shall be the duty of the Auditor of State in lieu of the statements required to be made in his annual report in section 132 of an act entitled, "An act to provide an uniform assessment of property," approved December 21, 1872, to transfer to the office of Secretary of State all returns of agricultural statistics contemplated by such section. It shall also be the duty of said Auditor to require of the township assessors, in addition to the lists prescribed in said act, to take an annual list of the population of their several townships, designating nativity, color, sex and age—such lists to be made and returned in the manner prescribed concerning agricultural products. It shall also be the duty of said Auditor to furnish said Secretary with convenient access to all reports, lists, schedules and statements made by banks, insuranc ecompanies and all other corporations, partnerships and persons, under the provisions of said act that he may tabulate their contents for statistical purposes. And it shall also be the duty of said Auditor when required so to do by the Secretary, to require such additional statements as will show the annual business of such corporations, partnerships and persons, when engaged in the business of mining, manufacturing, banking, insurance, or transportation of persons, freight or messages.

SEC. 4. It shall be the duty of every clergyman, justice of the peace, or other person solemnizing marriages, to return the certificate thereof now required by law to the proper clerk within thirty (30) days thereafter. Every physician, midwife, or other person principally officiating at the birth of any child in the State, shall, within thirty (30) days thereafter, certify the fact of such birth to the Trustee of the township in which the same has occurred, setting forth the time, place, color and sex and name of the child, and whether born in marriage or otherwise. Every physician, surgeon and coroner who shall attend any person in his or her last sickness, or who may be called in to view the body of any dead person, shall certify the fact to the Township Trustee within thirty (30) days, setting forth the place, time, cause of death, and the name, age, sex and color of the person, as far as may be known. Every undertaker, sexton, grave digger, or other person who has principal charge of the burial of any dead person, shall, in the order named, in like manner certify the same to the Township Trustee.

It shall be the duty of the Township Trustees of the several townships of this State to record the facts set forth in said certificates in proper registers; and annually, on the first day of April, to foot up such registers, and send duplicate copies of such registers to the County Clerk, and such Clerk shall file one copy thereof in his office, and shall forward the other to the Secretary of State, and any person who shall refuse or neglect to perform any duty enjoined on him by this section shall be guilty of a misdemeanor.

SEC. 5. It shall be the duty of all justices of the peace, mayors and criminal judges, and all other judicial officers, whose business is not of record in the offices of County Clerks, to keep accurate registers of both their civil and criminal

business, and on the first day of April each year to report abstracts thereof, setting forth the number of cases, the amount of claims, the number and amount of judgments, and the amount of costs. Also, the number of persons charged with crimes, arrested, discharged, held to bail, committed, tried, acquitted, convicted, fined and imprisoned, the number of bonds taken, forfeited and collected, and the amounts thereof, which report shall be transmitted to the County Clerks of their respective counties, and by them filed, and a copy of each forwarded to the Secretary of State. And a refusal or neglect to keep such registers, or to make or forward such reports shall constitute a misdemeanor.

SEC. 6. It shall be the duty of the clerk of each county of this State to register in suitable books the civil and criminal business of his office as follows:

In a civil register the suits brought, amount claimed, dismissed, tried, judgments rendered, costs assessed, executions issued and sales thereon.

In a criminal register the informations, indictments, crime, arrests, committals, trials, dismissals, acquittals, convictions, fines, imprisionments, recognizances taken, forfeited and collected.

In a divorce register the applications for divorce, withdrawn, tried, granted, refused, cause assigned and amount of alimony.

He shall annually, on the first day of April, sum up, digest and arrange his registers, and within thirty (30) days thereafter he shall forward to the Secretary of State a copy of such summaries, together with the number of marriage licenses issued and of certificates returned.

And any clerk who shall refuse or neglect to keep such registers, or to make such returns, shall be guilty of a misdemeanor.

SEC. 7. Any person guilty of a misdemeanor under the provisions of this act, upon being convicted thereof in any court of competent jurisdiction, shall be fined in any sum not exceeding fifty dollars for each offence. And every refusal or neglect to discharge the duties enjoined by this act for the space of one month shall constitute a separate misdemeanor. And all misdemeanors arising under the provisions of this act shall be prosecuted by information of the prosecuting attorneys, as in other cases.

SEC. 8. The report and registry of statistics, required by the provisions of this act, shall begin on the first day of April, 1879. Such returns, registers and reports, being made for information only, can not be used as evidence in any suit concerning taxes.

SEC. 9. In order to enable the Secretary of State to discharge the duties of this act, he shall be allowed to employ one clerk, in addition to the clerks otherwise allowed by law, at a salary not to exceed twelve hundred dollars per year. He shall also be allowed his necessary expenses on account of blanks, blank books, printing, stationery, postage and expressage—such expenses to be allowed by the Auditor of State only on bills filed and certified by the Secretary.

SEC. 10. There being no provision of law for the record, report and publication of statistics, an emergency exists for the immediate taking effect of this act, and therefore the same shall take effect and be in force immediately from and after its passage.

Hon. Charles H. Reeve, Senator from Marshall, introduced, during the same session, Senate Bill No. 290, entitled "An act creating

a Bureau of Labor Statistics, the appointment of a Commissioner for the same, defining his powers and duties," etc. A copy of his carefully prepared bill could not be found among the papers of the late General Assembly; it was referred to the Committee on the Judiciary, and ideas from Reeve's bill were engrafted on the one which subsequently passed. Many other legislators, public officers and prominent citizens have, at different times, taken deep and special interest in the same matter, but from the imperfect data accessible the record is not available.

January 10, 1879, Hon. John B. Conner, Representative from Marion county, proposed House Bill No. 20. It was prepared after a careful study of similar laws in the sister States, and passed the House of Representatives March 5, almost unanimously, the vote being 68 to 18, and was adopted in the Senate March 26, by a vote of 29 to 16. The majority of both chambers of the Legislature was decidedly for the new measure, and the high character of the gentlemen who gave it support, as well as those who opposed, shows that it was adopted only after mature consideration. Mr. Sarninghausen, with a compromising disposition, indicative of the man, moved, in committee, to lay on the table the bill he had so long and heartily advocated, and that the present law be enacted, and supported the measure by recalling the favorable mention of the subject by Governor Baker, remarking that "the State of Massachusetts is indebted for the development of her resources principally to her excellent bureau of statistics and the information given by the same to enterprising parties abroad, and that Indiana should follow the example set by her sister State."

The following is a copy of the law from pages 193, 194, 195, chapter XCI., acts of the regular and special sessions of the Legislature, 1879, establishing the *Indiana Bureau of Statistics and Geology:*

AN ACT providing for the establishment of a State Bureau of Statistics and Geology, creating the office of the Chief of such department, defining his duties, providing for the collection of statistics on agriculture, manufactures, commerce, education, labor, social and sanitary subjects, making said chief curator of the geological cabinet, and appropriating money to carry out the provisions of the act. Approved March 29, 1879.

SECTION 1. Be it enacted by the General Assembly of the State of Indiana, That a department of statistics and geology is hereby established for the collection and dissemiination of information, hereinafter provided, by annual printed reports made to the Governor and Legislature of the State.

SEC. 2. The Governor is hereby authorized to appoint, as soon after the passage

of this act as convenient, and thereafter biennially, some suitable person to act as Chief, who shall have power to employ such assistants as he may deem necessary, and said officer and assistants shall constitute the Indiana Bureau of Statistics and Geology, with headquarters to be furnished by the State: *Provided*, That such Chief of the Bureau of Statistics shall be an expert in the sciences of geology and chemistry.

SEC. 3. The duties of said bureau shall be to collect, systematize, tabulate and present in annual reports, as hereinafter provided, statistical information and details relating to agriculture, manufacturing, mining, commerce, education, labor, social and sanitary condition, vital statistics, marriages and deaths, and to the permanent prosperity of the productive industry of the people of the State.

SEC. 4. It shall be the duty of the several city, incorporated town, county and township assessors, trustees, officers of school boards, and boards of health, in their respective cities, towns, counties and townships; the agents or superintendents of all manufacturing, mining and mechanical establishments, the managers and superintendents of all corporations, manufacturing, mechanical and transportation companies and associations, and county superintendents of schools, to make reports and answer questions relating to the duties of said bureau, upon such blanks as may be furnished to them for such purposes by said bureau. And the Chief of said department shall have power to administer oaths, to examine witnesses under oath on questions relating to production, manufacturing, mining, transportation, labor, wages, savings, and respecting such other matters as relate to the duties of said bureau.

SEC. 5. The Chief of said Bureau shall be the curator of the geological cabinet, museum, chemical laboratory, apparatus and library, and shall, from time to time, as may be practicable, add specimens to the cabinet of minerals, organic remains, and other objects of natural history peculiar to the State and other States and countries.

