

BULLETIN

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CARROLL D. WRIGHT,
COMMISSIONER.

OREN W. WEAVER,
CHIEF CLERK.

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THE POOR COLONIES OF HOLLAND.

BY J. HOWARD GORE, PH. D., COLUMBIAN UNIVERSITY. (*a*)

The poor colonies here described are not a creation; they are a development. They have not been elaborated out of speculation as to what they ought to be, but forged into their present organic form under the fire of criticism and the shocks of adversity.

General van den Bosch, very soon after the devastating war which was terminated by the battle of Waterloo, saw in Holland thousands of families reduced to helplessness and poverty. He realized that work-houses as well as poorhouses very often feed pauperism; that they systematize it, place their stamp of recognition, if not approval, upon it, and by so doing increase it. Moreover, these provincial or municipal agencies were usually located in large cities into whose overcrowded streets the released or acquitted paupers were cast adrift to again become amenable to the poor law.

The problem, therefore, that presented itself to General van den Bosch was how to help the poor in their life struggle, not merely how to help them to tide over the demands of a single week or month. The first point that received decision was, that in whatever shape his hopes might be ultimately realized the location at least should be in the country. If the land is improved by man, he reasoned, then man can be improved by the land.

Through his influence, and chiefly through his instrumentality, there was organized in 1818 the Society of Beneficence (*Maatschappij van Veldadigheid*). Very soon thereafter the society purchased a large tract of

a Dr. Gore was the United States Commissioner-General to the International Exposition at Amsterdam in 1895. The information embodied in this article was collected by him during a visit to the poor colonies in July of that year.

barren uncultivated heath, which, with additions subsequently made, now contains 5,100 acres. It is situated near the center of the kingdom, northeast of the Zuyder Zee, about 5 miles from the town of Steenwyk, and at the junction of the three provinces, Drenthe, Friesland, and Overysse.

With the alluring motto, "Help the people and improve the land," considerable enthusiasm was aroused, and in a short time there was enrolled a membership paying annually into the treasury of the society \$22,000. The organization was in such a prosperous condition, and it was able to do so much for its beneficiaries, that it attracted the attention of the State. The proposition was soon made that the society take charge of the wards of the Government, that is, the beggars, foundlings, and orphans. The conditions offered were so favorable that the society accepted them.

It was at once realized that it would be unwise to put those declared by judicial acts to be incapable of self-support by the side of others who were being encouraged to believe in their ability to become sooner or later not only independent but contributing members of society. Consequently the organization, in order to keep these two classes apart, secured land and established two beggar colonies—one in Overysse, named Ommerschans, and the other in Drenthe, named Veenhuizen.

At the two latter the society continued the generous policy which it had already inaugurated. Thus the beggar colonies became popular, and a man released at the expiration of his sentence did not rest until he succeeded in securing a second conviction. It therefore became necessary to add to each sentence such a term of imprisonment at hard labor as would efficaciously rob the stay at the colonies of the greater part of its charm.

Besides acting as an encouragement to begging and profligacy, the generous policy of the society toward the beggar colonists had a worse effect. There was so much said in police and court circles about the beggar colonies that people failed to discriminate between them and the free colony. They thought the Government was meeting all expenses, and soon lost interest in the institution which relied for its maintenance upon their contributions, and so it became a sort of State asylum. The free colonists felt that they were being placed on the same footing with a convict class, at least in the minds of many, consequently the institution which was originally intended to act preventively against pauperism by helping sinking families up to a livelihood—earning condition—now acted repressively against this very class.

In this condition of disrepute into which the free colony fell, colonists were so slow to take up the lands of the society that it was compelled to farm them itself, using the weak, unwilling members of the other colonies. This resulted in great loss to the society. It was not possible to break the contract with the Government, and an organization was needed to administer the conditions growing out of this contract.

In 1843 a reorganization was effected. Prince Frederick of the Netherlands accepted the presidency and secured such special favors from the Crown, such as the contract for making all coffee bags used by the chartered Dutch India Company, that the financial condition of the colonies rapidly improved. This, however, not only awakened hostility on the part of the factories throughout the kingdom, but it also transformed the agricultural colony into a manufactory and made mechanics instead of farmers. The usual result of a combination of such diverse purposes soon came and the society found itself in 1856 in debt to the amount of \$3,000,000.

The State realized that it had been greatly benefited during this period, and also gave the society \$1,500,000 with which to pay private creditors 65 per cent of their claims.

A complete reorganization followed. Ommerschans and Veenhuizen became government property and a complete disunion of the beggar and the free colonies took place. Naturally this experiment was looked upon as proving that agricultural colonies can not succeed. This prejudiced opinion should be kept in view in order that one may fully realize how handicapped the present organization is in its struggle to do good.

Still, the experiment had attracted the attention of philanthropists and even of other governments. During this time the colonies had been visited by official commissions from France, Austria, and Scotland.

The organization as at present constituted dates from September 15, 1859.

The underlying principle in the revised scheme seems plainly to be to assist the destitute in meeting his wants, and the wants of all who depend upon him, without suggesting a feeling of dependence and without disturbing the family relations.

It is likely that the affections as well as the exigencies of life, which have so effectually kept the Dutch families intact, have been potent in forming the conditions under which they began to dispense their benefactions; nor is it at all improbable that the large Jewish population, among whom the family ties are extremely strong, has been instrumental in giving directions to the elaboration of the systems now in vogue.

The entire conduct of the affairs of the society rests with a commission of five persons, one of whom is designated as chairman and another as secretary. This commission meets at regular intervals, either in Amsterdam or at the colony. It fixes the salaries of all employees, but selects only one, the director, who, being responsible for the faithful discharge of all duties by his subordinates, has the right to choose them.

All contracts are made by the commission, and, in short, it has all the rights and privileges of an ordinary corporation. It realizes that it is administering the affairs of a company to which a large number of persons make annual contributions, consequently it considers with

great care all propositions which look toward a change of policy or the venture of money.

In order to keep the contributing members of the society in close relations with the work which is being done, there is a general meeting held annually in Amsterdam, to which each branch society sends a delegate. This delegate has one vote for every twenty members in his local society.

These branch societies are the outgrowth of a club system. It was ascertained that a house and land enough for the support of one family had originally cost the society about \$680, hence it decreed that whenever any person or party of persons paid into the treasury this sum of money he or they could have the privilege of sending to the colony one family, which should be retained there without further cost to the sender. Since it was not easy to find persons ready to contribute so much at once, a clubbing system was proposed and annual fees paid—in amount equivalent to the interest on \$680 at 3 per cent. Thus it happens that for each multiple of twenty represented in the membership of a branch society or department it has a ward at the colony, and hence the supporters of this ward as well as the branch society should have a vote in the general meetings of the organization.

For every \$20.40 annually contributed a department has the right to send one family to the colony, and this family remains there as long as this sum is paid. In return for this contribution the department receives reports periodically from the director regarding all of its families, with a statement showing the financial status of each. If attention is called to a needy family in a neighborhood in which there is an organized department with a sufficient sum to its credit with the society, the head of the family is sent to the colony on a tour of inspection. A railroad ticket is furnished him and all incidental expenses paid. If he returns favorably impressed, the entire family is given transportation thither. This time the trip is made by water, since this is cheaper, and time is not an important element, and one can go from almost any point in Holland to any other by water. This entire expense is met by the department which sends the family.

Upon arrival a house is provided and the immediate wants of the household attended to—not in the shape of gifts but advances, which must be paid for in installments according to conditions previously made known to the newcomer. He is also supplied with a sheep (ewe), which can be pastured on the society's farm for a small sum. On this he makes weekly payments. The purchaser is advised to insure this animal in the general funds of the society, so that in case of death it can be replaced without loss to the owner. At the very beginning a man is invested with the feeling of ownership, and a way is provided by which, with due economy, he may meet his obligations.

In passing it might be said that the ewe in Holland takes the place of the goat. The milk is quite as good and, in addition to the increase, the sheep yields wool enough to assist in clothing the family.

All the wage-earning members of this newly arrived family are at once put to work on one of the society's farms or in some of the shops or factories operated by it. Idleness is not tolerated. The children must either be learning a trade or be at school. Although the free-school system originated in Holland, the spirit of individual liberty is so current that no successful attempt has been made to institute compulsory education. But within the colony the people are subject to the regulations of the colony. Even if a boy's parents intend that he shall become a farmer, he must learn some simple trade, such as basket making, because there is so much time during the long winters when the farmer can not be at work in the ground. It is therefore well when he can occupy himself at this time with some profitable indoor occupation.

Wages, such as are current in the vicinity of the colony, are paid weekly, after having deducted: The installment on the debt incurred upon arrival; house rent, not exceeding 20 cents; 1 cent infirmity fee for each person; 4 cents for the clothing fund; and a reserve for the family emergency fund, equivalent to 10 per cent of the gross earnings. That all transactions may be thoroughly understood each debit and credit is entered in a pass book.

In this connection it is interesting to note that the boys and girls, even while serving as apprentices, are paid for each merchantable article they make. If a boy makes a good basket he knows exactly how much he will receive for it; but should the work be defective, his compensation will be less. This of course furnishes an important stimulus to put forth best endeavors and also tends to hasten the coming of the time when faultless jobs can be turned out.

After two years of probation, if the head of the family has given evidence of industrious habits and a commendable desire to pay his debts, he is promoted to citizenship, and is called a "vrijboer," or "free farmer." If there is a place available he is put on it—a farm of 7.7 acres—apparently a small one, but it is so fertile that it will readily support an ordinary family. This plot of land is either one just vacated for some reason, or else it has been in the hands of the society; therefore it is not barren, but is provided with such planted crops as would have been in place in case the tenancy had begun months before. If the occupancy should begin in midwinter, the farmer is furnished with fodder for five months, enough rye to sow 2.4 acres, and 33 bushels of potatoes. Again, these are not gifts; he becomes responsible for their cost as well as for the cow which was provided him. His wants are not magnified by the feeling that all he receives are gifts. He has just passed through the ordeal of paying debts on the installment plan, and fully realizes the pressure of debt and the slow and tedious process of removing it.

In return for the improvement made during the probationary period the farmer is admitted into new privileges. He has the full enjoyment of his farm, cultivates it as he deems best, can work for others when he

can spare the time, even going outside of the colony with the consent of the director, and has a vote in electing a delegate to the colonial council, while the only added burden is the rent for the land and a somewhat larger payment on his debts. The rent of course varies somewhat with the condition of the house and the fertility of the land, but the average annual rent is \$20. The payment on his indebtedness is only \$4 a year. In addition to this, he must each year put on the land \$14 worth of manure, but this item is remitted in case he owns a cow and is duly saving of all manure.

It has been the purpose of the society to have all the houses alike and each plot of ground as desirable as any other. But this is impossible. Some of the houses are comparatively new, yet the older ones in many cases are more favorably located with respect to school and church. As is usual in Holland, the stable, barn, and house of the small farmer are all under one roof. One can step directly from the barn into the house, but the former is kept so clean that one would hardly notice that the rooms were put to different uses were it not for the surrounding furniture and utensils. The barn is large enough to house the entire products of the farm, the cow naturally not requiring much space. The house itself has two rooms and an attic—one used for a kitchen and dining room and the other for a sitting room and bedroom. The bedroom feature is not apparent, for, as is usual in this section, the beds are shelves in a closet, so that during the day when the closet doors are closed no suggestion of a bed can be seen.

The local department has the right to designate who shall be sent to the colony from its district, and the colony must accept the family sent. But the board of commissioners can, whenever it deems it best, dismiss or eject a tenant, whether he be laborer or farmer.

The department is responsible for the debts of those persons whom it placed in the colony, but it must receive from the society's officers quarterly reports of all its wards. These reports must indicate whether or not the conduct of each family concerned was satisfactory, how much it owed the society, and what change took place in the account during the preceding three months. If in any case the indebtedness should persistently increase, the department can announce its intention to withdraw all further assistance, but this does not exempt it from the payment of all accrued debts.

A man ordinarily can not remain in the colony as a laborer more than two years. If he fails in this time to give evidence of the possession of those qualities demanded of a farmer he must leave. But once admitted to the farmer class he may remain so during good behavior. There are several cases in which, after the death of the head of the family, the widow continued as tenant; and in one instance at least a son, after having attained majority, married and retained the farm.

That the conditions are regarded as favorable may be seen from the fact that of the 284 families residing in the colony in 1894 three classed

as laborers failed to qualify as farmers and hence were dismissed, while not a single farmer moved away.

While the lands of the society have been spoken of as the colony, there are in reality four subdivisions so important that each has its separate name; they are Frederiksoord, Wilhelminasoord, Willemsoord, and Colony Number Seven. The principal offices are at the first named, which is also the one nearest the town of Steenwyk.