SEC. 6. The annual compensation of the Chief of said Bureau shall be twelve hundred dollars, to be paid out of the Treasury of the State, as provided by law for similar expenditures; and in addition thereto the sum of twenty-five hundred dollars be and the same is hereby annually appropriated out of any funds in the State Treasury, not otherwise appropriated, for two years, to be expended, or so much of it as may become necessary in the discretion of the Chief of said Bureau, in carrying out the purposes of said department, as herein provided. It shall be the duty of the Chief of said department to render annually to the Governor a detailed statement, accompanied with proper vouchers for all moneys expended by him in carrying out the provisions of this act: *And provided further*, That no greater expenditure of money, or liability therefor, shall be made or incurred by the Chief of said Bureau, or his assistants, than the sum herein appropriated for carrying into effect the provisions of this act.

SEC. 7. Any person or persons authorized by the Bureau to collect statistics, or answer questions relating thereto, who shall neglect or refuse to make true returns, as provided for in this act, shall forfeit and pay a fine not exceeding two hundred dollars.

SEC. 8. The fines arising under this act may be recovered in any court of competent juristiction, by information or complaint of the Attorney-General, and the same shall accrue to the State and be paid into the Treasury thereof.

SEC. 9. The act approved March 5, 1869, establishing a separate department of geology, and the acts amendatory thereof, and in conflict herewith, are hereby repealed.

SEC. 10. Whereas, an emergency exists for the immediate taking effect of this act, it shall, therefore, take effect and be in force from and after its passage.

WORK OF THE BUREAU.

THE LINES OF INQUIRY PURSUED—THE ASSISTANCE RENDERED BY PUBLIC OFFICERS—EXTENT OF CORRESPONDENCE—METHOD OF ESTIMATES, ETC.

Pursuant to the foregoing act "providing for the establishment of a State Bureau of Statistics and Geology," a commission was issued by his Excellency Governor James D. Williams, dated April 25th, 1879, to John Collett as "Chief of the Department of Statistics and Geology" for the official term of two years. The Bureau was organized May 5th, the Chief calling to his assistance G. M. Levette; work was commenced at once, and in less than ten days sixty-five letters had been written and mailed, asking information and advice, copies of forms, etc., from the different State Bureaus and Boards of Trade; and in the same time over 2,500 circulars and forms were sent out. June 30th, Assistant Levette withdrew, when John T. Campbell was installed in his place as First Assistant, with George Hurty, Chemical Assistant, and George K. Green, Geological Assistant, on special duty. The clerical work has been dilligently performed by T. A. Lloyd, H. B. Davis, M. E. Palmer, Lucien Hetselgesser, T. G. Woolen, C. E. Smith, and G. H. Fleming.

It was soon found that the limited appropriation would require the closest economy, even to cover a small portion of the field of labor, and that there were difficulties in executing the law which were almost insurmountable—difficulties which discouraged our best friends. Commencing on the 5th of May, there were really but six months in which to collect information.

The work was entirely new in this State—without precedent. Like the first essay of childhood, every step was a discovery in a strange land. In many cases the forms sent out in advance of the

publication of the acts of the Legislature, were the first notice to the recipient of the law creating the Bureau. The results in Indiana, as well as other States, proves that to succeed in collecting and preparing valuable statistics, the educational process of experience is necessary on the part of collectors and enumerators, as well as tabulators of facts.

The field of inquiry opened by law to the Bureau is wide, covering almost every view of interest, but the provisions for executing such duties were found, on consulting with the proper legal adviser, to be somewhat defective. To some of the officers and people of the State the law is mandatory, but those who from official position or otherwise were best able to give the fullest and most reliable information, the Bureau was only by implication authorized to call upon for official statements. Hence it was found best to rely on voluntary contributions, and the following circular was sent with every blank to the various officers, corporations, etc.:

INDIANAPOLIS, July 25, 1879.

Dear Sir:—The Legislature, last winter, created the "Bureau of Statistics and Geology," laying out broad and onerous duties on the Chief and his assistants, yet making such a limited appropriation that, unless the people, and especially the officials, who appreciate the importance of the work assigned to this Bureau, will give voluntary aid by sending such information as is needed, the report will fall short of what it should be and what the people expect. When it is considered that the Bureau must correspond with ninety-two each of Clerks, Auditors, Treasurers, Sheriffs, Recorders, Surveyors, Coroners, School Superintendents, over one thousand each of Township Trustees and Assessors, over fifteen hundred Justices of the Peace, over three hundred town and city officials, over seventy railroad officials, the unknown hundreds of church organizations, secret societies, trades unions, banking associations, and the unknown thousands of manufacturing and mining industries, much of which correspondence must be repeated because of miscarriage, neglect or misunderstanding, besides the correspondence with similar bureaus of other States, together with printing, forms, stationery and clerk hire, you will see how very much the efficiency of this Bureau depends on the *good will* of the people and the officials. True, the law gives the Bureau very broad and to some extent arbitrary power, but it will not be the purpose to exercise it if success is possible without. See section 7 of the act creating this department:

"Any person or persons authorized by the Bureau to collect statistics, or answer questions relating thereto, who shall neglect or refuse to make true returns, as provided for in this act, shall forfeit and pay a fine not exceeding two hundred dollars."

This is a work of high importance. What a legislator wants is *information*. It is not uncommon for legislatures to pass laws that are impracticable, because contrary to existing but unknown *facts*. All our neighboring States, and many others, are ahead of us in this work, and Indiana to-day stands as a missing link in the chain of statistical inquiry. But despite the limited appropriation, and the disadvantages under which it labors, this Bureau *will do its very best* to make the Indiana Reports compare favorably with those of other States engaged in similar inquiries.

We trust that each person appealed to will share in this effort to show all the facts. Many county officers and others have signified their willingness to contribute their share to the work, and we hope that *all* will do so. It will require less time and labor than is frequently given to campaign meetings.

Should the officers of any county fail or refuse to respond, the people of the whole State will regret to see that county exhibiting a blank space in the statistical tables. Your co-operation is earnestly invited.

It is proper to assure every person that, while the Bureau will be obliged to inquire considerably into details of private business, in order to get at the aggregate wealth of the State, the private affairs of individuals will be kept strictly confidential. For instance, inquiries are made of A, B, C, D and E, who are, we will say, merchants and manufacturers, what their sales have been during the past year, how much cash sales, how much on time, what the claims outstanding, what their *bona fide* indebtedness, how many persons employed, male and female, what wages, etc., not for the purpose of prying into the private business of each, but for the purpose of showing the aggregate of such business in the State and several counties. All these will be destroyed as soon as the total for the county is known. So with each line of business. This is already done every year on the assessment blanks, and every ten years by the United States census takers.

JOHN COLLETT,
Chief of Bureau.

This reliance on the good will of our people was not in vain. Reports by hundreds and by thousands were, as a rule, promptly and faithfully prepared and returned. Indiana may well be proud of the unselfish and gallant public spirit of her subordinate officials; a noble army of heroes who do duty for duty's sake, without hope of "crowns or arches."

Massachusetts, the first year of the operation of her Bureau of Statistics of Labor, received in some divisions but ten per cent. of answers, in others but seventeen per cent., and still complains of imperfect results. In Ohio, the first year the answers returned represented but forty per cent. and New Jersey but ten per cent. of the inquiries.

This Bureau has pleasure in acknowledging full lists of answers from county auditors to form A, from the same officers on forms 3 and 4, with the exception of only two counties. The reports from county treasurers, recorders and clerks are so nearly full that, considering the amount of careful labor necessary to complete their returns, we can not but express the gratification of the Bureau and its friends. The auditors, treasurers, recorders and clerks who have thus aided us with their reports have fairly earned and merit acknowledgement, and in thus faithfully discharging an onerous duty

they have done honor to themselves and the intelligent people they represent. Judging from results in other States, we unhesitatingly believe that the county officers of Indiana, as a class, for efficiency and public spirit, are rarely equalled and not surpassed by those of any State.

The reports from banks, gravel and turnpike roads are fairly complete, and give information upon those subjects not heretofore accessible.

To the township trustees who have made *full* reports the State owes a debt of gratitude. To these officers especial thanks are due for giving information which has never before been collected. Many lines of inquiry are entirely new, not having been attempted by other Bureaus of Statistics, and the facts collected will go far toward giving the State of Indiana the fair position in agriculture to which she is entitled.

The table showing the product of corn, wheat and oats per acre has been compiled from the ordinary reports of assessors sent from the various counties to the Auditor of State. The inaccuracies of these reports have long been a subject of comment, and are not less apparent in the returns now presented. In one township the number of acres of wheat was found to be less than the acres sown by one farmer in that township. Also, that crops of corn raised were from one to three or four bushels, wheat but little better, and oats from a peck to a few bushels per acre. Other counties report one year a crop of over ninety bushels of wheat and over four hundred of corn. Many such guesses could be noted. These reports are supplemented by the returns for 1879 of the township trustees, which, from the advice of well posted business men and farmers, will be found approximately correct.