The person immediately in charge of the colony, and who is responsible for the conduct of its affairs, is the director—at present Mr. Job van der Have. His duties are clearly defined in the regulations of the society under nineteen distinct heads, but they may be summarized as follows: He conducts the correspondence; executes the orders of the board of commissioners; looks after the receipts and expenditures; keeps a double-entry account with all the departments and employees; provides for the maintenance, liberty, and safety of the roads, bridges, waterways, farms, and open squares; protects the real and personal property of the society; controls the public health; inspects the schools; cares for the external interests of public worship; appoints or discharges all officers of the society denominated second class; makes up the budget for the coming year; formulates plans for the furtherance of the best interests of the colony; keeps a close watch over all the factories of the colony; in short, does everything that can possibly be done for the welfare and comfort of all concerned.

The director has such clerical help as is needed, including a bookkeeper, on whom falls the task of keeping several hundred rather complicated accounts. Then he has directly under him subdirectors, each of whom has immediate charge of one of the seven districts into which the colony is divided. The subdirector gives to the bookkeeper a weekly statement showing the amount of services rendered during that week and by whom. From these statements the bookkeeper makes up the credit sides of his accounts.

These officers have a still more important function. They, from frequent inspections, determine whether each farmer is getting the best possible yield from his land. If not, they give such advice as will enable him to farm more successfully. The undivided tracts, or large farms, are directly under these subdirectors, and, since the laborers are employed on these farms, it is they who are in the position to make the recommendation which, at the end of the two years already mentioned, either promotes the laborer to citizenship or dismisses him from the colony.

The counsel of the directors in agricultural matters is more than mere haphazard guessing. One of the Government agricultural experiment stations is located in the colony. Here experiments are conducted to determine specifically the best treatment of the soil in that immediate neighborhood and the kind of seed best suited to the land and the climatic conditions which there exist.

In addition to these schools of agriculture, of horticulture, and of forestry have been erected in the colony through the beneficence of General van Swieten. Here excellent instruction is given in the subjects usually included in the schools named. To boys from the colony tuition is free. The colony is benefited not only by the amount of information directly imparted to the pupils, but by the example continually before the eyes of all the colonists, especially in the improved methods of vegetable culture. The value and importance of a garden to the household is emphasized by example as well as by precept. Holland has been compared to a vast garden, but in its vastness the vegetables that thrive in one part may be failures in others, and so the colonists coming from other parts of the kingdom are saved the costly lessons of experience by having before them the fruits of careful experimentation.

The gardens of the School of Horticulture have, in addition to useful vegetables, ornamental flowers, and the daily or frequent sight of the gay flower beds has awakened in many a responsive love for the beautiful, until now a large proportion of the houses have either a bed of flowers in the front yard or else potted plants in the windows. The officers of the society appreciate the elevating influence of beautiful surroundings, even if limited to a few bright flowers, and so to encourage the care and cultivation of them they give each summer several prizes for floral displays.

The statement should not be omitted that prizes are also awarded to farmers for the general appearance of the farm, condition of live stock, and yield of grain per acre.

Pupils of the School of Forestry have an excellent opportunity for becoming acquainted with the practical side of their chosen profession in caring for the 943 acres of forest in the colony; and in obtaining the manual skill demanded they also have a chance to earn some money, for since the forest needs this care all time given to it, over and above what is required as a part of the course of study, is paid for. In Europe the subject of forestry receives considerable attention so that the graduates of a good school readily secure situations.

In the colony there are also such public schools as the state usually provides for communities of this size, and all children must attend school, at least until they can read and write.

From these last remarks it will readily be seen that the policy of the society is to place the coming generation in a self-supporting condition. It is realized that the class of men who come to the colony as well as the age at which they come is such that their existence in the world must be at a cost to some one. But the society endeavors to reduce this cost to a minimum, and better than that—to so educate their children that they may never be a burden to the community. If this principle could be completely put into practice, pauperism would have the life of only one generation.

The society is absolutely free from religious bias. It has within the colony a Protestant and a Catholic church, and provides for the maintenance of both. But while the colonists are permitted to elect their church, they are required to see that their children are more than mere attendants upon service, for one of the rules provides that all children must know the catechism of their particular faith before the age of 14 is reached.

Since the majority of men who are sent to the colony are those who have passed through a life struggle of greater or less duration, they are of middle age or older. They are also people who have been obliged to undergo hardships, and for most of the time with insufficient nourishment, consequently they soon reach a helpless old age. It has been impossible in a short period of residence in the colony, even under the excellent system there in vogue, to lay by anything for these years of enforced idleness. The society has therefore erected an "Old Folks' Rest," and agrees to pay so much weekly toward the support of those unable to work. The colonists are urged to aid in the maintenance of this home, and they cheerfully meet the appeal to the extent of their ability. They know from recent experience the value of aid and the sweetness of charity.

At the time of my visit in July, 1895, there were 1,826 people in the colony. They were grouped as follows: Farmers, 199 families; laborers on probation, 85 families; individual laborers, not belonging to the foregoing, 165 persons.

During the preceding year there had been 35 births and 24 deaths in the colony, and 46 young men withdrew to accept positions or regular work outside.

To govern this large body of men, coming from all parts of the kingdom and bringing with them the traditions and habits of their native villages, is no simple matter nor can it be an easy task. It has been simplified somewhat by the society and made easier by calling on the colonists themselves to see to it that the rules were observed. In these regulations it will be noticed that there is a strong infusion of the golden rule, and the purpose is manifest to throw around the rising generation those influences which will lift it out of the helpless state. The rules forbid—

1. Disobedience, insubordination, or insult offered any officer of the society or any of its employees.

2. Fighting or disturbing the peace in any manner.

3. Drunkenness.

The fine inflicted for a violation of either of the above is from 10 cents to \$1.20, or imprisonment for a period of from one day to three days, for the first offense and ejection from the colony for a repetition.

4. Absence from the colony in excess of the permissible twenty-four hours, or of the leave granted by the director.

A fine of from 4 to 20 cents for each twenty-four hours of absence over and beyond the leave is imposed, or an imprisonment as above. In this connection it should be said that this, as well as all other rules, applies to the resident officers of the society. The director can not absent himself for more than one day without the written consent of the president of the board, and the under directors, clerks, and all employees must obtain permission for similar absences from the director.

5. The occupation of quarters or buildings without the consent of the director.

The chief purpose of this rule is to compel the grown members of the families to live with their parents and not where fancy might lead them. Then, too, single men are occasionally admitted to the colony and it is necessary that the director should always know where they are located, and this would be impossible in the absence of such a regulation as the one just given. This is deemed of such vital importance that its violation is followed by immediate dismissal.

6. Loss, destruction, theft, or pawning of the property of another, calls for the restoration of the property or its value, and a fine varying from 20 cents to \$1.20.

A second offense brings about either imprisonment or ejection.

7. Injury to the morals of another condemns the offender to prompt dismissal.

The infraction of this rule is the one most dreaded. As can be inferred the majority of the colonists belong to a lower class, and their conceptions of morality and virtue are not so clear in their minds as to inspire proper conduct in the absence of such a regulation.

8. Wanton wastefulness, carelessness, and laziness are punished by imprisonment with a notification to that effect to the department which sent the offender.

No fine is imposed in this instance for the good reason that a person so worthless as to fall under the condemnation of this rule would not be in a position to pay a fine.

9. Refusal to pay his debts to the society demands a confiscation of the debtor's property and its sale.

But the society is extremely indulgent. It makes due and charitably due allowance for crop failures, sickness, or unexpected losses of any kind. At no time does it lose sight of the fact that its purpose is to help, and in all of its safeguards and efforts to protect itself there is evident an incentive directed toward the borrower to pay his debts. For a cash payment, made before it is due, of \$8 he is given credit for an additional 80 cents, and the inability to meet his obligations brings to the farmer such special advice and encouragement from the authorities as will insure better returns from his farm in the future. This aid I know is efficient, for in looking over the accounts of a large number of the farmers I noticed only one who owed as much as \$200, while I am sure that the average indebtedness was not one-fourth of that amount.

Before getting too far from the subject it would be well to explain how the rules above given are enforced.

All questions pertaining to the welfare of the community, the trial of offenders, and matters of local interest are in the hands of a council consisting of the director, who is *ex officio* president; the bookkeeper, who is secretary; the treasurer of the society, and one delegate from each of the four subdivisions of the colony. These delegates belong to the farmer class and are elected annually, the laborers not having any vote in this election.

The laborer is not disfranchised in the election of state or local officers; this matter is beyond the jurisdiction of the society, nor is one released from his obligations to the State or province by being a member of the colony. However, the code of the colony is so satisfactory that all infractions of law and order within its domain that can be punished by its provisions are left to it.

The practical question comes, What does all this cost?

The last balance sheet, that for 1893, shows that the estimated value of the property is \$533,274, and the indebtedness \$43,380.

At the time of the last reorganization the indebtedness was \$56,000, and to the war of the rebellion in the United States was attributed the responsibility for this debt. The contract which the society had for so many years following 1843 for making coffee bags had proved so profitable that the society, after its withdrawal from this contract, continued the manufacture of jute bags in competition with private firms. From 1861 to 1864 the coffee trade with the United States was demoralized, and all industries depending on this trade suffered loss.

The last balance sheet (1893) shows that the receipts and expenses were as follows:

RECEIPTS.	
From members.....	\$5, 418. 40
From special gifts.....	3, 931. 20
From rent of land and farm products.....	3, 128. 52
From forest.....	615. 02
Profit on laborers' and apprentices' work.....	733. 44
Total.....	13, 826. 58
EXPENSES.	
Deficit for the preceding year.....	\$745. 94
Interest on debt.....	1, 381. 91
General expenses of administration.....	4, 790. 32
Religious services and special instruction.....	1, 097. 32
Ditching, road making, unproductive work, and losses in the various factories.....	8, 092. 00
Advances to colonists over and above returns.....	538. 29
Total.....	16, 645. 78

That is a deficit for the year of \$2,819.20, or \$1.54 for each inhabitant.

To see how the inhabitant is taken care of, and to what extent, the accounts for one week of two extreme cases are presented:

A family of seven persons, in which there were four above 15 years, two above 10, and one under 5, earned in one week during the winter season \$4.36. From this amount the following showing was made:

Installment and house rent.....	\$0.56
Infirmary fee .....	.07
Clothing.....	.28
Ten per cent for reserve fund.....	.44
Potatoes.....	.64
Cash	2.37
Total	4.36

If 80 cents a week were allowed for bread, they would have a surplus of \$1.57 for sundry clothing and incidentals.

In the other family there were also seven persons—three above 15, one above 10, two above 5, and one under 5. During the same week they earned \$2.36, and spent as follows:

Installment and house rent.....	\$0.56
Infirmary fee .....	.07
Clothing.....	.28
Ten per cent for reserve fund.....	.24
Potatoes.....	.77
Bread, from the colony bakery.....	.87
Total	2.79

That is 43 cents more than they earned. Because of the number of nonearning members of this family it was allowed \$1 a week, so that it had an actual balance in its favor of 57 cents.

As already said, these are perhaps extreme cases and represent two distinct types. In the first cited the man came to the colony when young, his children were born there, and all were accustomed to habits of industry and frugality. The rooms of their house were cosily furnished, a large mahogany chest of drawers represented the savings of many weeks, the omnipresent clock was ticking against the wall, and a rug covered a part of the floor.

The head of the other family had been a mechanic, grew up in a city, and, having failed in his efforts to support his family by his trade, came to the colony later in life. He was, therefore, not used to farm work, and, besides, was disheartened by the recollection of having once failed. But notwithstanding these disadvantages this entire family was provided for, educated, and trained for usefulness at a total annual cost of \$52, or less than \$8 for each member. An examination of the entire yearly expenses of the colony will show that the average expense for each person there is only \$9 a year. This average of \$9 does more than feed, clothe, and shelter these needy persons; as has been repeatedly said, it educates the young, gives them religious instruction, and provides them with a bread-winning trade.

It might well be asked, What more is desired? And in fact this question came to mind innumerable times—first while reading the con-

stitution of the society and its annual reports, and then again during my sojourn in the colony in visiting the homes of the laborers; in walking over the farms of the citizens; in watching the happy children at play or their older brothers and sisters working in the basket factory, weaving jute, or drying fruits and vegetables; in looking through the home for the aged, the churches, the professional schools, and the public library. What more is desired? The society would answer, "More money." For, although they have reduced their bonded indebtedness to \$37,200, the interest on this sum was last year one-third of the entire deficit.

This shortage is not through any bad management at the colony nor by the society. The departments did not pay their stipulated quota for each family that they had at the colony. Their payments fell short by almost identically the amount of the deficit. The society naturally expected the entire amount, they made their plans and promises accordingly, and their disappointment was shown in the untoward balance.