A large majority of the city and town authorities promptly responded to the call of the Bureau. Their reports indicate, as a rule, careful preparation, and present one of the most valuable exhibits, creditable alike to their respective communities and the State. Such reports will be an established base for all future efforts. To their municipal authorities special credit is due, as well as to their public-spirited constituents.

The "Commonwealth" table shows the public property of the State, including turnpikes, railroads, etc., which nominally are private property, but which, making little or no return to stockholders, are, as they should be, classed more as public than private

property. Separate columns show the distributive interest which attaches to each voter and each acre of land in the State. This table is, perhaps, a new feature, as we have not seen such tabulations elsewhere.

Deductions which lead to political argument are avoided and left to politicians.

The social statistics speak for themselves, and have remarkable significance. They are respectfully referred to sociologists.

There is no provision in the State laws for the preservation of vital statistics. The Bureau had nothing upon which to rely, except the few city reports presented, and the death rate to be deduced from the letters of administration and to executors issued by the County Clerks. This subject should have further investigation, for which the Bureau has neither means nor time now.

The County Treasurers' reports present a remarkable table as to the ownership of real estate, which is referred to politicians for discussion.

The reports from Recorders as to mortgages, deeds, sales of land, etc., the production of which involved much labor, are of the highest interest in connection with the trying monetary crisis just passed; they, as well as other tables of business, trade, etc., are referred to political economists.

Considering the high condition of schools, the efficiency and number of courts of justice, and the rapid erection of public buildings and enterprises, the rate of taxation, shown by the tables, may be as low as the public interest justifies.

Many other States of the Union have severally appropriated for their bureau of statistics, health, agriculture and public commissions from four thousand to fifty thousand dollars annually, when any considerable results were expected. The annual sum devoted by Indiana to this purpose, including geology and kindred matters, is $3,700. To accomplish anything with this sum, required parsimonious economy, and ten or twelve hours' labor and thought daily from each person on duty. Considering the limited time of six months to collect, and of four months in which to tabulate and condense the facts herein given, the novelty of the situation, the limited appropriation, and the amount of labor to be performed, it will be seen that the task was not easy.

FORMS, CIRCULARS, LETTERS, ETC.

One of the heavy draughts on the means and time of the Bureau was the preparation, printing and mailing of circulars, forms, etc., so numerous that to repeat even a copy of them here, as is usual in similar reports, would occupy much space. The time and labor involved in the reading and filing of reports, and the answering of letters, may be estimated from the following table:

FORMS, CIRCULARS, POLYGRAPHS, ETC.

Form A to auditors, including duplicates and extras	210
Form No. 2 to township and city assessors, duplicates and extras	2,144
Form No. 3 to auditors, and extras	116
Form No. 4 to auditors, and extras	123
Form No. 5 to cities and towns, and extras	417
Form No. 6 to township trustees, and extras	1,421
Form No. 7 to banks, and extras	373
Form No. 8 to recorders, and extras	120
Form No. 9 to gravel roads, and extras	381
Form No. 10 to treasurers and extras	139
Form No. 11 to clerks—marriages—and extras	140
Form No. 12 to clerks—administrators—and extras	147
Form on Postal to auditors	92
Total forms	5,823
Circulars, May 14	184
Circulars, July 25, one with every form	5,823
Circulars, September, to cities, towns and townships, with extras	1,500
Total circulars	7,507
Polygraph to banks	110
Polygraph to gravel roads	127
Polygraph to recorders	72
Polygraph to treasurers	67
Polygraph to clerks	19
Polygraph to clerks, February 5, 1880	95
Polygraph to township trustees	324
Total	814

Letters received from county, township and other officials.	815
Letters received pertaining to geology, etc.	403
Letters received from other State bureaus, etc	22
Total letters received and filed	1,240
Letters and postals sent, about	1,802
Letters and postals sent, pages, about	2,045
Total letters, forms, circulars, prepaid and mailed.	15,933
Total letters, forms, circulars, etc., received and examined.	3,913

The "Chief of the Bureau" has had general direction of affairs, especially in devising the plan of operations and the points and forms of inquiries. This work, combined with that of giving oral and written opinions and advice to hundreds on questions relating to Natural History, Archeology, Geology, including Building Stone, Cements, Coal, Coal Mines and Shafts, Coal-fields and their development, Lime, Manures, Quarries, etc., etc., and the care, arrangement and increase of the State Museum and Bureau Library, shows that his duties have been multitudinous as well as somewhat exacting.

First Assistant John T. Campbell brought to the aid of the Bureau an experience derived from long study of financial statistics, supplemented by his training as a civil engineer, and a mathematical, inventive cast of mind. He has worked with absorbed devotion, and deserves full credit for persistent and laborious effort. Many tables of special interest have been devised by him; he has had charge of the routine work of the office, receiving, filing and answering correspondence as to forms, circulars, etc.; the preparation of blanks for tabulation, and the descriptive titles, the proportions and percentages which are attached as explanatory of each table:

METHOD OF ESTIMATES, ETC.

There are 1,010 townships, 51 cities and 227 incorporated towns in the State, representing an estimated population in April, 1879, based on double the taxable polls and enumerated school children, of 2,052,116. The polls and children in 1870 were a trifle over half the population, and that ratio held good in a large portion of a long list of minor subdivisions, as counties, townships, cities and towns. Of the foregoing, 892 townships, 34 cities and 133 towns have made report to this Bureau, representing 82 per cent. of the estimated population. Perhaps no other State ever succeeded so well in the first attempt at gathering statistics.

While these reports from townships, cities and towns are not precise in some instances, they are perhaps as accurate as statistical information generally is. These statements are published just as returned, that the people of the localities from whence they come may see with what faith their local officers made returns, in the hope that greater care will be taken in the future.

In the tables showing any business which is general over the State a statement of estimates, etc., is prefixed, obtained by taking the establishments which give full answers to all the questions, aggregating their capital, raw material, product, employes, wages and other expenses, showing in manufactories the ratio of capital to employes, to value of raw material used, to the value of the manufactured product, to wages paid and to other expenses per annum.

Same with dealers. For example: The whole number of establishments engaged in general merchandise in 1878, as returned, was 1,434. Of this number 456 returned full answers, showing the aggregate average stock at $1,841,982; the annual purchases at $5,478,632; the annual sales at $6,659,658; the aggregate number of employes at 824; the aggregate annual wages at $301,075, and the aggregate annual expenses other than wages at $186,498. This allows an employe to every $2,235 of average stock. The purchases are 298 per cent. of (2.98 times) the carrying stock. The sales are 362 per cent. of (3.62 times) the carrying stock. The wages paid employes is 16 per cent., and other expenses 10 per cent. of the average stock. Nine hundred and two establishments, including the 456 before mentioned, gave the average stock at $2,965,272; the annual purchases at $8,118,729, and the annual sales at $9,771,082 (other questions not fully answered), showing the purchases to be 274 per cent. of (2.74 times) the average stock, and the sales to be 330 per cent. of (3.30 times) the stock. Eleven hundred and eighty-six establishments, including the 902 before mentioned, gave the average annual value of their stock at $3,424,392, averaging $2,887 to each establishment so reporting.

Assuming this to fairly apply to 1,434 establishments reported or mentioned in the returns, it will give $4,140,460 of average stock to 82 per cent. of the State, or for the whole State $5,049,341. The probability is that those establishments which gave full answers to all the questions, also gave the most reliable answers, and that their ratio of purchases, sales, etc., to capital, or average stock is the safest on which to base an estimate. Multiplying $5,049,341 by 298 (per cent.), and dividing by 100, gives annual purchases for the State at $15,047,036, and multiplying by 362 (per cent.), and dividing by 100, gives the sales for the State at $18,278,614. In this particular line, wholesale is not included as in other lines, there being no wholesale general merchandise. It is not safe to assume that every return which shows extraordinary profits or losses is necessarily false, for many contingencies come in to affect business. A merchant may have engaged in that business for the first time, and not being versed in the art of buying and selling, may have lost money, and *vice versa*.

At the time the forms were sent out to gather information, it was not contemplated to show more than the capital and labor employed, and the general profits and losses of the various kinds of trades and manufactures. To estimate the consumption of the people in these several lines, the wholesale trade must be deducted.

The experience of this Bureau demonstrates that the business of dealers and manufacturers can be as easily and correctly shown as can the agricultural products. So great a number gave a full showing of their business that an estimate for the State can be made scarcely less trustworthy than a full count. As each individual contributing to this aggregate of information finds, as he *will*, that he has not been at all injured or betrayed, the willingness of others to contribute will greatly increase. If the official machinery for collecting information was more perfect, the true annual growth of the business of the State could be fully exhibited.