To say how many persons have been aided would be a mere recital of statistics; to attempt to estimate the amount of good accomplished would be impossible. As may be seen, the assistance is of the best possible character; people are helped to help themselves, they are taught self-reliance; faith in mankind is engendered by the faith that is placed in the individual. The class of persons benefited are in general those who lack opportunity, people unable from some fault or misfortune to make a start. The society practically says: "We will put you in a position to prove your worth, then if found worthy you shall have a start." The man thus addressed works with confidence that the promise will be kept, and knows that starvation will be kept from his family during this period of probation.

Experience has shown that the best results are obtained with people from small towns or from the country, while those who have lived in a large city, for a longer or a shorter period, chafe under the restrictions of the colony and show a reluctance to exchange the freedom of a city for its restraints. This experience also reflects itself in the donations as well as the interest, they being, per inhabitant, the minimum in Amsterdam and Rotterdam and the maximum in Utrecht and the smaller cities.

It must not be imagined that the colony is in any sense an agricultural normal school, that good farmers are here taught skill, wisdom, and experience, and sent throughout the kingdom to teach others by precept and example how to farm. As already intimated, but few, very few, families willingly leave the colony. And why should they? They would necessarily be renters wherever they should go, and in the colony there is land enough for generations to come. Here they are not subjected to exorbitant rents, their tenancy is secure, the manifested will is accepted as an important step in the doing, and their landlord is their best friend.

Then, again, it is best that such persons should remain near the hands that are ready to catch them should they stumble, close under the arm that is willing to shield them should adversity come. They are men who were helped to their feet, steadied during their early attempts to walk alone along the highway of independence, and strengthened for life's conflict with moral and financial support. They are not men strong in every respect, or they would not be in the colony; they are the men, within the boundaries of "brave little Holland," deficient in moral courage and unfortunate through accident or vice, or there would be no "Maatschappy van Veldadigheid." So when this society elevates a man into its citizenship it makes him in a truer sense a citizen of Holland. The Government appreciates this fact, and gives the colony an agricultural experiment station. General van Swieten saw its power for good, so, when he wished to perpetuate the memory of a beloved son, he endowed its professional schools. The corps of faithful ministers and teachers realize the importance of the work committed to them and labor with zeal and devotion. Her Majesty the Queen is the society's patron and annual benefactor.

Again I must call attention to the important fact that the beneficiaries are not abased by their benefits; they are not caused to feel that they are paupers; their independence is not expelled by the acceptance of gratuities. They experience the great joy of having found a friend who will loan them money, give them advice free from selfish motives, and afford them the opportunity to become men.

For opportunities to become so well acquainted with the society and its work in the colony, I am indebted to Mr. van Eeghen, secretary of the Amsterdam department, and Mr. Bleeker, member of the faculty of the School of Horticulture, who gave me freely of his time at Frederiksoord.

THE INDUSTRIAL REVOLUTION IN JAPAN. (a)

BY WILLIAM ELEROY CURTIS.

Japan is becoming less and less dependent upon foreign nations for the necessities and comforts of life, and is making her own goods with the greatest skill and ingenuity. Since their release from the exclusive policy of the feudal lords, the people have studied the methods of all civilized nations, and have adopted those of each which seem to them the most suitable for their own purposes and convenience. They have found one thing in Switzerland, another in Sweden, another in England, others in Germany, France, and the United States, and have rejected what is of no value to them as readily as they have adopted those things which are to their advantage. It is often said that the Japanese are not an original people; that they are only imitators; that they got their art from Korea, their industries from China, and that their civilization is simply a veneer acquired by imitating the methods of other countries. All of this is true in a measure, but it is not discreditable. Under the circumstances that attend the development of modern ideas in Japan, originality is not wanted, but a power of adaptability and imitation has been immensely more useful. The Japanese workman can make anything he has ever seen. His ingenuity is astonishing. Give him a piece of complicated mechanism—a watch or an electrical apparatus—and he will reproduce it exactly and set it running without instructions. He can imitate any process and copy any pattern or design more accurately and skillfully than any other race in the world. It is that faculty which has enabled Japan to make such rapid progress, and will place her soon among the great manufacturing nations of the world.

It was only forty years ago that the ports of Japan were forcibly opened to foreign commerce. It was only twenty-eight years ago that the first labor-saving machine was set up within the limits of that Empire. Now the exports and imports exceed \$115,000,000.

The following table shows the general character of the merchandise imported into Japan during the year 1894: (b)

Raw cotton.....	\$9, 551, 961
Machinery, etc.....	7, 974, 543
Sugar	6, 662, 261

a The facts on which this article is based were collected by Mr. Curtis, personally, while in Japan during the past year.

b Values stated in American gold on the basis of 2 silver yen to the dollar.

Breadstuffs, including rice.....	\$5, 877, 068
Iron and steel.....	4, 589, 384
Woolen goods.....	3, 991, 441
Cotton yarn.....	3, 988, 683
Cotton fabrics.....	3, 788, 267
Oil (mostly kerosene) and wax.....	2, 845, 997
Drugs and medicines.....	1, 798, 140
Dyes and paints.....	986, 641
Furs, hides, and leather.....	904, 034
Provisions.....	886, 602
Copper, brass, and lead.....	876, 973
Books and stationery.....	451, 783
Oil cakes.....	411, 098
Hemp and jute.....	403, 917
Other textiles.....	279, 358
Silk goods.....	261, 457
Wines and liquors.....	257, 671
Glassware.....	183, 884
Clothing.....	179, 807

The chief exports from Japan in 1894 were as follows:

Raw silk.....	\$21, 446, 376
Textile fabrics, mostly silk.....	8, 867, 744
Food products, mostly rice.....	5, 406, 599
Tea.....	3, 965, 143
Coal.....	3, 289, 229
Metals, mostly copper.....	3, 015, 186
Matches.....	1, 897, 817
Drugs and medicines.....	1, 230, 816
Floor matting.....	982, 747
Porcelain.....	742, 426
Fish, oil, and vegetable wax.....	639, 595
Lacquer ware.....	398, 770
Umbrellas.....	388, 032
Straw plaiting.....	371, 700
Bamboo and wooden ware.....	289, 498
Tobacco.....	174, 137
Fans.....	171, 533
Paper and stationery.....	169, 147

It is a curious fact that 10,273,401 fans, 2,348,810 umbrellas, 134,209 screens, 455,659 paper lanterns, and 13,843,022 gross of matches were shipped from Japan in 1894.

The following table shows the growth of the foreign trade of Japan during the last ten years: (a)

EXPORTS AND IMPORTS, 1885 TO 1894.

Year.	Exports.	Imports.
1885.....	\$18, 573, 346	\$14, 678, 484
1887.....	26, 208, 841	22, 152, 126
1890.....	28, 301, 758	40, 864, 290
1892.....	45, 551, 377	35, 663, 040
1894.....	56, 623, 043	58, 740, 978

a Values stated in American gold on the basis of 2 silver yen to the dollar.

The following table shows the distribution of the exports of Japan among the several nations, arranged according to the magnitude of the trade in the year 1894: (a)

EXPORTS BY COUNTRIES, 1890, 1892, AND 1894.

Country.	1890.	1892.	1894.
United States	\$9, 910, 719	\$19, 337, 486	\$21, 661, 779
France	4, 177, 197	9, 049, 847	9, 749, 368
Hongkong	4, 685, 203	6, 644, 270	8, 098, 740
China	2, 613, 748	3, 179, 430	4, 406, 394
Great Britain	2, 819, 490	1, 900, 376	2, 975, 099
British India	295, 393	711, 145	1, 844, 079
Germany	423, 461	470, 391	753, 774

The remainder of the exports of Japan are sent in small amounts to nearly every nation in the world.

The following table shows the source from which the imports of Japan come, arranged according to the magnitude of the trade in 1894: (a)

IMPORTS BY COUNTRIES, 1890, 1892, AND 1894.

Country.	1890.	1892.	1894.
Great Britain	\$13, 309, 551	\$10, 394, 666	\$21, 094, 937
China	4, 424, 843	6, 254, 705	8, 755, 753
United States	3, 437, 266	2, 994, 027	5, 491, 279
British India	4, 455, 446	3, 831, 002	5, 280, 224
Hongkong	2, 747, 956	3, 492, 861	4, 499, 859
Germany	3, 428, 478	3, 187, 524	3, 954, 771
France	1, 934, 666	1, 810, 250	2, 174, 024

The Japanese coinage is based on the decimal system and corresponds with that of the United States. A rin was originally the same as a mill. Ten rin make 1 sen and 100 sen make 1 yen, which used to be as good as a gold American dollar, but is now worth about 51 cents. Therefore, a man who goes to Japan from the United States or Europe with money that is at par with gold finds his funds almost doubled immediately.

The industrial revolution that is now going on in Japan is quite as remarkable as the political revolution that occurred there thirty years ago, and equally important to the rest of the world. Until recently all the manufacturing done in Japan has been in the households, and 95 per cent of the skilled labor is still occupied in the homes of the people and in a measure independent of the conditions that govern wage workers in other lands. The weaver has his loom in his own house, and his wife, sons, and daughters take their turns at it during the day. It has always been the custom for children to follow the trade of their parents. The finest brocades, the choicest silks, the most artistic porcelain, cloisonné, and lacquer work are done under the roofs of humble cottages, and the compensation has heretofore been governed usually by the quality of the piece produced.

a Values stated in American gold on the basis of 2 silver yen to the dollar.

In the olden times the feudal lord, or daimio, who ruled a particular province, was always expected to purchase the highest grades of industrial art that were produced in his jurisdiction, and if he did not wish them they were sold to some of his subordinates who had money to invest in such luxuries, but now there are middlemen who stand between the artisans and the public markets and buy for both the local and the export trades, taking all sorts of goods and disposing of them wherever they can do so to the best advantage. These middlemen are the same who used to handle similar wares during the days of the daimios, and their fathers followed the same business before them. The relations between the producer and his agent have gone on for centuries in the same family. Asana, the weaver, sells his brocades to the great-grandson of the merchant who bought his great-grandfather's product. When a large order is to be placed, say, for 1,000 lacquer trays or 10,000 embroidered shawls, the middleman distributes it among the families of his acquaintance who are in the habit of doing such work. If they are poor he advances them money and furnishes them materials. He is usually their banker and they keep an open account with him, being credited for whatever they furnish and charged with whatever money or supplies he gives them. If they get a little ahead he advises them in making investments, and acts as a friend and counsel in financial affairs. The relations between these commission men and their clients, which sometimes extend over provinces as large as our States, have nothing to resemble them among the working classes of Europe or America. They are the outgrowth of the feudal system, and to the credit of Japan it may be said that the confidence which the working people have placed in their agents has seldom been betrayed. There has not been a fixed price for anything except the staples of the country, but the producers have relied upon the middlemen to represent their interests and get as good prices as possible for their wares, just as a large real estate owner depends upon his agents to rent and sell his property to advantage.

It will be seen that under this system organizations for the purpose of affecting wages and hours of work have not been practicable in Japan, but guilds have been known for several centuries and were introduced by the Dutchmen who occupied the island of Deshima, in the harbor of Nagasaki, the westernmost port of Japan. During the four hundred years that the policy of isolation and exclusion was enforced in Japan these Dutchmen were the only foreigners with whom the inhabitants of the country were allowed to communicate, and the few modern ideas that filtered into the country came through them.

The guild, or association of men who are engaged in the same kind of employment, which originated in Holland, was readily accepted in Japan, and long before the country was open to foreign commerce this system included all trades and occupations. The silk growers and silk buyers, the men who raise tea and those who sell it, the spinners and

weavers, artists and decorators, carpenters, screen makers, confectioners, peddlers, doctors, lawyers, merchants, and even thieves have had guilds to promote their mutual interests. Among the mechanics and tradesmen the guilds have often been extended to include life insurance and aid to those who are ill or infirm, like the mutual benefit societies of the United States. Assessments were made upon the living to pay the doctors who have attended the sick and the undertakers who have buried the dead.

The only trade union that endeavors to control the wages and the working time of its members, so far as I was able to ascertain, in Japan is the Guides' Association, which has its headquarters in Yokohama and includes all of the professional guides and couriers in the Empire. When a tourist lands in Japan and applies at the hotel office or at a bank for a guide, he is directed to the general agency, and the first man on the list is assigned to him. As there are both good and poor, educated and ignorant, amiable and disagreeable, competent and incompetent guides, this assignment is not always satisfactory, but a traveler can always get the guide he wants sooner or later by applying for him. If he happens to be low down on the list his patron must go without a guide or employ someone else temporarily until his name is reached, or he may arrange with the man who stands at the head to sell out his chance for a bonus in cash, or divide fees with him until his turn arrives for regular assignment. This arrangement is often annoying to travelers, but it gives every guide an equal chance, and protects them from the avarice of popular guides and at the same time gives the unpopular ones an equal chance for employment.