Mr. Thomas A. Lloyd tabulated the reports by recorders on mortgages, liens and transfers, the reports on roads and bridges, county property, county expenditures, marriages for each month for ten years, cities and towns, showing streets, public improvements, polls, etc., toll roads, newspapers and periodicals, and municipal indebtedness; the Bureau is also indebted to him for valuable suggestions and careful adjustment of county treasury statements.

H. B. Davis made the arithmetical calculations and prepared the agricultural table of farm products for 1878, the products per acre for 1873 to 1879, inclusive of wheat, corn and oats, church statistics, per cent. of increase of values, etc.

Marshall E. Palmer prepared the tables of Banks, Barrel Factories, Blast Furnaces, Boot and Shoe Factories, Coal Mines, Coffin Factories, Cooper Shops, Foundries, Furniture Factories, Gas Works, Harness and Saddle Factories, Lot and Land Holders, Marble Works, Machine Works, Miscellaneous and Social tables, Potteries, Saw Mills, Sewer Pipe and Stave Factories.

Charles E. Smith prepared the following tables: Township Expenditures, Educational Institutions, Dealers in Agricultural Implements, Books and Stationery, Boots and Shoes, Clothing, Coal and Wood, Drugs, Dry Goods, Furniture, General Merchandise, Grain, Groceries and Provisions, Hardware, Jewelry and Timekeepers, Licensed Liquor Saloons, Unlicensed Liquor Saloons, Livery Stables, Live Stock Dealers, Lumber Yards, Milliners, Saddles and Harness, Tin and Stoves, Tobacconists, Toys and Notions, Miscellaneous Dealers, and Administrators.

Lucien W. Hetzelgesser tabulated the following: Blacksmiths' Forges, Breweries, Brick, Carriage, Cement, Cigar, Cotton Manufactories, Planing Mills, Flouring Mills, Drain Tile, Wagon Factories, Dairies, Merchant Tailors, Photographers, Stone Quarries, Distilleries and Unenumerated Industries.

T. G. Woolen compiled and calculated the tables showing the taxation of Townships, Cities, Towns, etc., for 1875–6–7–8–9, cost of construction, equipment, length, etc., of Railroads; Free Gravel Roads, cost and length, and the "Commonwealth" table condensed from so many others.

The Bureau is indebted to George H. Fleming for valuable aid in systematizing and tabulating the death returns, a work of special difficulty.

All the foregoing clerical work, much of which required careful adjustment and the intuition necessary for deciphering strange hieroglyphics, has been done by these gentlemen with careful regard to precision, with neatness and dispatch. The Bureau can not give too much credit to them for faithful, patient labor.

The Report of the State Health Commission, and the other papers by the distinguished authors, will command the attention and study which the importance of the subjects discussed merits. These papers, it is stated, were ordered published by the Legislature, and are consequently here annexed.

LIST OF STATISTICAL TABLES.

AGRICULTURAL.

Agriculture of 1879 by townships.
Agriculture of 1878, Form "A."
Agriculture, rate per acre, 1873-9.
Agriculture of 1879 by counties.

DEALERS.

Agricultural Implements.
Books and Stationery.
Boots and Shoes.
Clothing (Men's).
Coal and Wood.
Drug Stores.
Dry Goods.
Furniture.
General Merchandise.
Grain Dealers.
Groceries and Provisions.
Hardware.
Jewelry and Timekeepers.
Liquor Saloons (licensed).
Liquor Saloons (unlicensed).
Livery Stables.
Live Stock Dealers.
Lumber Dealers.
Millinery.
Sadddle and Harness.
Tinware and Stove.
Tobacconists.
Toys and Notions.
Miscellaneous Dealers.

MANUFACTURERS.

Agricultural Implements.
Barrel Factories.
Blast Furnaces.
Blacksmiths' Forges.
Boots and Shoes.
Breweries.
Brick (common).
Brick (fire).
Carriages.
Cement.
Cigars.
Coffins.
Coal Mining.
Coopering.
Cotton Mills.
Dairies.
Distilleries of Whisky.
Distilleries of Brandy.
Drain Tiles.
Flouring Mills.
Foundries.
Furniture.
Gas.
Harness and Saddles.
Machine Works.
Marble Works.
Merchant Tailors.
Photographing.
Planing Mills.
Potteries.
Saw Mills.
Sewer Pipes.
Stave Factories.
Stone Quarries.
Wagon Factories.
Woolen Mills.
Miscellaneous.

UNCLASSIFIED.

Banks—assets and liabilities.
Banks—employes, salaries, etc.
Turnpikes, etc.
Newspapers, etc.
Mortgages, etc.
Rate of Taxation.
Real Estate Holders.
Public Indebtedness.
Public Property.
Roads—kind, number and value.
"Common Wealth."
Taxable value and acreage per capita.
Per cent. of increase in taxable values, etc.
Township Expenditures.

SOCIAL STATISTICS.

Churches.
Dead Beats, etc.
Ministers, Doctors, Lawyers and Teachers.

VITAL STATISTICS.

Administrators, by months.
Administrators, by years.
Indianapolis.
Other Cities, Towns and Townships.

The Bureau invites the friendly advice and criticism of thoughtful students on the plans, work and tables here presented; suggestions for the better execution of the law under which it is laboring will be gladly received; suggestions as to what the law ought to

have been should be made to the Legislature. The Bureau can do no more than the law, herein quoted, authorizes.

Work in the division of geology, etc., has been limited to the care and arrangement of the State Museum, examination of Coals, Stone, Cements and Ores of the State; the inspection of some of the mines and quarries, and the detail survey of Monroe county by George K. Green, the map of which, on account of sickness in his family, is not completed in time for this publication.

The annual report to the Governor of the expenditures of the Bureau for the fiscal year ending October 31, 1879, is appended, with a list of the books, pamphlets, maps, etc., donated to the Library, and of minerals, fossils and relics of the State or pre-historic age, presented to the State Museum, with the name of the donors, which are thus publicly acknowledged.

1880.

The year 1880 is the time for the decennial census of the United States; there are many common points of inquiry that will be fully and exhaustively covered by the National Government. It seems neither politic nor desirable that this Bureau should cover the same field and double the route which will be exhaustively pursued by the census authorities, backed with millions of money. Other lines of examination may be followed, allowing more attention to the co-department of geology and natural history.

Well devised forms have been prepared and sent out to the proper officers by the Auditor of State, according to the statute, which insures the collection of full agricultural statistics for the past year, with acreage of the crops of the present year. This forms the basis of advance plans, and will enable actual reports of the crops of the State to be given within a few months after they are harvested.

THANKS.

Grateful acknowledgments are due from this Bureau, for suggestions, advice and kind assistance, to Governor Williams and the Executive Department, to General M. D. Manson, Auditor of State, and Mr. John H. Piercy, Deputy Auditor; to Attorney General Woollen and Assistant Ayers; to the Secretary and Treasurer of State and Superintendent of Public Instruction and each

of their official assistants; to all the editors of the State, without exception, but especially to the editors of the Indianapolis Sentinel, Journal, News and Farmer. Kind aid has been given by Secretary A. Heron and the State Board of Agriculture; by Hon. John B. Conner, author of the law establishing the Bureau, the various Boards of Trade throughout the State, and the Mayors and authorities of some of the most thriving towns and cities.

Earnest thanks are returned to the County Auditors and to those County Recorders, Treasurers and Clerks who promptly and faithfully gave full and precise statements to the Bureau. With them must be classed such of the Township Trustees as well and fairly reported their districts.

By the aid of all these officers and gentlemen, and the favor of the good people of Indiana, this report is made, and to your Excellency respectfully submitted.

REPORT OF EXPENSES.

DEPARTMENT OF STATISTICS AND GEOLOGY,
INDIANAPOLIS, INDIANA, October 31, 1879.