The fees charged by guides in Japan are much less than in Europe, the regular terms being 2 yen (\$1) a day, with 50 sen (25 cents) for hotel fare and second-class traveling expenses. Any guide who cuts under these rates or attempts to collect more, is disciplined by the association and often expelled.

There have been but two strikes in Japan. One of these occurred among a railway construction gang, who were hired for certain wages to work six days in the week, and were required to work seven without additional compensation. When their protests were unheeded they laid down their tools, and appealed to the police authorities for the enforcement of the law which makes six days a week's labor, and provides that no employee of the Government or any corporation or private individual shall be compelled to work more than six days in a week without extra compensation. Sunday is the usual day of rest in Japan. Its selection is not due to law nor to religious scruples, but to public convenience and, perhaps, out of respect to foreign nations. When what is known as the six-day law was passed the Government set the example by closing its offices on Sunday, and all other institutions followed suit. That law was originally suggested for sanitary reasons.

The second strike in Japan occurred in Tokyo in the summer of 1895. A party of bricklayers engaged in building a factory near Tokyo had their hours of labor extended from twelve to thirteen because of a desire on the part of the management to complete the job and start the machinery as soon as possible. The men did not object to this increase of time, but asked a corresponding advance of wages, which, as they were getting only 12 cents a day in our money, would have been only 1 cent a day increase for each, or perhaps \$1 a day for the whole gang. But the contractor refused and they quit work. He got other bricklayers to take their places, but they were induced to abandon him also, and as he persisted in his refusal to do what the men considered simple justice it was decided to send emissaries to all the other bricklayers in the city and ask them to join in a sympathetic strike. This attempt to introduce foreign methods into the conservative labor system of Japan was only partially successful. The greater part of the bricklayers employed in the city declined to join, but a thousand or more men, engaged upon the city waterworks, on some railway freight houses and other large structures, quit, and it was several days before the difficulty was adjusted. Public sentiment was aroused by the disturbance, and the contractor who caused the trouble finally compromised with his men and went back to twelve hours' work for twelve hours' pay.

The ancient system of household labor is being rapidly overturned by the introduction of modern methods and machinery. The older artisans are offering a vain resistance and can not be drawn from their antique looms and forges by any inducement that has yet been offered, but the younger generations are rapidly acquiring a knowledge of the use and value of labor-saving machinery and factories are being built in all parts of the Empire. The greatest progress thus far has been made in cotton spinning and weaving, but several iron mills have been established and machine shops are springing up all over the Empire. In four years the new treaties go into effect, when foreigners will be allowed to engage openly in manufacturing enterprises. Then their capital and experience will give a decided stimulus to mechanical industry and the increase in the productive power of Japan will be even more rapid than now.

The first manufactory established in Japan was a cotton mill down in the southwestern corner of the Empire, in the province of Satsuma, which has produced the best pottery and some of the greatest men. Prince Shimazu was its patron. Having learned something of modern arts and sciences from the Dutchmen who were allowed to remain on the island of Deshima, he started a laboratory on his estates in which he learned telegraphy, photography, and how to make glass, coke, and gas for illuminating purposes. A few years later he built a factory near his summer villa, which was half arsenal and half iron foundry. He made guns there and other articles of iron, and experimented with explosives.

All the work in both institutions was conducted under his personal supervision, with the assistance of Dutch chemists, from whom he heard that much could be learned about such matters from books. So he started a retainer to Nagasaki, charged with the duty of securing whatever books on chemistry, natural philosophy, and other scientific subjects could be bought or borrowed. And an order was left with a merchant at Deshima to procure for him a copy of every scientific publication that was issued. In this way a considerable library accumulated, and the books were translated to the prince, as fast as they came, by a schoolmaster who had learned English at Deshima and whose services were secured.

One of the books contained a description of the Arkwright spinning jenny; and the prince was so fascinated that he lost no time in ordering a machine through the Dutchmen. When it came and was operated he decided to introduce it among his people as a substitute for the old-fashioned spinning wheel. He built a stone factory and located a plant of 3,030 spindles, at a cost of 30,000 yen (\$15,000), in a small town called Niriiso, a suburb of Kagoshima. The machines were throstles and mules made by Platt & Bro., of Bradford, who sent an English engineer over to set them up and educate the operatives. The prince treated him like an equal, built him a fine large stone house, which is now the high-school building at Kagoshima, surrounded him with luxuries of every kind, and paid him a handsome salary. As the enterprise was not intended for profit, but for the purpose of introducing the art of spinning among the people, everything was conducted on a most elaborate and expensive scale, and the yarns produced were of superior quality.

As coal, which had to be brought from a neighboring province, was very expensive the prince sent out prospectors to examine his own territory in the hope of finding deposits, but they failed. He then conceived the idea of utilizing water power and commenced the construction of a canal 10 miles long, but the work was suspended at his death and never resumed. His sons took little interest in the enterprise, and soon became involved in the political complications which led to the restoration of the emperor, so the factory passed into the hands of a private citizen for several years, from whom the present prince of Satsuma purchased it.

The next factory was set up by Mr. Kajima, of Tokyo, in 1867, while the country was still disturbed by the war. It originally had but 720 spindles, but now operates 82,000 and is the largest in the Empire. These were the only factories in Japan until 1879, when the Government undertook to encourage such enterprises and established two well-equipped plants in different parts of the country to educate operatives and demonstrate the superiority of modern machinery. It set up four more in 1880, four in 1881, one in 1882, another in 1883, and still another in 1884. They served their purpose, made machine spinning popular,

and have since been handed over to private companies who are operating them with great profit.

The industry has grown so rapidly that, according to statistics gathered by the Osaka board of trade, there are now 61 factories in operation, with 580,564 spindles, employing 8,899 men and 29,596 women. The factories in course of construction, and which will be in operation during the present year, will bring the total number of spindles up to 819,115. Thirty-seven of these factories are at Osaka. The largest in the Empire has 82,000 spindles, and the smallest 1,136. There are four with more than 50,000 spindles, and thirteen with more than 25,000.

Most of the raw cotton used in Japan comes from India and the United States, but very little is shipped direct from the latter country. The import statistics do not disclose this trade. It is merged with that of Great Britain. The value of raw cotton alone imported into Japan in 1894 was \$9,551,961, while the total imports from the United States are given as \$5,491,279. More than one-half, probably two-thirds, of that cotton was reshipped at Liverpool to Japanese ports, with an additional charge to allow a profit for the middleman. The freight on cotton by sailing vessels from the southern ports of the United States around the Horn would not be more than \$6 a ton, while the rate by steamer via England is about \$8. Therefore it is difficult to understand why shipments are not made direct. The only explanation seems to be that cotton exporters in the United States are not aware of the extent of the market in that country.

The same is true to a certain degree as to iron. There is plenty of poor iron ore in the northern provinces of Japan which might be utilized for certain purposes if mixed with a better quality, but it is comparatively useless as it is, and pig iron imported from England, Russia, and Norway costs about 40 yen (\$20 gold) a ton in Yokohama. There are two furnaces in Japan that might be used for smelting with profit if properly managed, but it would be much cheaper to bring the iron from the United States in pigs than in the ore.

The first genuine foreign factory to be established in Japan is the Osaka Tokei Seizo Kubushiki Kwaisha, familiarly known as the American Watch Company. It was started on January 1, 1895, and turned out its first finished watch on April 10. The organizer and promoter of this company was Mr. A. H. Butler, of San Diego, Cal., who took an outfit of watch-making machinery to Japan and induced a number of jewelers and watch dealers in Osaka to furnish \$160,000 capital to pay the cost of a building and the running expenses of the business. The company is incorporated under Japanese law, and the stock is all in the names of Japanese citizens, although 140 of the 300 shares actually belong to Mr. Butler and his associates.

As no foreigner is allowed to engage in manufacturing outside of certain limited districts in the treaty ports of Japan, until the new

treaties go into effect in 1899, it was necessary for Mr. Butler to evade the law, which he did, with the knowledge and consent of the authorities, by having his stock issued in the name of Japanese trustees, who assigned to him the certificates in blank and gave him a written agreement to protect his interests. At the end of four years Mr. Butler will have the stock registered in his own name and become an officer of the company.

Japanese architecture is not suitable to factory work that requires a great deal of light and protection from wind and weather, and therefore it was necessary to erect a new building of brick upon the American plan, 240 by 40 feet in size, with an abundance of windows.

In the meantime the machinery was set up in temporary quarters and a number of men and boys, who had already been engaged in repairing and manufacturing hand-made watches and clocks, were assembled to be educated by P. H. Wheeler, the superintendent, and his assistants. Mr. Wheeler had worked in Elgin, Rockford, and Springfield, Ill., and in Columbus, Ohio. He brought with him from America nine experts, who, like himself, have contracts for three years and an option of renewal for three years longer at the end of the first term. They are as follows: From Elgin, F. M. Clark and William Keene; from Rockford, T. Schuarke; from Springfield, L. Sylvester, E. V. Goodman, and Charles Gassler; from Columbus, H. Barbier, S. B. Finch, and George Flick.

These gentlemen say that their Japanese students show very great aptitude and skill, and that they learn much more rapidly and have a much more delicate touch than persons of similar intelligence and condition in the United States. Nearly all of them had some experience in making or repairing watches and clocks before they came into the factory, and a few had used hand machines for drilling, polishing, and that sort of work; but the modern machinery at which they were placed was entirely new to them. They are mostly young men, aged from 18 to 30. As none of them can understand a word of English, and none of the American experts could speak Japanese when they arrived, the work of instruction might have been very slow but for the keen perception of the pupils.

It is difficult to explain a proposition to the Japanese, but their power of imitation is so well developed that the easiest way to teach them is to go through the process yourself and let them watch you. Almost instantly they are able to repeat it, and will continue to do so until the end of their days without the slightest variation. Another difficulty in this school of instruction was the absence of words in Japanese to describe the machinery and the parts of the watch, but the English terms were adopted and are now exclusively used.

The highest wages paid to the skilled native workmen in the factory are only 40 sen a day, which is equivalent to 20 cents in our money. The lowest wages are 10 sen (5 cents) a day, while in American factories the

same labor would be paid from 50 cents to \$5 a day. The capacity of the factory when fully in operation will be 150 watches a day, and owing to the low price of labor they can be sold with a profit for 50 per cent less than the market price in the United States and Europe.

The following statement shows the rates of wages per day paid to Japanese artisans and laborers: (a)

DAILY RATES OF WAGES, JAPAN.

Occupation.	Highest.	Lowest.	Average.
Blacksmiths	\$0.60	\$0.18	\$0.30
Bricklayers .....	.88	.20	.33
Cabinetmakers (furniture) .....	.53	.17	.30
Carpenters .....	.50	.20	.30
Carpenters and joiners (screen making) .....	.55	.17	.30
Compositors .....	.83	.10	.29
Coolies or general laborers .....	.33	.14	.22
Cotton beaters .....	.45	.13	.23
Dyers .....	.60	.05	.25
Farm hands (men) .....	.30	.16	.19
Farm hands (women) .....	.28	.08	.19
Lacquer makers .....	.58	.15	.28
Matting makers .....	.50	.20	.30
Oil pressers .....	.34	.16	.25
Paper hangers .....	.60	.20	.31
Paper screen, lantern, etc., makers .....	.55	.20	.31
Porcelain makers .....	.50	.13	.29
Pressmen, printing .....	.70	.11	.26
Roofers .....	.60	.20	.29
Sauce and preserve makers .....	.40	.10	.24
Silkworm breeders (men) .....	.50	.10	.22
Silkworm breeders (women) .....	.25	.05	.17
Stonecutters .....	.69	.22	.36
Tailors, foreign clothing	1.00	.25	.49
Tailors, Japanese clothing .....	.56	.15	.28
Tea makers (men) .....	.80	.15	.31
Tobacco makers .....	.50	.11	.26
Weavers .....	.40	.07	.15
Wine and sake makers .....	.50	.15	.29
Wood sawyers .....	.50	.13	.30

The following are the rates of wages paid by the month: (a)

MONTHLY RATES OF WAGES, JAPAN.

Occupation.	Highest.	Lowest.	Average.
Confectionery makers and bakers	\$12.00	\$1.00	\$5.74
Weavers (men)	12.00	1.00	4.83
Weavers (women)	12.00	1.00	3.30
Farm hands (men)	5.00	1.00	2.31
Farm hands (women)	3.50	.49	1.28
House servants (men)	5.00	.50	2.12
House servants (women)	3.00	.59	1.16

a Values stated in American gold on the basis of 2 silver yen to the dollar.

The following are the present rates of wages paid in the city of Yokohama for an average working day of ten hours: (a)

DAILY RATES OF WAGES PAID IN YOKOHAMA.