To His Excellency, JAMES D. WILLIAMS,
Governor of Indiana:

SIR—In pursuance of a requirement of sixth section of the Act of the General Assembly of Indiana, creating the department of "Statistics and Geology," I submit the following "detailed statement, accompanied with the proper vouchers" (Nos. 1 to 35 inclusive), of and for all moneys expended during the fiscal year ending October 31, 1879:

July 3,	Voucher No. 1, postage stamps, by self . .	$27 00
June 6,	Voucher No. 1[a], express on books, Iowa . .	75
June 9,	Voucher No. 2, express on Connecticut books	70
June 9,	Voucher No. 3, express on books	50
June 10,	Voucher No. 4, express on package books .	75
June 11,	Voucher No. 5, express on package books, New Jersey	50
June 11,	Voucher No. 6, express for package . . .	50
June 13,	Voucher No. 7, express on package books, Minnesota	30
June 16,	Voucher No. 8, express on package	25
June 18,	Voucher No. 9, express on Boston, Massachusetts, books	60
June 19,	Voucher No. 10, freight on books, I., P. & C. Railroad	1 16
June 20,	Voucher No. 11, express on Madison, Wisconsin, books	25
June 12,	Voucher No. 12, express on Topeka, Kansas, books	70

June 24, Voucher No. 13, Indiana Directory	$5 00
July 1, Voucher No. 14, express on North Carolina .	13 00
July 2, Voucher No. 15, Sulgrove, labor in laboratory	6 00
June 26, Voucher No. 15[a], W. B. Burford, printing, etc	65 81
June 30, Voucher No. 15[b], G. M. Levette, assistant .	128 33
July 26, Voucher No. 16, Heron, express on New York books	40
July 26, Voucher No. 17, memorandum books . .	25
July 28, Voucher No. 18, express on New York books	65
Aug. 4, Voucher No. 18[a], J. T. Campbell, assistant .	58 35
Sept. 1, Voucher No. 19, postage paid per self . . .	43 00
Sept. 1, Voucher No. 19[a], Campbell, assistant . . .	70 00
Aug. 26, Voucher No. 20, paid carrier	3 85
Aug. 26, Voucher No. 21, box for Smithsonian Reports	25
Aug. 26, Voucher No. 22, blank books	65
Aug. 26, Voucher No. 23, cartage of books	25
June 26, Voucher No. 24, binding book	1 50
July 5, Voucher No. 25, express package from Terre Haute	25
July 8, Voucher No. 26, express package, Cincinnati.	25
July 31, Voucher No. 27, express, sundry	1 60
Aug. 1, Voucher No. 28, express package, Chicago .	45
Aug. 8, Voucher No. 29, express package, Vermont .	1 70
Aug, 11, Voucher No. 30, express package from New York	80
Aug. 14, Voucher No. 31, express package from Pittsburg..	1 30
Sept. 13, Voucher No. 32, printing and stationery, Carlon	24 00
Sept. 13, Voucher No. 33, printing and stationery, Carlon	73 50
Sept. 20, Voucher No. 34, printing and stationery, Carlon	44 70
Sept. 30, Voucher No. 35, Campbell, assistant	75 00
Total	$654 80

Salary of Chief drawn to date, for which receipted bills are filed with Auditor of State	$483 34
Total	$1,138 14

The allotment of the appropriation, for facility of keeping accounts, by the Auditor of State for the fiscal year ending October 31, 1879, shows as follows:

For Salary of Chief	$583 34
For Expenses of Bureau	1,235 00
Total	$1,818 34

Amount expended as above	$1,138 14	
Amount on hand unexpended, carried forward to cancel bills and expenses already incurred	680 20	
Total	$1,818 34	

JOHN COLLETT,

Chief of Bureau.

LIST OF BOOKS AND PAMPHLETS RECEIVED

DURING THE YEAR 1879.

No. 1. Memoir of Chromides Marins, from National Historical Society, from Smithsonian Institute. May 22.

No. 2. Archives of Exact and Natural Sciences of Netherlands, Volume 12, Parts 2, 3, 4, and 5, per Smithsonian Institute. May 22.

No. 3. Census of Massachusetts, Volume II, Manufacturers and Occupations, from State Librarian. May 22.

No. 4. Tenth Annual Report American Museum Natural History, New York, from Prof. A. S. Bickmore. May 22.

No. 5. Laws of Regular and Special Sessions of Indiana Legislature, 1879, from Secretary of State. May 28.

No. 6. Contribution to the Geology of the Lower Amazon, from Prof. Orville A. Derby. May 29.

No. 7. Annals, Society Geologique de Belgique, Volumes 2 and 3, per Smithsonian Institute. June 2.

No. 8. First Annual Report State Board of Health of Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 9. Thirteenth Report Fish Commission of Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 10. Twenty-sixth Report Railroad Commission of Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 11. Report of Board of Education of Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 12. Twelfth Annual Report Board of Agriculture, Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 13. Report of Bank Commissioner, Connecticut, from Secretary State, Hartford, Connecticut. June 9.

No. 14. Twenty-second Annual Report Savings Banks of Maine, from Secretary State, Augusta, Maine. June 10.

No. 15. Report of Railroad Commission of Maine for 1878, from Secretary State, Augusta, Maine. June 10.

No. 16. Twenty-third Annual Report of Maine Board of Agriculture for 1878, from Secretary State, Augusta, Maine. June 10.

No. 17. Twenty-fifth Annual Report State Superintendent Common Schools of Maine for 1878, from Secretary State, Augusta, Maine. June 10.

No. 18. Second Biennial Report of State Fish Commissioner of Iowa, from Secretary State, Des Moines, Iowa. June 10.

No. 19. Biennial Report of Auditor of State of Iowa, from Secretary State, Des Moines, Iowa. June 10.

No. 20. Biennial Report Superintendent Public Instruction of Iowa, from Secretary State, Des Moines, Iowa. June 10.

No. 21. Seventh Biennial Report Iowa State Agricultural College, from Secretary State, Des Moines, Iowa. June 10.

No. 22. Thirteenth State Census of Iowa for 1875, from Secretary State, Des Moines, Iowa. June 10.

No. 23. Transactions Iowa State Horticultural Society for 1878, from Secretary State, Des Moines, Iowa. June 10.

No. 24. First Annual Report of Railroad Commissioners, State of Iowa, for 1878, from Secretary State, Des Moines, Iowa. June 10.

No. 25. A Manual of Georgia, from Commissioner of Agriculture, Georgia. June 14.

No. 26. Soil, Tests of Fertilizers and Results, from Commissioner of Agriculture, Georgia. June 14.

No. 27. Report of Crops for April and May, from Commissioner of Agriculture, Georgia. June 14.

No. 28. A Manual on the Hog, from Commissioner of Agriculture, Georgia. June 14.

No. 29. The Farmer's Scientific Manual, from Commissioner of Agriculture, Georgia. June 14.

No. 30. Report of Secretary of State for Colorado, 1878, from Secretary State, Denver, Colorado. June 14.

No. 31. Report Auditor of State, Colorado, for 1878, from Secretary State, Denver, Col. June 14.

No. 32. Report Superintendent of Public Instruction, Colorado, for 1878, from Secretary State, Denver, Col. June 14.

No. 33. Report State Board of Agriculture, for 1878, from Secretary State, Denver, Col. June 14.

No. 34. Report Commissioners of Penitentiary, Colorado, for 1878, from Secretary State, Denver, Col. June 14.

No. 35. Report State Board of Health, Colorado, for 1878, from Secretary State, Denver, Col. June 14.

No. 36. Report of Railroad Commissioners of Minnesota for 1878, from Secretary State, St Paul, Minn. June 14.

No. 37. Report State Board of Health of Minnesota, for 1879, from Secretary State, St. Paul, Minn. June 14.

No. 38. Report of Public Examiner of Minnesota for 1878, from Secretary State, St. Paul, Minn. June 14.

No. 39. Report Superintendent Public Instruction, Minnesota, for 1878, from Secretary State, St. Paul, Minn. June 14.

No. 40. Geological Report of Alabama for 1875, from Secretary State, Montgomery, Ala. June 14.

No. 41. Geological Report of Alabama for 1876, from Secretary State, Montgomery, Ala. June 14.

No. 42. Report of Auditor of State of Alabama for 1878, from Secretary State, Montgomery, Ala. June 14.

No. 43. Alabama Manual and Statistical Register for 1869, from Secretary State, Montgomery, Ala. June 14.

No. 44. Biennial Message of Governor West, with accompanying documents, session of 1879, State of Virginia, from Secretary State, Virginia. June 23.

No. 45. Resources of West Virginia, by M. F. Maury, 1876, from Secretary State, Virginia. June 24.

No. 46. Crop, Stock and Labor Report of Virginia for 1878, from Secretary State, Virginia. June 24.

No. 47. Hand-Book of Virginia for 1879, from Secretary State, Virginia. June 24.

No. 48. Second Annual Report of Commissioner of Agriculture of Virginia, from Secretary State, Virginia. June 24.

No. 49. Annual Report of Officers, Boards and Institutions of Virginia for 1878, from Secretary State, Virginia. June 24.

No. 50. Tenth Annual Report State Superintendent of Instruction of South Carolina for 1878, from Secretary State, Columbia, S. C. June 26.

No. 51. Report of Health Officer of South Carolina for 1877–8, from Secretary State, Columbia, S. C. June 26.

No. 52. South Carolina: A Home for the Industrious Emigrant, from Secretary State, Columbia, S. C. June 26.

No. 53. Report of Comptroller General for 1878 South Carolina, from Secretary State, S. C. June 26.

No. 54. Tenth Annual Report of Bureau of Statistics and Labor of Massachusetts, from Hon. J. B. Connor, Indianapolis.

No. 55. United States Treasury Department: Report of Chief of Bureau of Statistics for Third Quarter, 1878, from J. B. Connor.

No. 56. Massachusetts: History of the Bureau of Statistics and Labor, from J. B. Connor.

No. 57. Biennial Report of Board of Education of Texas for 1877–8.

No. 58. Statistics of Minnesota for 1878.

No. 59. Geology of Wisconsin. Vol. II, with Atlas.

No. 60. Report of the Governor of Wyoming Territory for 1878.

No. 61. Report State Geologist of New Jersey for 1878.

No. 62. Report of State Board of Agriculture of New Jersey, for 1878.

No. 63. Report of Bureau of Statistics, Labor and Industries of New Jersey, for 1878.

No. 64. Report of Commissioner of Pilotage of New Jersey, for 1878.

No. 65. Report of Banks and Savings Institutions of New Jersey, for 1878.

No. 66. Report of Commissioners of Fisheries of New Jersey, for 1878.

No. 67. Annual Statement of Railroad and Canal Companies of New Jersey, for 1878.

No. 68. Annual Report of Commissioner of Railroad Taxation of New Jersey, for 1878.

No. 69. Report of Board of Health of New Jersey, for 1878.

No. 70. Report of the Clay Deposit, Fire Brick, Pottery, etc., of New Jersey, for 1878.

No. 71. Report of State Board of Education of New Jersey, for 1878.

No. 72. Report of Officers of Lunatic Asylum of New Jersey, for 1878.

No. 73. Report of Riparian Commissioner of New Jersey, for 1878.

No. 74. Third Annual Report of Insane Asylum Managers of New Jersey, for 1878.

No. 75. Report of Trustees of State Normal School of New Jersey, for 1878.

No. 76. Report of State Reform School of New Jersey, for 1878.

No. 77. Eighth Annual Report of State Industrial School for Girls of New Jersey, for 1878.

No. 70. Fourteenth annual report of Rutgers Scientific School of New Jersey for 1878.

No. 79. Report of Home for Disabled Soldiers, New Jersey, for 1878.

No. 80. Report of State Librarian of New Jersey for 1878.

No. 81. Report of Commissioners of Sinking Fund for 1878 of New Jersey.

No. 82. Report on Treasurer's Account, New Jersey, 1878.

No. 83. Report of Commissioner for Encouragement of Manufactures, New Jersey, 1878.

No. 84. Report of Inspectors of Weights and Measures, New Jersey, for 1878.

No. 85. Report of Comptroller of Treasury, New Jersey, for 1878.
No. 86. Report of State Prison of New Jersey for 1878.
No. 87. Instruction for the Registry and Return of Marriages, Births and Deaths, New Jersey.
No. 88. Marriage, Birth and Death, return form, New Jersey.
No. 89. Report of State Superintendent of Public Instruction for 1878, Arkansas.
No. 90. Report of Deaf Mute Institute for 1877–8, Arkansas.
No. 91. Report of Attorney-General for 1879, Arkansas.
No. 92. Report of Commissioners of State Lands for 1878, Arkansas.
No. 93. Report of Secretary of State for 1878, Arkansas.
No. 94. Report of Treasurer of State, for 1878, Arkansas.
No. 95. Letter of the State Board of Finance to the people, 1877, Arkansas.
No. 96. Transactions of the State Agricultural Society, of California, for 1877.
No. 97. Report of Surveyor General, of California, for 1877.
No. 98. Report of State Board of Equalization, for 1877, California.
No. 99. Report of Commissioner of Fisheries, of California.
No. 100. Report of State Board of Health, for 1876-7, California.
No. 101. Report of Commissioners of Transportation, for 1877, California.
No. 102. Hand-book of North Carolina.
No. 103. Fish Culture, North Carolina.
No. 104. Report of Commissioner of Agriculture, North Carolina.
No. 105. Blank forms for Statistics, North Carolina.
No. 106. Analysis of Fertilizers, North Carolina.
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No. 112. Bulletin of Minnesota Academy of Natural Sciences, 1877.

No. 113. Transactions of Manchester (England) Geological Society, 1878–9.

No. 114. First Report of State Board of Agriculture, Kansas.

No. 115. Report of State Superintendent of Public Instruction, 1877–8, Kansas.

No. 116. Fifth Annual Report of State Board of Agriculture for 1876, Kansas.

No. 117. Monthly Reports of State Board of Agriculture, Kansas, for February, March, November and December, 1877, and May, June, July, August, September, October, November and December, 1878.

No. 118. Quarterly Reports of State Board of Agriculture, Kansas. First quarter, 1879.

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No. 143. Ninth Annual Report State Board of Charities, New York.

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No. 175. Annual Report on Statistics of Crime, 1875, New York.

No. 176. Annual Report on Criminal Statistics, 1878, New York.

No. 177. Annual Report of State Agricultural Society, 1878, New York.

No. 178. Fifty-third Annual Report of the Society for Reformation of Juvenile Delinquents, New York.

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No. 182. Annual Report on Statistics of Pauperism for 1877, New York.

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No. 184. Transactions of State Agricultural Society for 1871, New York.

No. 185. Transactions of State Agricultural Society for 1872–76, New York.

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No. 202. United States Coast Survey for 1872, from Alex. Heron, Secretary Indiana State Board of Agriculture.

No. 203. Indiana Agricultural Reports for 1870.

No. 204. Indiana Agricultural Reports for 1871.

No. 205. Indiana Agricultural Reports for 1872.

No. 206. Indiana State Agricultural Report, 1874.

No. 207. Indiana State Agricultural Report, 1875.

No. 208. Indiana State Agricultural Report, 1876.

No. 209. Indiana State Agricultural Report, 1877.

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No. 212. Treatment of the Drowned (4 pages), Michigan.

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No. 243. Second Report of Board of Health for 1877, Michigan.

No. 244. Fifth Report of Board of Health for 1877, Michigan.

No. 245. Statistics of Michigan for 1870.

No. 246. Transactions of Indiana Horticultural Society, from W. H. Ragan, Secretary.

No. 247. Indiana Documentary Journal, Volume 1, 1870–1.
No. 248. Indiana Documentary Journal, Volume 2, 1870–1.
No. 249. Indiana Documentary Journal, Volume –, 1871.
No. 250. Indiana Documentary Journal, Volume –, 1872–3.
No. 251. Indiana Documentary Journal, Volume 2, 1874–5.
No. 252. Indiana Documentary Journal, Volume 1, 1874–5.
No. 253. Indiana Documentary Journal, Volume 1, 1875–6.
No. 254. Indiana Documentary Journal, Volume 2, 1875–6.
No. 255. Indiana Documentary Journal, Volume 1, 1863.
No. 256. Indiana Reports (from Auditor State Manson), 1875.
No. 257. Indiana Reports (from Auditor State Manson), 1877.
No. 258. Indiana Annual Reports, 1871.
No. 259. Indiana Documentary Journal, Volume 1, 1878–9.
No. 260. Indiana Documentary Journal, Volume 2, 1878–9.
No. 261. Indiana Senate Journal, 1873.
No. 262. Indiana House Journal (from Auditor Manson), 1873.
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No. 276. United States Finance Report, Secretary of the Treasury, 1878.
No. 277. Quarterly Report, Bureau of Statistics, 1877–78.
No. 278. Commerce and Navigation, Part 1, 1878, Bureau of Statistics.

No. 279. Commerce and Navigation, Part 2, 1878, Bureau of Statistics.
No. 280. Commerce and Navigation, 1877, Bureau of Statistics.
No. 281. Commerce and Navigation. Monthly report, 1872–73.
No. 282. Commerce and Navigation. Monthly report, 1873–74.
No. 283. Commerce and Navigation. Monthly report, 1874–75.
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No. 299. Agricultural Report of Indiana, 1874.
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No. 309. Report of Secretary of State and Commissioner Public Printing, Wisconsin, 1878.

No. 310. Resources and Attractions of Utah: Prepared by the Utah Board of Trade, 1879.

No. 311. Report Bureau of Statistics, etc., New Jersey. James Bishop, Chief.

No. 312. Report of Chicago Board of Trade, 1872.

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No. 314. Report of Chicago Board of Trade, 1874.

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No. 318. Report of Chicago Board of Trade, 1878.

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No. 223. Report of New York Produce Exchange, 1876–7.

No. 324. Report of New York Produce Exchange, 1878.

No. 325. Quarterly Report of Bureau of Statistics, 1876–7.

No. 326. Report Commerce and Navigation, 1876.

No. 327. Proceedings of National Board of Trade, 1869. Charles Randolph, Secretary.

No. 328. Proceedings of National Board of Trade, 1870.

No. 329. Proceedings of National Board of Trade, 1871.