Occupation.	Rate per day.	Occupation.	Rate per day.
Blacksmiths	\$0.36	Porcelain makers	\$0.24
Carpenters .....	.26	Pressmen, printing offices .....	.19
Carpenters, ship .....	.29	Roofers .....	.26
Compositors .....	.29	Sake brewers .....	.22
Confectionery makers and bakers .....	.17	Sauce and preserve makers .....	.24
Cotton beaters .....	.17	Screen makers .....	.26
Dyers .....	.24	Silk spinners (female) .....	.17
Joiners .....	.29	Stonecutters .....	.31
Laborers, ordinary .....	.19	Tailors, foreign clothing .....	.48
Lacquer makers .....	.24	Tailors, Japanese clothing .....	.24
Matting makers .....	.24	Tea-firing men .....	.14
Oil pressers .....	.24	Tea-firing women .....	.10
Paper hangers .....	.24	Tea pickers .....	.29
Plasterers .....	.26	Tilers .....	.31
Porcelain artists, ordinary .....	.38	Tobacco and cigar makers .....	.24
Porcelain artists, superior .....	.72	Wood sawyers .....	.29

The following are the rates of wages paid by the month: (a)

Farm hands (men)	\$1.44
Farm hands (women)	1.20
Silkworm breeders (men)	1.92
Silkworm breeders (women) .....	.96
Weavers (women) .....	.96
House servants (men)	2.80 to 7.20
House servants (women)	2.40 to 4.80

Factory labor is paid even less than these prices. Middleton & Co., one of the most prominent tea-shipping houses in Japan, employ in their establishment a large number of persons, men and women, who work from 5 o'clock in the morning until 6 o'clock at night, with three intervals at 8, 12, and 3 o'clock, respectively, when they eat their rice and what other refreshments they bring with them and rest for twenty minutes or a half hour. The highest wages paid by the Messrs. Middleton are 42 sen a day, which is equivalent to 21 cents in United States currency. This is received by men who are experts in handling tea, and have acquired their proficiency by natural ability and long years of experience.

The lowest wages are paid to young boys and girls who pick over the tea leaves to remove the stems and other foreign substances. They receive 13 sen (6½ cents) a day for about twelve hours' work, not including their resting spells.

Of the entire force in the establishment 20 are paid 21 cents (United States currency) a day, 90 are paid 18 cents, 50 are paid 15 cents, 335 are paid 12 cents, 278 are paid 10 cents, 5 are paid 9 cents, and 30 are paid 6½ cents—and they board themselves.

The same rates are paid in all the tea "go downs," as they are called, and similar wages in the factories and manufacturing establishments throughout the country.

a Values stated in American gold on the basis of 2 silver yen to the dollar.

Embroidery women, who make the work that is so much prized by Americans and Europeans for decorative purposes, seldom receive more than 15 or 20 cents a day in our money, although in any other land they would be estimated as artists.

The wages paid in Yokohama are the highest in the Empire, because it has a large foreign population. Money has a smaller value to foreigners and they are not such close traders as the natives. In that city the ordinary patrolmen of the police force are paid 8 yen, or \$4 in our money, a month. Sergeants receive \$6 and the other officials of higher rank a corresponding amount. Ordinary firemen get \$3.50 a month, foremen of hose carts \$7, and engineers of steam fire engines, who are supposed to possess the highest grade of talent, receive \$12 a month. All are furnished two suits of clothing a year, one for summer and one for winter, and an overcoat. Night watchmen, who go about the premises of citizens, in addition to the regular police, as a safeguard against fire and burglars, get \$4 a month. They patrol the districts on which they are employed from dark to daylight, and are paid by their patrons, although licensed by the city and sworn in as special police.

There has been some rise in wages in the cities since the opening of the war because of the scarcity of labor. Coolies who work as stevedores, loading and unloading vessels, get 30 cents a day now for working from 6 o'clock in the morning till 6 o'clock at night, where they formerly received 25 cents. Professional gardeners—and in Japan landscape gardening has been a science and an art for 600 years—get \$10 and \$12 a month. Telegraph messengers and postmen are paid \$6 and \$8, respectively, and are furnished a uniform.

Every man has his business or the name or trade-mark of his employer stamped or embroidered upon his kimono—the loose tunic which all Japanese men and women wear. If he is a carpenter or a bricklayer, or if he is a porter in a store or a tea dryer, he wears that fact emblazoned in large characters upon his back or upon what corresponds to the lapels of his coat. If he is a footman or a coachman in a private family he has its coat of arms or monogram upon his kimono in the middle of his back, or if he is driving for a livery stable he will carry its advertisement around with him in a similar form.

Investments are as safe in Japan as anywhere else in the world, although there is comparatively little foreign capital represented. All the railroads, which now represent a total of about 3,000 miles and a capital of \$75,000,000, were built with local money. Not a dollar was borrowed abroad, and there are very few shares or bonds of Japanese corporations held by foreign investors. At the same time the people are not rich. There are very few men of large fortunes. I was told by a Tokyo banker that he knew of only two millionaires in Japan. One made his money in coal mining and the other is the principal owner of a great steamship company which has 100 vessels in its service and a monopoly of the coasting trade. But there are many

men with small fortunes, and although wages are very low nobody is very poor. There is not an almshouse in the entire country, and you never see a beggar on the street. Occasionally some poor leper stretches out his hand as you enter one of the gilded temples, but there isn't a country in Europe or America so free from street begging as Japan.

The people as a rule are frugal and economical, and manage to save a little even when they are working for 10 cents a day. They have few wants and are temperate. You never see a drunken man in the street. I spent four months in Japan and visited five of the principal cities. The only intoxicated people I saw were a party of young fellows dressed in fantastic costumes who were in a boat sailing down the river in Osaka. The city had been given over to great ceremonies and rejoicings on the return of the soldiers it sent to the war, and these young men—five or six of them—were continuing their celebration another day.

This sobriety is due to the use of tea instead of liquor as a beverage. Tea houses in Japan take the place of saloons and are about as numerous in the large cities as barrooms in New York or Chicago. But a pot of tea that will entertain an entire family can be bought for 2 sen (1 cent), which cheers and strengthens quite as much as malt or alcoholic liquors. The use of beer is, however, increasing so rapidly in Japan as to excite apprehension, and the Government is making it the subject of an inquiry. There is a brewery or two in nearly every city of size, and beer can now be bought at almost every tea house.

The new treaty which was negotiated by Secretary Gresham and Minister Kurino last winter at Washington makes Japan as free for foreigners as the United States, with the exception that they can not own real estate, and by a straight reading of the text it would seem that that is not prohibited. It provides that foreigners may trade by wholesale or retail, singly or with native partners, and says that they "may own, hire, and occupy houses, manufactories, warehouses, shops, and premises, and lease land," conforming, of course, to the laws and police regulations that apply to them and the natives of the country alike.

The treaty also provides that foreigners shall enjoy all rights and privileges enjoyed by natives "in whatever relates to residence and travel, to the possession of goods and effects, to the succession to personal estate and the disposition of property;" that they shall not be required to pay any higher taxes, imposts, or other charges than natives; that they may freely enjoy their own religion, bury their dead according to their own rites, and shall be exempted from military service, forced loans, and all other exactions. No higher duties are to be imposed upon the products of the United States than upon those of the most favored nation, and there must be perfect equality in the treatment of Americans and natives in the exportation of merchandise. The coasting trade, as is customary in all countries, is withheld

for the benefit of the citizens of Japan, but American vessels laden with cargoes for more than one port are allowed to load and unload wherever they like. The same protection is afforded to natives and foreigners in patents and trade-marks, which is a very good thing, because at present there is no patent treaty between the two countries and the Japs are stealing our inventions.

The foreign settlements, which are now subject to the jurisdiction of the consuls of the different countries, are to be incorporated into the municipalities which they adjoin, and the consuls will yield control to the local officials.

Until now Japan, like China, Turkey, Egypt, and other countries which have not reached a high degree of civilization, has been subjected to what is called the doctrine of extraterritoriality. That means that the citizens of the United States or England or any other civilized nation residing in those countries are subject to their own laws, administered by their consuls, and not to the local authorities or courts. If an American commits a crime in Japan to-day he is tried before the United States consul-general, according to the laws of the United States, and not by the courts and laws of Japan. The same is true of citizens of European nations. If a Japanese citizen commits a crime against an American he is tried by the local authorities. The general rule in civil as well as criminal cases is that the defendant shall be tried under the laws of his own country, and the plaintiff brings his suit accordingly.

But Japan thinks she is sufficiently civilized to administer justice to foreigners, and has long demanded release from the extraterritoriality restriction.

There is no protection for foreign patents in Japan, but any article or instrument or machine that comes into the country or that is seen abroad may be manufactured without interference or the payment of royalty; but no Japanese can obtain a patent upon a foreign invention. He must show that his idea is not only original in Japan but original with him, and if it appears thereafter that he is mistaken or has practiced a deception his patent is canceled. The processes and implements used in all the industries of Japan have been inherited from generations far removed, and nearly all of those recently adopted are copied from foreign models.

There has been little inducement for the development of inventive genius in Japan until recently, and the greater part of the applications already filed in the patent office have been for trifles, like children's toys or improvements or changes in foreign methods and machinery to make them more useful in that country.

I asked Mr. Matsudiara, the chief examiner of the patent office, at Tokyo, whether the introduction of common schools and compulsory education had improved labor.

"That is difficult to say," he replied, "but so far as I have observed education is not improving labor. The little education that the com-

mon people receive in the public schools makes them abhor labor. It has always been the custom in Japan for families to follow the same trade or occupation for centuries after centuries, but when a boy receives an education superior to that of his father he seems to feel that the old mode of life and avocation are not good enough for him. If he is a farmer's son he wants to live in the city, and if he is the son of a mechanic he wants employment under the Government or some less laborious occupation than his family have followed. But I believe the Japanese are not peculiar in this respect. I think it is the rule all over the world that when a man acquires learning he wants to advance in other respects also and better his condition."

While the Japanese will soon be able to furnish themselves with all they use and wear and eat without assistance from foreign nations, they will be compelled to buy machinery and raw material, particularly cotton and iron. Therefore our sales will be practically limited to those articles. And the market for machinery will be limited as to time. The Japanese will buy a great deal within the next few years, almost everything in the way of labor-saving apparatus, but they are already beginning to make their own machinery, and in a few years will be independent of foreign nations in that respect also. Another important fact—a very important fact—is that they will buy only one outfit of certain machinery. We will sell them one set, which they will copy and supply all future demands themselves. This will go on until the new treaties take effect, when American patents will be protected.

They have very little wood-working machinery; and very little shoe-making machinery, for the people do not wear shoes. The same is true of knitting machinery, for they do not wear hosiery. I do not think that more than 20,000 out of the 41,388,313 people who compose the population of Japan wear shoes and stockings. Ninety per cent go barefooted and barelegged, women, children, and men, protecting their feet from the stones by wooden and straw sandals. The higher classes have the same sort of foot gear, but it is made in a more finished manner, and they wear little cloth affairs that they call "tabis" upon their feet. These are made of white or blue cotton, and do not go above the ankle bone. But the use of shoes and hosiery is increasing, and the people will grow into it as they have grown into other foreign notions.

Lumber is worth about twice as much in Japan as it is with us. Common lumber, which we sell for \$10 and \$12 a thousand feet, will bring 40 yen (\$20 gold) there. This is due chiefly to the scarcity of timber and the great labor required to work it up by their primitive processes. They have been cutting timber off their mountains for 2,500 years, and although the forests have been reproduced again and again during that period it is difficult and expensive to get logs down from the mountain side in the absence of the necessary facilities. The lum-

bermen usually go into the woods and cut one log at a time, which they haul out by hand or by oxen for many miles. Where streams are convenient they use them for floating timber as we do, but they have no sawmills in the mountains, although there is an abundance of water power everywhere.

They cut all their lumber by hand with a wide and thin saw during the seasons of the year when they have nothing else to do, and each man who is engaged in business that requires lumber usually buys his own logs and cuts them up himself at odd times. Women and men both work at it. One man or woman will work on the top of the log while another works underneath, but usually not with the same saw. I have seen four or five men working on the same log, each sawing off his own board. They raise the log at an incline of 45° , with one end on the ground and a rest about the middle, and when they work down to the rest they tie the strip to the log and begin at the other end again.

All the lumber is dressed by hand. There is but one planing mill in the country; that is in Yokohama. It employs about 150 hands, and, curiously enough, its entire product is made into boxes and shipped to India. It does no business in the local market. The machinery is from Boston. The manager is thinking of enlarging the plant by adding a sash factory and machinery for making blinds and doors, also for the India market. I do not know why they do not sell their goods in the local market, but I presume there is a good reason for it; perhaps they get better prices in India.