No. 330. Proceedings of National Board of Trade, 1872.

No. 331. Proceedings of National Board of Trade, 1873.

No. 332. Proceedings of National Board of Trade, 1874.

No. 333. Proceedings of National Board of Trade, 1875.

No. 334. Proceedings of National Board of Trade, 1876.

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No. 356. Annual Report of Postmaster-General, 1876.
No. 357. Annual Report of Postmaster-General, 1877.
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Seven pamphlets and two atlases, as follows:

No. 359. Ser. C. No. 26, on the Causes of the Glacial Phenomena, with maps, from Geological Department, Stockholm, Sweden.

No. 360. Halle-och, Hunneberg's Trapp, af. E. Svedmark.

No. 361. Ser. C. No. 28, De Paleozoiska Bildningarna vid Humlenäs. I. Smaland, af. G. Linnarsson.

No. 362. Ser. Aa. No. 63, Beskrifning Till Kartbladet Brefven, af. Edward Erdmann.

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No. 364. Ser: Aa. Nos. 65 and 66. Beskrifning till Kartbladen Sandsort Och Källskären, af. A. G. Nathorst.

No. 365. Ser: Aa. No. 67. Beskrifning till Karlbladet Herrvadkloster, af. Axel. Sindström.

No. 366. Atlas } With foregoing pamphlets from O. Treel, Chief
No. 367. Atlas } of Bureau of Geology, Stockholm, Sweden.

No. 368. Second Annual Report Geological Survey, Pennsylvania, 1838.

No. 369. Second Annual Report Geological Survey, Pennsylvania, 1839.

No. 370. Second Annual Report Geological Survey, Pennsylvania, 1840.

No. 371. Second Annual Report Geological Survey, Pennsylvania, 1841.

No. 372. Second Annual Report Geological Survey, Pennsylvania, 1842.
(From Pennsylvania Historical Society, Philadelphia.)
No. 373. Walter P. Jenning's Survey of the Black Hills, 1876. Mineral wealth, climate, rainfall, etc.
No. 374. Paleontology of the Black Hills. R. P. Whitfield. 1877. J. W. Powell in charge.
No. 375. Bibliography of North America, Invertebrated Paleontology, by C. A. White. 1878.
No. 376. United States Geological Survey of the Territories. Hayden. 1868–9.
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No. 378. United States Geographical and Geological Survey, Second Division. Powell. 1876.
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No. 392. Report of Railroad Commissioner of Vermont, for 1875-6.
No. 393. Report of Railroad Commissioner of Vermont, for 1877-8.
No. 394. Vermont Constitutional Convention, for 1870.

No. 395. Proceedings Vermont Historical Society, Oct. 15, 1878.
No. 396. Catalogue Vermont State Library, September 1, 1872.
No. 397. Second Biennial Report Insurance Companies, Vermont, for 1873-4.
No. 398. Third Biennial Report Insurance Companies, Vermont, for 1875-6.
No. 399. Twenty-fifth Vermont School Report, for October, 1878.
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No. 405. Vol. 2, Geology of Vermont, for 1861.
No. 406. Second Annual Report Metropolitan Board of Health, 1867.
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No. 418. Special Report on the Trap Dykes and Azoic Rocks of Southeastern Pennsylvania.—E. T. Sterry Hunt.
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No. 423. Part II. same as above.—H.H.H.

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No. 429. Report of Progress in the Fayette and Westmoreland District of the Bituminous Coal Fields of Western Pennsylvania.—K.K. J. L. Stevenson.

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No. 431. Report of Progress in the Fayette and Westmoreland District of the Bituminous Coal Fields of Western Pennsylvania.—K.K.K. J. J. Stevenson.

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No. 434. Report of Progress.—N. 200 Tables of Elevations above Tide Level.—N. Charles Allen.

No. 435. Report of Progress in the Beaver River District of the Bituminous Coal Fields of Western Pennsylvania.—O. By J. C. White.

No. 436. Catalogue of the Geological Museum. Part I.—Q. Charles E. Hall.

No. 436. M.M. Second Geological Survey of Pennsylvania. Chemical Analysis.

No. 436. V. Second Geological Survey of Butler County, Pa.

No. 437. Report of T. Couchman, Chief Inspector of Mines, Melbourne, Australia.

No. 438. Report of Mining Surveyors and Registrars. T. Couchman, Chief Inspector of Mines, Melbourne, Australia.

No. 439. Catalogue of the Brazilian Section at the International Exhibition, Philadelphia.

No. 440. The Enterprise of Brazil at the Universal Exhibition of 1876, in Philadelphia.

No. 441. Castilian Collection.

No. 442. Third Annual Report of the Board of Trustees of Illinois Industrial University.

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No. 447. Report of Smithsonian Institute, for 1875.

No. 448. Report of Smithsonian Institute, for 1876.

No. 449. Report of Smithsonian Institute, for 1877.
(Received from Smithsonian Institute.)

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No. 452. Statistical Reports of Ohio, for 1866.
No. 453. Statistical Reports of Ohio, for 1871.
No. 454. Statistical Reports of Ohio, for 1873.
No. 455. Statistical Reports of Ohio, for 1876.
No. 456. Statistical Reports of Ohio, for 1878.
No. 457. Late Census Law, Circulars and Forms, from Census Bureau.
No. 458 Ohio Agricultural Report, for 1878.
No. 459. Diseases of Swine, from Department of Agriculture, Washington, D. C.
No. 460. Systematic Geology, Vol. 1, (King.)
No. 461. Descriptive Geology, Vol. 2, (King.)
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No. 463. Explorations and Surveys, Humphries & Wheeler, 1875, part 6.
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No. 473. Report Superintendent Public Instruction Indiana, 1876. (Smart.)
No. 474. Report of Commissioner of Education, Washington, D. C.

No. 475. Quarterly Report Bureau of Statistics, quarter ending June 30, 1879. Washington, D. C.

No. 476. Proceedings and Transactions of the Nova Scotian Institute of Natural Science.

No. 477. Bulletin of the Essex Institute. From Essex Institute. November 11, 1879.

No. 478. Agricultural Report of Ohio. From Alex. Heron, Secretary Indiana State Board of Agriculture.

No. 480. Report Special Commissioner, Revenue, 1868.

No. 481. Report Special Commissioner, Revenue, 1869.

No. 482. United States Commission at Vienna Exhibition, Vol. 1.

No. 483. United States Commission at Vienna Exhibition, Vol. 2.

No. 484. United States Commission at Vienna Exhibition, Vol. 3.

No. 485. United States Commission at Vienna Exhibition, Vol. 4.

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No. 487. United States Survey of Wyoming, etc., 1871. Wheeler.

No. 488. United States Survey of Montana, Wyoming, Idaho and Utah, 1872. Hayden.

No. 490. United States Geological Survey of Colorado, 1873. Hayden.

No. 491. United States Geological and Geographical Survey of Colorado and adjacent territory, 1874. Hayden.

No. 492. United States Geological and Geographical Survey of Colorado and adjacent territory, 1875. Hayden.

No. 493. United States Geological and Geographical Survey of Colorado and adjacent territory, 1876. Hayden.

No. 494. United States Survey by Hayden and Entomological Commission on the Rocky Mountains.

No. 495. Report on Alaska. By Morris. 1879.

No. 496. Mineral Resources West of Rocky Mountains. By R. W. Raymond. 1869.

No. 497. Mining Statistics West of the Rocky Mountains. By R. W. Raymond.

No. 498. Mineral Resources West of Rocky Mountains, 1871. Raymond.

No. 499. Mineral Resources West of Rocky Mountains, 1872. Raymond.

No. 500. Mineral Resources West of Rocky Mountains, 1873. Raymond.

No. 501. Mineral Resources West of Rocky Mountains, 1874. Raymond.

No. 502. Mineral Resources West of Rocky Mountains, 1875. Raymond.

No. 503. Mineral Resources West of Rocky Mountains, 1876. Raymond.

No. 504. Commerce and Navigation, 1862.

No. 505. Commerce and Navigation, 1863.

No. 506. Commerce and Navigation, 1864.

No. 507. Commerce and Navigation, 1865.

No. 508. Commerce and Navigation, 1866.

No. 509. Commerce and Navigation, 1867.

No. 510. Explorations for Ship Canal across Isthmus Tehnautepec, 1872.

No. 511. Explorations for Ship Canal across Isthmus Tehuantepec, 1874.

No. 512. Solar Eclipse of August, 1869.

No. 513. Explorations in Nevada and Arizona, 1871.

No. 514. Report Smithsonian Institute, 1868.

No. 515. Report Smithsonian Institute, 1869.

No. 516. Report Smithsonian Institute, 1870.

No. 517. Report Smithsonian Institute, 1871.

No. 518. Report Smithsonian Institute, 1872.

No. 519. Report Smithsonian Institute, 1873.

No. 520. Report Smithsonian Institute, 1874.

No. 521. Report Smithsonian Institute, 1875.

No. 522. Report Smithsonian Institute, 1876.

No. 523. Report Smithsonian Institute, 1877.

No. 524. Diseases of Cattle, Department of Agriculture, 1871, Washington, D. C.

No. 525. Ninth Census, Population, etc., 1870.

No. 526. Ninth Census, Vital Statistics, 1870.

No. 527. Ninth Census, Wealth, etc., 1870.

No. 528. Report of Signal Service, 1872.

No. 529. Geological Survey of Colorado and New Mexico, 1869. Hayden.

No. 530. Cholera Epidemic in the United States, 1873.

No. 531. Commercial Relations, 1861.
No. 532. United States Fish Commission, southern coast of New England, 1871–2.
No. 533. United States Fish Commission, fresh water, 1872–3.
No. 534. United States Fish Commission, propogation, 1873–4–5.
No. 535. United States Fish Commission, propogation, 1875–6.
No. 536. Silver Commission, Volume 1.
No. 537. Silver Commission, Volume 2.
No. 538. Monthly Reports Department of Agriculture, 1866.
No. 539. Monthly Reports Department of Agriculture, 1867.
No. 540. Monthly Reports Department of Agriculture, 1868.
No. 541. Monthly Reports Department of Agriculture, 1869.
No. 542. Monthly Reports Department of Agriculture, 1870.
No. 543. Monthly Reports Department of Agriculture, 1871.
No. 544. Monthly Reports Department of Agriculture, 1872.
No. 545. Monthly Reports Department of Agriculture, 1873.
No. 546. Monthly Reports Department of Agriculture, 1874.
No. 547. Monthly Reports Department of Agriculture, 1875.
No. 548. Monthly Reports Department of Agriculture, 1876.
No. 549. Chinese Immigration, 1876.
No. 550. Diseases of Swine, Department of Agriculture, 1878.
No. 550½. Diseases of Swine, Department of Agriculture, 1879.
No. 551. Report on Forestry, 1877. Hough.
No. 552. Commercial Relations, 1869.
No. 553. Commercial Relations, 1870.
No. 554. Commercial Relations, 1871.
No. 555. Commercial Relations, 1872.
No. 556. Commercial Relations, 1873.
No. 557. Commercial Relations, 1874.
No. 558. Commercial Relations, 1875.
No. 559. Commercial Relations, 1876.
No. 560. Commercial Relations, 1877.
No. 561. Transportation Routes to the Seaboard, Vol. 1.
No. 562. Transportation Routes to the Seaboard, Vol. 2.
No. 563. Labor in Europe, 1878.

The foregoing list, embracing 117 volumes, were received November 13, by the courtesy of Hon. Lycurgus Dalton, and J. R. Bright, Sergeant-at-Arms United States Senate.

No. 564. Report of Commission of Education, 1870.
No. 565. Report of Commission of Education, 1871.
No. 566. Report of Commission of Education, 1872.
No. 567. Report of Commission of Education, 1874.
No. 568. Report of Commission of Education, 1875.
No. 569. Special Report of Commission of Education, 1871.
No. 570. Department of Agriculture, 1862.
No. 571. Department of Agriculture, 1865.
No. 572. Department of Agriculture, 1867.
No. 573. Department of Agriculture, 1868.
No. 574. Department of Agriculture, 1869.
No. 575. Department of Agriculture, 1870.
No. 576. Department of Agriculture, 1871.
No. 577. Department of Agriculture, 1872.
No. 578. Department of Agriculture, 1873.
No. 579. Department of Agriculture, 1874.
No. 580. Department of Agriculture, 1875.
No. 581. Department of Agriculture, 1876.
No. 582. Department of Agriculture, 1877.
No. 583. Reports of Land Office, 1866.
No. 584. Reports of Land Office, 1867.
No. 585. Reports of Land Office, 1868.
No. 586. Reports of Land Office, 1869.
No. 587. Reports of Land Office, 1870.
No. 588. Reports of Land Office, 1871.
No. 589. Bureau of Statistics, Commerce and Navigation, 1870.
No. 590. Bureau of Statistics, Commerce and Mavigation, 1871.
No. 591. Bureau of Statistics, Commerce and Navigation, 1872.
No. 592. Bureau of Statistics, Commerce and Navigation, 1873.
No. 593. Bureau of Statistics, Commerce and Navigation, 1874.
No. 594. Bureau of Statistics, Commerce and Navigation, part 2d, 1875.
No. 595. Bureau of Statistics Commerce and Navigation, 1876.
Nos. 564 to 592, inclusive, by courtesy of Commissioner Le Duc, Department of Agriculture, Washington, D. C.
No. 596. Special Reports Department of Agriculture, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16 and 17, from June 30, 1877, to June 30, 1879.

No. 597. Proceedings of the Engineers' Club, Philadelphia, Nos. 1, 2 and 3, from January to June, 1879.

No. 598. Report of Superintendent of Public Instruction of Kentucky, No. 5, 1877.

No. 599. Report of Auditor of Public Accounts of Kentucky, 1871.

No. 600. Report of Auditor of Public Accounts of Kentucky, 1878.

No. 601. Report of Superintendent of Public Instruction of Kentucky, No. 3, 1877.

No. 602. Report of Insurance Commission of Kentucky, 1876.

No. 603. Report of Auditors of Public Accounts of Kentucky, 1876.

No. 604. Report of Auditors of Public Accounts of Kentucky, 1878.

No. 605. Report of Connecticut Board of Agriculture, 1878.

No. 606. Ohio Agricultural Report, 1878.

No. 607. Bericht über die Senckenbergische Naturforschende Gesellschaft, 1878–9.

No. 608. Industrial Statistics of Pennsylvania, Part 3d, 1875–6.

No. 609. Industrial Statistics of Pennsylvania, Part 3d, 1876–7.

No. 610. Industrial Statistics of Pennsylvania, Part 3d, 1876–8.

No. 611. Railroads, Canals and Telegraphs of Pennsylvania.

No. 612. Report On Marine Insurance of Pennsylvania, 1878.

No. 613. Agriculture of Pennsylvania, 1878.

No. 614. Report of the Inspector of Mines, Pennsylvania, 1878.

No. 615. Report of Land Office and Assessment of Pennsylvania, 1877.

No. 616. Report on Life Insurance, Pennsylvania, 1878.

No. 617. Report of Board of Public Charities, Pennsylvania, 1878.

No. 618. Department of Agriculture, 1878.

No. 619. Report Michigan Pomological Society, 1878.

No. 620. Report of North Carolina Agricultural Experiment Station, from Gov. J. D. Williams.

No. 621. Catalogue of Official Geological Reports of United States and British North America, by Fred. Prime, 1879.

No. 622. Shell Mounds of Omori, Japan, Part 1, Volume 1.

No. 623. Transactions Department of Agriculture, Illinois, Volume 14, 1876, from Secretary State, Illinois.

No. 624. Transactions Department of Agriculture, Illinois, Volume 15, 1877, from Secretary State, Illinois.

No. 625. School Report of Illinois, 1877–8, from Secretary State, Illinois.

No. 626. Report of the Railroad and Warehouse Commission of Illinois, 1878, from Secretary State, Illinois.

No. 627. Report of State Board of Health, Illinois, 1879, from Secretary State, Illinois.

No. 628. Report of Special Commission on Labor, Illinois, 1879, from Secretary of State, Illinois.

No. 629. Weather Report of the U. S. Signal Corps. May, 1877.

No. 630. Weather Report of the U. S. Signal Corps. April, 1877.

No. 631. United States Finance Reports, 1879.

No. 632. Report of the Bureau of Labor and Industries of New Jersey for 1879. James Bishop, Chief.

No. 633. Report of Supervising Architect of the United States Treasury Department, 1878. Presented by James C. Baker.

No. 634. Report of Supervising Architect of the United States Treasury Department, 1879. Presented by James C. Baker.

LIST OF SPECIMENS RECEIVED FOR THE STATE MUSEUM.

No. 1. One Female *Corydalis cornutus* (Hellgramite Fly), from Master W. Y. Miller, Indianapolis. June 12.

No. 2. Fragments of Ancient Pottery from Brazil, South America, from Ernest Morris. June 12.

No. 3. One Male *Corydalis cornutus* (Hellgramite Fly), from S. S. Collett, Newport, Indiana. October 13.

No. 4. Specimen Silurian Fossils, Drift, Indianapolis, from Mrs. Wm. A. Peele. July 15.

No. 5. Specimen Silurian Coral, Drift, Indianapolis, from ——— Baker. July 10.

No. 6. Cranium of Sheep or Lamb, found three-fourths of a mile northwest of Millersville, Washington Township, Marion County.