The Japanese make all the woodwork about their houses by hand, and most of their houses are entirely of wood. They are very skillful in all kinds of cabinet and joiner work, and more rapid than our people. Their hand-made tools are better adapted for doing close work than ours, and are kept very sharp. Besides, they give a great deal more labor and patience to an article than our carpenters and cabinetmakers. You never see scratches from nicked tools on their planed work. They use very few nails, but mortise almost everything. It is usually so well done that it is difficult to detect the joints except by the grain, and it lasts forever. Some of their ships are made without a bit of iron in their composition. Everything is mortised.

Japan is one vast garden, and as you look over the fields you can imagine that they are covered with toy farms where children are playing with the laws of nature and raising samples of different kinds of vegetables and grain. Everything is on a diminutive scale, and the work is as fine and accurate as that applied to a cloisonné vase. What would an Illinois or an Iowa farmer think of planting his corn, wheat, oats, and barley in bunches, and then, when it is three or four inches high, transplanting every spear of it in rows about as far apart as you can stretch your fingers. A Japanese farmer weeds his wheat fields just as a Connecticut farmer weeds his onion bed, and cultivates his

potatoes and barley with as much care as a Long Island farmer bestows upon his asparagus or mushrooms or his flowers.

When grain is ripe it is cut with a sickle close to the ground. The bottom ends are carefully tied together with a wisp of straw; the bunch is then divided and hung over a bamboo pole or a rope, like Monday's washing, to dry, sometimes in the field and sometimes in the back yard, and even in the street in front of the house. When it is thoroughly cured the heads of grain are cut off with a knife, and the straws are carefully bound up and laid away in bundles. The heads are then spread out upon a piece of straw matting and beaten with a curious old-fashioned flail. Another method of thrashing is to take handfuls of straw and pull them through a mesh of iron needles. After the thrashing is done the grain is taken up in a sort of scoop basket made of bamboo, and shaken by one woman who holds it as high as her head, while another woman stands by with a large fan which she waves rapidly through the air and blows the lighter chaff away from the heavier grains as they are falling. The richer farmers have separators built upon a primitive plan and turned with a crank. People often winnow grain by pouring it from a scoop upon a fan 3 or 4 feet wide, upon which it is tossed gently up and down, so as to leave the chaff in the air when it falls. Another method of thrashing is to beat the heads of grain upon a board or a row of bamboo poles.

In passing through country districts in a carriage or jinrikisha one finds the greater part of the roadway preempted by the farmers of the neighborhood for the purpose of drying their grain, which is spread out in thin layers upon long mats and raked over every now and then by an old woman in order that the particles at the bottom may get their share of the sun. The straw, which is still tied together in bunches, is hung over racks along the roadside during the day and carried under shelter at night to protect it from dampness as well as from thieves. Sometimes the racks are 30 or 40 yards long and 18 feet high, with a series of poles, and the farmer's wife or one of his daughters comes along at intervals to inspect the straw to see that it is curing evenly, for it is almost as valuable as the grain.

Every particle of straw is saved, and it is put to many uses. They make of it hats, shoes, ropes, roofs, matting, the partitions and floors of houses, water-proof coats, baskets, boxes, and a thousand and one other useful articles. They braid it for fences, too, and the finer, softer qualities are cut up for fodder.

There is little hay raised in Japan. The grass is wiry and indigestible. It cuts the intestines of animals. Some alfalfa is grown, but it does not prosper. In the neighborhood of Kobe, which is one of the seaports on the southern shore, the soil seems to be better adapted for hay, and the best beef comes from that locality.

The ordinary Japanese horse, which originated in China and is called a griffin, seems to like straw and thrives upon it, but he is small and

ugly, and is not capable of much endurance. He resembles the Texan broncho in appearance, but a journey of 15 miles will use him up. They chop the straw very fine for feeding purposes, mix it with oats, barley, millet, and other grains, and by adding water make a kind of mush. Oxen are given the same food, and in some portions of the country one sees a good many of them. They draw their loads by ropes stretched from a collar to the axle of the two-wheeled cart. One man leads them by cords attached to rings in their noses, while another steers the vehicle with a tongue that sticks out behind.

On rare occasions you find a man plowing with a cow or an ox, but more frequently with man or woman power. The Japanese plow is a section of the trunk or the branch of a young tree with a proper curve to it, and is all wood except a narrow, pointed blade, fitted into the framework. It has only one handle.

Every variety of agriculture is carried on in a manner similar to that described, and the soil is in constant use. A couple of acres is considered a large tract of land for farming purposes. Most of the farms are of smaller area, and the crops are greatly diversified. Upon such a little spot of land will be grown almost everything known to the vegetable kingdom; a few square feet of wheat, barley, corn, and millet; a plot of beans perhaps 10 feet wide by 20 feet long, an equal amount of potatoes and peas, then a patch of onions, about as big as a grave; beets, lettuce, salsify, turnips, sweet potatoes, and other varieties of cereals and roots occupy the rest of the area.

The farmer looks upon his growing crop every morning just as an engineer will inspect the movements of his machinery, and if anything is wrong remedies it. If a weed appears in the bean patch he pulls it up; if a hill of potatoes or anything else fails it is immediately replanted. And when he cuts down a tree he always plants another to take its place. The artificial forests of Japan cover many hundreds of square miles, and by this accuracy, economy, and care the prosperity of the country is permanently assured. As one crop is harvested the soil is worked over, fertilized, and replanted with something else.

The largest area of agricultural land in Japan is devoted to raising rice, perhaps as much as nine-tenths of the whole, and as that crop requires a great deal of water, the paddy-fields are banked up into terraces, one above the other, and divided off into little plats 25 or 30 feet square, with ridges of earth between them to keep the water from flowing away when they are flooded. All farming lands are irrigated by a system that is a thousand years old. Some of the ditches are walled up with bamboo wickerwork and some with tiles and stone.

The farmers live in villages and their farms are detached, sometimes a mile, or 2 and 3 miles, away from their homes. There are no fences or other visible marks of division, but every man knows his own land, for it has been in his family for generations. Irrigating ditches and little paths are usually the boundary lines. Theoretically all the land

belongs to the emperor, but the greater part of that under cultivation has been held by fee simple, and the title descends from the father to the oldest son. Sales are made and recorded very much as they are in this country, and land is mortgaged to secure loans. The actual value of every acre is fixed upon the assessor's book for taxation purposes.

The official statistics of Japan show that there are 11,400,008 men and 10,948,053 women engaged in agriculture, which is nearly one-half the total population.

The tools used in the cultivation of the ground are peculiar to Japan and quite curious. Most of them are homemade and have never been imitated by foreign manufacturers. The farmers employ their winter evenings and stormy days in making new implements and repairing old ones, with a little aid from the neighboring blacksmith or traveling tinker. Many men make a business of traveling from village to village during the winter with a small portable forge to assist in repairing tools for the next season.

The workmen of Japan have no reason to complain that the women do not carry their half of the load. Whatever may be the position of the gentler sex in the household, although she is not allowed to hold property or share in the responsibilities that are usually divided between husbands and wives in America, she is at least admitted to an equality with men when there is any hard work to be done. Wherever you go, in the cities or villages or the farming communities, you find the wife and mother working side by side with the husband and sons, plowing, planting, and reaping, and at sunset taking home a large portion of the harvest in a big basket on her back. Whenever you see a man between a pair of tiny shafts tugging to haul a heavily loaded cart uphill there is always a woman pushing from behind, bareheaded and barefooted, except for a pair of straw sandals, and wearing a pair of blue cotton leggings like tights extending from her waist to her ankles. Sometimes the baby is playing with a few rude toys on top of the load. Sometimes he is strapped to her shoulders and his head drops from one side to the other with every motion of her body until you fear it may fall off.

Silk and tea, the two chief exports of Japan, are raised almost entirely by the labor of women, and in the mechanical arts she appears to participate equally in the labor, although she gets little or none of the credit. Her deft fingers fashion many of the choicest pieces of cloisonné and the ceramics, and in the decoration of lacquer that which comes from her hands is equal and often superior to the work of men. She weaves mats and other articles of straw, she braids bamboo baskets, and a thousand and one other articles that are made from that useful tree. She goes out with her husband in fishing boats and dries and salts the catch he brings home; she assists in house-building and cabinetmaking, and in various other occupations which

in the western countries are not considered suitable to her sex, she does almost everything that man can do quite as well and as rapidly as he, although her wages in every employment are only a little more than half of his. She is always present in the shops and stores, usually as bookkeeper and cashier. Some of the largest stores are managed by women and a few are owned by them. And, although the laws and social regulations of the country prohibit it, sometimes you find a woman whose force of character defies both courts and customs and directs the financial affairs and the business of her family as well as the matters that pertain to the household.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

COLORADO.

The Fourth Biennial Report of the Bureau of Labor Statistics of Colorado is for the years 1893 and 1894. The introduction consists largely of a description of the new State capitol, and the address of the Commissioner to the Industrial Congress assembled at Denver in July, 1894. The subjects treated in the report may be grouped as follows: Farms, homes, and mortgages, and manufactures, 8 pages; cost of producing silver and facts relating to smelter production, 14 pages; wages, incomes, living expenses, and prices, 189 pages; strikes, 25 pages; Labor Commissioners' reports and what they contain, 60 pages; miscellaneous matter, 133 pages.

The presentation under each of these titles, with the exception of the cost of producing silver, smelter production, and strikes, consists, principally, of systematic compilations from numerous publications on statistical and sociological subjects.

COST OF PRODUCING SILVER AND FACTS RELATING TO SMELTER PRODUCTION.—The cost of production is shown for the two principal silver-producing districts of the State, and is accompanied with a statement of the product of the smelting plants and smelter and mine wages. The State, in 1892, produced 24,000,000 ounces of fine silver, or over 58 per cent of the total production of the United States.

STRIKES.—A brief statement is given of the strikes and labor troubles occurring in the State during 1893 and 1894. The account of the different strikes is followed by the conclusions and recommendations of the commission appointed to investigate the Chicago strike of June–July, 1894.

It is stated in the address above referred to that in March, 1893, a canvass of Colorado towns was made in order to ascertain the number of unemployed in the State. The returns showed an aggregate of about 8,000 persons, male and female, out of employment. This number probably represented the normal unemployed in the State at that season of the year. After the decline in silver, in June, a further canvass showed that during the sixty days ending with August 31, 1893, the number had increased to 45,000, and of these 22,500 were reported as having left the vicinity where they were employed.

ILLINOIS.

The Eighth Biennial Report of the Bureau of Labor Statistics of Illinois, 1894, contains 430 pages, devoted to a discussion of the subject of taxation, and an appendix, comprising 59 pages. The appendix con-

tains an account of the coal miners' strike of 1894, which is accompanied with statistical tables showing by districts names of operators and location of mines, number of mines involved, number of miners suspending work, etc., number of days suspended, and conditions under which work was resumed. The decision of the supreme court of the State, declaring void section 5 and part of section 10 of the factory inspection law of the State, is given in full; also the address of Mrs. Potter Palmer at the opening of the Woman's Building at the World's Columbian Exposition and the address of Governor John P. Altgeld to the graduates of the University of Illinois.

TAXATION.—In introducing the subject of taxation the purpose of the report is stated to be to expose existing methods in Illinois with special reference to their effect upon labor interests, and to recommend such reforms in the tax system of the State as may tend to ameliorate the condition of the laboring class. The scope, power, and duties of the bureau, the present condition of workingmen, the causes of industrial poverty, and the different schemes of taxation are reviewed.

The general property tax is the system in vogue in Illinois, and the city of Chicago is selected as the central field of the investigation.

The taxation of personal property is treated separately from that of real estate. The statutes of the State require personal property to be listed yearly. The assessor is empowered to swear and examine the party making the report, and in case of a refusal to make a return he is required to list the property to the best of his ability. The following statement gives the totals of a series of tables introduced to show the extent of the undervaluation of the moneys, credits, etc., of banks (other than national), bankers, brokers, and others, also the capital stock of State and national banks in Cook County:

ASSESSED VALUE OF MONEYS, CREDITS, ETC., 1894.

Items.	Cook County.	The State, exclusive of Cook County.	The State.
Population, census of 1890.....	1, 191, 922	2, 634, 429	3, 826, 351
Bankers, brokers, and stockjobbers:			
Moneys.....	\$43, 925. 00	\$3, 076, 630. 00	\$3, 120, 555. 00
Per capita value.....	. 037	1. 168	. 816
Credits.....	10, 000. 00	1, 538, 583. 00	1, 563, 583. 00
Per capita value.....	. 008	. 590	. 409
Persons other than bankers, brokers, and stockjobbers:			
Moneys.....	434, 244. 00	7, 335, 114. 00	7, 769, 358. 00
Per capita value.....	. 364	2. 784	2. 030
Credits.....	522, 110. 00	10, 821, 255. 00	11, 343, 365. 00
Per capita value.....	. 438	4. 108	2. 965
Shares of capital stock, State and national banks.....	357, 353. 00	23, 347, 411. 00	3, 704, 851. 00
Per capita value.....	. 300	2. 037	. 968
Shares of capital stock of companies not incorporated in Illinois.....	1, 280. 00	6 86, 838. 00	98, 927. 00
Per capita value.....	c. 005	b. 187	d. 035
Investments in real estate (money secured by deed).....	6, 275. 00	184, 582. 00	e 191, 857. 00
Per capita value.....	. 005	. 070	. 050

a For 54 counties; 2 counties, Effingham and Macoupin, show \$40 and \$50, respectively, which is included in the total for the State; 45 counties make no returns.

b For 14 counties; 25 counties report a total of \$10,750, which is included in the total for the State; 62 counties make no returns.

c Figures here apparently should be \$0.001; those given are, however, according to the original.

d Figures here apparently should be \$0.026; those given are, however, according to the original.

e Figures here apparently should be \$190,857; those given are, however, according to the original.

Items similar to those given in the above statement are shown for a number of selected counties in comparison with Cook County. As further illustrative of the undervaluations in Cook County, tables are presented which show that according to the report of the State auditor the net taxable credits and moneys of 27 State banks in Chicago, on June 5, 1893, amounted to \$1,058,105.25 and \$18,991,771.67, respectively, while the amounts of these items listed for taxation, May 1, 1894, by all the banks in the city (national banks excluded) amounted to \$10,000 and \$43,925, respectively.

The following statement shows the value of the capital stock and surplus fund of State and national banks, the former as reported to the State auditor June 5, 1893, and the latter as reported to the Comptroller of the Currency, May 5, 1893; also the assessed valuation for 1893:

ACTUAL AND ASSESSED VALUE OF CAPITAL STOCK AND SURPLUS FUNDS OF BANKS IN CHICAGO, 1893.

Kind of bank.	Capital stock and surplus fund.		Per cent of assessors' valuation of reported value.
	Values reported to State auditor and Comptroller of the Currency.	Assessors' valuation.	
Eighteen State banks.....	\$16,387,006	\$1,485,000	9.06
Eighteen national banks.....	30,504,000	4,771,050	15.64
Total.....	46,891,000	6,256,050	α 11.21

α Figures here apparently should be 13.34; those given are, however, according to the original.

The undervaluation of certain classes of personal property in Cook County is shown by a comparison of their valuations with those of similar property in the other counties of the State. The following statement summarizes the totals for some of the classes:

AVERAGE ASSESSED VALUE OF MISCELLANEOUS PERSONAL PROPERTY, 1894.

Class of property.	Cook County.			The State, exclusive of Cook County.			The State.		
	Number.	Persons to each.	Average value.	Number.	Persons to each.	Average value.	Number.	Persons to each.	Average value.
Fire and burglar proof safes.....	397	3,002.32	\$29.60	9,967	264.32	\$21.54	10,364	α 327.10	\$21.84
Steam engines and boilers.....	643	1,853.69	204.91	9,530	276.26	125.24	10,179	375.91	130.37
Pianos.....	11,930	99.91	28.39	31,757	82.90	30.24	43,687	87.59	29.74
Watches and clocks.....	7,597	156.89	3.78	326,016	8.08	1.94	333,613	11.47	1.98
Sewing and knitting machines....	5,232	227.81	4.47	223,315	11.80	3.95	228,547	16.74	3.98
Billiard and pigeonhole tables....	154	7,739.10	222.00	1,911	1,378.56	19.09	2,065	1,852.95	19.31

α Based on the population of 1890 (3,826,351), the figures here should be 369.20; those given are, however, according to the original.

β Based on a total value of \$1,195,810, the figures here should be \$125.35; those given are, however, according to the original.

γ Based on a total value of \$887,036, the figures here should be \$3.97; those given are, however, according to the original.

δ Based on the population of 1890 (1,191,922), the figures here should be 7,739.75; those given are, however, according to the original.

ε Based on a total value of \$3,335, the figures here should be \$21.98; those given are, however, according to the original.

The assessed value of the personal property of saloons and eating houses in the State was reported at \$239,558, in Cook County at \$13,483, and in the State exclusive of Cook County at \$226,075. The per capita values were \$0.063, \$0.011, and \$0.086, respectively.

The main features of the branch of the investigation relating to real estate consist of statistics of the actual and the assessed value of property located in what is known as the old city limits of Chicago, the North, South, and West divisions of the city being treated separately. The different divisions are described as follows: The West division is distinctively a home region for working people and those of moderate means; the South division, besides being the residence section of most of the wealthy people of Chicago, embraces the great business center; the North division is the home of people who are ordinarily ranked as neither rich nor poor. The laws of the State require each tract or lot of real property to be valued at its fair cash value, estimated at the price it would bring at a fair voluntary sale. Assessors are directed to actually view and determine, as nearly as practicable, the fair cash value of each tract or lot of land improved, the value of each tract or lot of land not improved, and the total value.

The extent of the undervaluation for the purpose of taxation is first illustrated by a series of tables, that compare the cost of buildings erected during a number of years, as shown by the building permits, with the assessed value of all real estate. The following statement summarizes the general results of the comparison:

COST OF BUILDINGS AND ASSESSED VALUE OF ALL REAL ESTATE IN CHICAGO.

Items.	Division of city.			Total.
	North.	South.	West.	
Buildings erected, 1876 to 1893.....	8,569	14,619	40,113	63,301
Cost.....	\$68,718,157	\$174,817,633	\$174,608,812	\$418,144,602
Average cost.....	\$8,019.39	\$11,958.25	\$4,352.82	\$6,605.66
Per cent of total cost.....	16.43	41.81	41.76	100.00
Assessors' valuation, all real estate, 1893.....	\$15,744,560	\$64,364,142	\$43,637,130	\$123,745,832
Per cent of cost of buildings.....	22.91	36.82	24.99	29.59
Cost of buildings erected, 1890, 1891, and 1892..	\$15,500,000	\$62,628,875	\$51,235,375	\$129,364,250
Per cent of assessed value of all real estate, 1893.....	98.45	97.30	117.41	104.54

Leaving out entirely the buildings erected prior to 1876 and still standing in 1893, and omitting land values altogether, the assessment valuation in 1893 of both land and improvements was less than one-third of the cost of the buildings for which permits were granted after the close of 1875.

A description is given of seventy of the costliest commercial buildings of the city, with the true and the assessed value of the land and the buildings separately shown, and the percentages the assessed are of the true values; similar showings are also made for a number of costly and a number of cheap residences. The increase in the true value of some of the commercial and costly residence property is compared with the decrease in the assessment value. Comment is also made on the

constantly increasing value of land and decreasing value of improvements, with almost stationary assessment values.

In comparing values for old and new style office buildings it is found that while in both cases the site value exceeds the value of the buildings, the proportion is much greater in the case of the old buildings. For 44 new buildings the site value was 50.84 per cent of the value of both land and buildings, while for 16 old buildings it was 74.23 per cent. In the case of 8 lots in a choice residence portion of the city the value of the ground is shown to have increased 556.59 per cent between 1882 and 1893, while the assessed valuation increased 76.55 per cent, and the per cent that the assessed is of the true value decreased from 21.72 in 1882 to 5.84 in 1893. The assessed value of the improvements on these lots in 1893 was 15.82 per cent of the true value. For 98 unimproved lots the assessment for 1893 was 4.88 per cent of the true value, while for 20 buildings it was 13.54 per cent. The variation between the percentage of true value at which buildings are assessed and that at which building sites are assessed appears to be about the same for all classes of property.

Apart from its obvious tendency to obstruct improvement, the report states that "a custom of assessment for taxation like that above described must therefore in its very nature discriminate against the owners of improved property according to the greater value of their improvements relatively to the value of their land. And this operates with special force against owners of cheaper properties." Comparing a business property valued at \$800,000 with a residence valued at \$8,875, it is shown that for the business property the ground was 87.50 per cent and the building 12.50 per cent of the total value, and for the residence the ground was 21.13 per cent and the building 78.87 per cent. The assessed value of the land in the case of the business property was 7.29 per cent, the building 27 per cent, and the total 9.75 per cent of the true value. For the residence property the percentages were, land 5.33 per cent, building 15.71 per cent, and total 13.52 per cent of the true value. In these two cases the assessment valuation is, in proportion to actual value, lower on the cheaper property, both as to site and improvement, than on the business property; and yet the total assessment valuation of the cheaper property is 3.77 per cent greater, as compared with the total real value, than the total assessment of the business property. The tendency to a higher relative assessment on cheap residence property is further illustrated in the following statement by comparing the percentages that the average value of the ground and of the buildings, respectively, are of the total value of the ground and buildings in different classes of property:

PERCENTAGE OF VALUE OF GROUND AND OF BUILDINGS OF TOTAL VALUE,
CHICAGO.

Class of property.	Per cent of average value of—	
	Ground of total value of property.	Buildings of total value of property.
Sixty office buildings in center of business district.....	52.18	47.82
Choice residence quarter.....	56.58	43.42
Cheap residence quarter.....	28.06	73.94
Vacant lots.....	100	.....

If for purposes of taxation sites are assessed at "say 5 per cent and buildings at 15 per cent of real value, it is clear that the owners of cheap residences will pay a great deal higher tax in proportion to the value of their property than any other class."

Continuing the comparison between the assessment values for different classes of property, the following statement summarizes the totals for a number of tables:

TRUE AND ASSESSED VALUE OF LAND AND OF IMPROVEMENTS IN CHICAGO.

Items.	Class of property.				Total.
	Business and office.	Choice residence.	Cheap residence.	Unimproved.	
Pieces of property.....	70	30	80	98	278
True value, 1893.....	\$100,503,500	\$4,226,000	\$69,857	\$245,975	\$105,044,832
Average value.....	\$1,435,764	\$140,867	\$867	\$2,510	\$377,859
Assessors' valuation, 1893.....	\$9,039,250	\$328,860	\$11,027	\$12,010	\$9,391,147
Per cent of assessors' valuation of true value.....	a 9.67	7.78	15.90	4.88	a 9.58

a Not including two pieces of ground and one building which were exempt from taxation.

The centralization of land ownership is shown by a series of tables. The first table gives an alphabetical list of the owners of all the real estate in the business center of Chicago, except property owned by national and local governments, religious and educational institutions, and railroads. The number of pieces and the number of front and square feet owned by each are given, and the assessed valuations of ground and improvements, respectively, are shown for each of the years 1892, 1893, and 1894. In other tables the properties are grouped by classes according to the number of front feet owned. The number and percentage of square feet owned by each class and selected groups of classes are shown, and the assessed valuation of the ground and improvements for each of the years 1892, 1893, and 1894 is also given for each class, together with the per cent that this valuation is of the total assessed valuation. A little over 7 per cent of the owners own ground, the assessed valuation of which is more than 42 per cent of the total assessed valuation of the ground, while by another grouping of classes it appears that over two-thirds of the owners possess less than one-third of the ground, the assessed valuation of which is but a scant

quarter of the total assessed valuation. Of the 1,198 owners 340 were women, who owned 20.49 per cent of the pieces of property and 16.86 per cent of the total square feet.

The holdings of nonresidents in the business section of the city are described and summarized for the year 1894 according to the States in which the owners reside.

The disproportion between the assessed value of unimproved and improved land is shown by a series of tables giving a description, and the assessed values by years, of a number of pieces of property in the business section of Chicago that were vacant in 1892, 1893, and 1894, or that were improved in one or two of these years but vacant in the others. These tables are summarized by years, and some of the principal items shown are as follows:

ASSESSED VALUE OF UNIMPROVED AND IMPROVED PROPERTY IN CHICAGO.

	1892.	1893.	1894.
Unimproved property:			
Pieces.....	128	94	99
Front feet.....	5, 192. 7	3, 495. 2	3, 827. 7
Square feet.....	573, 287. 4	370, 012. 6	449, 353. 6
Assessors' valuation of ground—			
Per front foot.....	\$179. 633	\$146. 349	\$160. 676
Per square foot.....	\$1. 627	\$1. 382	\$1. 368
Total.....	\$932, 780	\$511, 520	\$615, 020
Improved property:			
Pieces.....	27	61	56
Front feet.....	1, 693. 0	3, 480. 5	3, 053. 0
Square feet.....	210, 380. 3	413, 635. 1	334, 294. 1
Assessors' valuation—			
Ground.....	\$412, 100. 00	\$338, 360. 00	\$729, 360. 00
Improvements.....	174, 790. 00	861, 320. 00	929, 550. 00
Total.....	586, 890. 00	1, 700, 180. 00	1, 658, 910. 00
Average valuation—			
Per front foot, ground.....	243. 414	241. 017	238. 509
Per square foot, ground.....	a 1. 954	2. 028	2. 182
Per front foot, ground and improvements.....	b 346. 893	488. 487	542. 482
Per square foot, ground and improvements.....	2. 739	4. 110	4. 962

a Figures here apparently should be \$1.959; those given are, however, according to the original.

b Figures here apparently should be \$346.657; those given are, however, according to the original.

The assessed valuation of certain property in the business district of Chicago is shown by years from 1890 to 1894, inclusive, the figures being given separately for each piece of property, and summarized as follows:

ASSESSED VALUATIONS IN CHICAGO, 1890 TO 1894.

Class of property.	Persons to whom listed.	Pieces of property represented.	Assessors' valuation.				
			1890.	1891.	1892.	1893.	1894.
Ground.....	38	45	\$648, 650	\$707, 600	\$869, 400	\$903, 200	\$857, 450
Improvements.....	143	189	2, 358, 750	2, 518, 000	3, 492, 800	3, 566, 100	2, 736, 860
Total.....	181	234	3, 007, 400	3, 225, 600	4, 362, 200	4, 469, 300	3, 594, 310

Statements similar to the above, for the years 1892, 1893, and 1894, are given for the separate pieces of property owned by forty-two of the largest owners of property in the business district of the city.

A number of tables are presented which show the quantity and assessed value of real and personal property, also of railroad and other corporate property throughout the entire State of Illinois, with appropriate comparisons with similar values for the State of Indiana. These statistics are shown in detail by county totals, comparisons being made between the totals of 1873 and 1893. The two final summary tables are in substance as follows:

ASSESSED VALUATION, ALL CLASSES OF PROPERTY, ILLINOIS.

Class of property.	Assessed values in—		Decrease.	Per cent of decrease.
	1873.	1893.		
Personal property.....	\$287,292,809	\$145,318,406	\$141,974,403	49.42
Lands.....	582,416,667	320,964,855	261,451,812	44.89
Town and city lots.....	317,199,235	298,274,185	23,925,100	7.54
Railroads (all property).....	133,807,823	82,270,090	51,537,733	38.52
Corporations other than railroads.....	20,896,462	5,363,979	15,532,483	74.33
The city of Quincy.....	13,788,271	(a)	13,788,271	.....
Total.....	1,355,401,317	847,191,515	508,209,802	37.50

a Assessment of the city of Quincy included in Adams County.

ASSESSED VALUATION, ALL CLASSES OF PROPERTY, ILLINOIS AND INDIANA.

Class of property.	Assessed values in—		Excess of Indiana over Illinois.	
	Illinois, 1893.	Indiana, 1894.	Amount.	Per cent.
Real estate.....	\$614,239,040	\$843,381,600	\$229,142,560	37.31
Personal property.....	145,318,406	291,085,845	145,767,439	a 103.09
Railroad property.....	82,270,090	157,743,026	75,472,936	91.74
Corporations other than railroads.....	5,363,979	b 4,983,153	c 380,826	c 7.64
Total.....	847,191,515	1,297,193,624	450,002,109	53.12

a Figures here apparently should be 100.31; those given are, however, according to the original.

b Includes telegraph, telephone, express and palace car companies only.

c Excess in favor of Illinois.

The population, according to the United States census of 1890, was for Illinois 3,826,351 and for Indiana 2,192,404.

The evils of the existing system of taxation and their remedies are discussed under appropriate heads. The impracticability of taxing personal property, the desirability of exempting improvements from taxation, and the practicability of site-value taxation are treated at length, the results of the statistical tables being used to support the arguments.

In summarizing, it is stated that the statistics show that the tax laws of the State are systematically violated; that Cook County escapes a fair proportion of general taxes as compared with other counties, and Chicago as compared with the remainder of Cook County; that by the assessment of buildings at a higher proportionate valuation than land, buildings in Chicago are taxed much more than land, which forces an undue proportion of taxes upon the poor and people in moderate circumstances; that discriminating undervaluations, indirect taxes, and tenderness toward landed interests in Chicago, besides overburdening

the laboring class with taxes, are diminishing opportunities for employment, dangerously concentrating ownership of land, and generally promoting the interests of the very rich at the expense of the rest of the community. A number of recommendations are made for additional legislation to remedy these evils.

The report on taxation is closed with a series of tables giving in detail every sale of property coming under the investigation of the bureau for each of the years 1890, 1891, and 1892, and for the years 1893 and 1894 considered together, showing the amount of the consideration as expressed in the warranty deeds, and the assessments on the same property for each of the years in which the property was sold; also recapitulations showing the same facts by classes of property, according to value, for each year from 1870 to 1892, inclusive, and for the years 1893 and 1894 considered together.

MAINE.

The Eighth Annual Report of the Bureau of Industrial and Labor Statistics of Maine for the year 1894 treats of the following subjects: Manufacturers' returns of the effects of the business depression, 51 pages; factories, mills, and shops built in 1894, 3 pages; census statistics, 10 pages; retail prices, 36 pages; pulp and paper making, 13 pages; publishing business, 12 pages; part of the proceedings of the tenth annual convention of the National Association of Officials of Bureaus of Labor Statistics, 24 pages; the labor laws of Maine, 10 pages; report of the inspector of factories, workshops, mines, and quarries, 46 pages.

MANUFACTURERS' RETURNS OF THE EFFECTS OF THE BUSINESS DEPRESSION.—These statistics are the result of two investigations, one in July and the other in October, 1894, the reports being collected by correspondence. Two hundred and twenty-four reports were received in answer to the first call, representing nearly all the cotton factories, large woolen mills, and other important manufacturing establishments in the State. While the replies to the second call were not so numerous and complete, they show an improved condition in some industries and but slight changes in others. The returns are presented in detail, and show for each establishment and industry the working time and number of employees when running on full time and during July, 1894; also whether wages have been reduced since April 1, 1893, and the per cent of reduction. The reports for July are followed by those for October, which show the changes that occurred in each establishment between July and October.

While the report does not present a statistical summary of the effects of the industrial depression on all industries, the Commissioner states that "Maine has, undoubtedly, felt the bad effects of the business depression to a much less degree than other sections of the country." It appears

that the total loss in the number of men employed on the railroads of the State during 1894, as compared with 1893, was 412, and in wages, \$181,026.54.

FACTORIES, MILLS, AND SHOPS BUILT IN 1894.—The cost of work in building or enlarging factories, mills, and shops in the State is shown to have decreased from \$3,023,850 in 1891 to \$663,700 in 1894, while the number of men employed on such work was 4,278 in the former and 1,039 in the latter year. This showing is made by counties and towns, the character of the industry being indicated for each establishment.

CENSUS STATISTICS.—These consist of a reproduction of some of the totals of the Eleventh Census of the United States that pertain to the State of Maine.

RETAIL PRICES.—The lowest, highest, and average retail prices in July, 1893, and July, 1894, for the necessaries of life are shown for each of the principal cities and towns of the State. The results are summarized so as to show the average price of each article by counties and for the entire State. The average prices for the State in July, 1894, of the articles enumerated are as follows:

AVERAGE RETAIL PRICES IN JULY, 1894.

Article.	Average retail price.	Article.	Average retail price.
Apples, cooking, per peck.....	\$0. 232	Halibut, fresh, per pound	\$0. 154
Apples, dried, per pound.....	.092	Kerosene, per gallon.....	. 100
Apples, evaporated, per pound.....	.161	Lamb, per pound.....	. 132
Beans, white, per peck.....	.667	Lard, per pound.....	. 110
Beans, yellow eyes, per peck .....	.713	Mackerel, fresh, per pound.....	. 111
Beef, corned, per pound.....	.069	Mackerel, salt, No. 2, per pound.....	.099
Beef, steak, per pound.....	.179	Milk, per quart.....	.055
Beef, roasts, per pound.....	.140	Molasses, good, per gallon.....	.410
Beef, soup, per pound.....	.042	Mutton, per pound.....	.095
Butter, best, per pound.....	.230	Oatmeal, per pound.....	.049
Cabbage, per pound.....	.023	Onions, per pound.....	.042
Cheese, per pound.....	.147	Pickles, per quart.....	. 110
Coal, stove, per ton.....	6.400	Pork, clear, per pound.....	. 104
Cod, fresh, per pound.....	.061	Potatoes, per peck.....	. 223
Cod, dried, per pound.....	.067	Raisins, cooking, per pound.....	.086
Coffee, roasted, Rio, per pound.....	.286	Rice, per pound.....	.076
Coffee, roasted, Java, per pound.....	.359	Salt, 20 pounds, box or bag.....	.207
Corn meal, per pound.....	.021	Sausage, per pound.....	. 111
Cranberries, per quart.....	. 110	Soap, hard, per pound.....	.058
Cracked wheat, per pound.....	.048	Sugar, granulated, per pound.....	.054
Crackers, per pound.....	.077	Tea, Oolong, per pound.....	.462
Eggs, per dozen.....	.179	Tripe, pickled, per pound.....	.079
Flour, family, per barrel.....	3.950	Vinegar, per gallon.....	.235
Flour, best, per barrel.....	4.680	Wood, hard, sawed and split, per cord.....	5.250
Ham, sliced, per pound.....	.177	Wood, soft, sawed and split, per cord.....	4.210

PULP AND PAPER MAKING AND THE PUBLISHING BUSINESS.—The presentation concerning these industries consists of a description of their development in the State, and of the special inducements offered to manufacturing enterprises by the natural resources of Maine.

REPORT OF THE INSPECTOR OF FACTORIES, WORKSHOPS, MINES, AND QUARRIES.—This is the annual report made to the commissioner of the bureau, and incorporated in his report, as required by law. Many devices for covering the dangerous parts of machinery or for

placing safeguards around other points of danger are described, the descriptions being, in most cases, accompanied by cuts and figures. The matter of fire escapes receives attention and several illustrations are introduced. Other parts of the report relate to fire extinguishers, sanitary matters, and child labor—the cost of sanitary improvements made during the year and the number of children employed in factories visited by the inspector being given.

MARYLAND.

The Third Annual Report of the Bureau of Industrial Statistics of Maryland for the year 1894 treats of the following subjects: Statistics of manufactures, agriculture, and mortgages, 66 pages; personal property values, 10 pages; sweat shops, 35 pages; the unemployed, 57 pages; strikes, 24 pages.

Personal property values, sweat shops, strikes, and a part of the presentation for the unemployed are the results of original investigations. Statistics of manufactures, agriculture, and mortgages are a reproduction of the totals of the Eleventh Census of the United States for Maryland.

PERSONAL PROPERTY VALUES.—This investigation was designed to throw some light on the distribution of wealth. It deals with the values of personal property only. The inquiry was confined to the examination of 3,498 estates probated in Baltimore City during the period from 1875 to 1880, and 5,914 estates probated from 1888 to 1893. The results show that during the former period 64, or 1.8 per cent, of the estates represented 52 per cent of the total value of all, leaving 3,434 estates to represent 48 per cent of the value. During the latter period 89, or 1.5 per cent, of the estates aggregated 44 per cent, or nearly one-half, of the total value. The number and value of the estates by classified valuations, ranging from \$500 and under to \$100,000 and over, are shown for each year covered by the investigation. The following summary presents the totals for the two periods:

VALUE OF PERSONAL PROPERTY BELONGING TO ESTATES PROBATED IN BALTIMORE CITY DURING TWELVE YEARS.

Estates having personal property valued—	1875 to 1880, inclusive. 1888 to 1893, inclusive.			
	Number.	Value.	Number.	Value.
Under \$500.....	854	\$201,902	1,359	\$333,225
\$500 to \$1,000.....	501	361,407	958	656,038
\$1,000 to \$2,500.....	805	1,287,083	1,358	2,165,694
\$2,500 to \$5,000.....	433	1,526,467	792	2,776,823
\$5,000 to \$10,000.....	341	2,329,146	578	4,009,751
\$10,000 to \$25,000.....	317	4,981,125	452	7,123,912
\$25,000 to \$50,000.....	127	4,475,415	199	6,996,063
\$50,000 to \$100,000.....	56	3,890,194	129	9,157,922
Over \$100,000.....	64	21,038,650	89	25,836,140
Total.....	3,498	40,091,389	5,914	59,055,568

SWEAT SHOPS.—A detailed description is given of the surrounding conditions, dimensions of rooms, number of hands employed, wages, etc., for about 200 shops in Baltimore City. The law of 1894 regulating the sanitary condition of sweat shops is quoted. In commenting on the results of the inquiry the Commissioner states: "The rate of wages paid to those who are compelled to work under such unhealthy conditions has been greatly reduced within the past twelve months, in many cases amounting to 50 per cent." The actual and average wages are quoted for different classes of employees in the different shops.

THE UNEMPLOYED.—The results of the investigation as to the number of the unemployed in Baltimore City during the period of business depression are given in detail for the principal trades. A careful estimate places the whole number of the unemployed in the city during the winter of 1893-94 at 33,900, or more than one-third of the working people. A part of this report is devoted to a treatise entitled "Government aid," in which the methods prevailing in England and other European countries of rendering assistance to the unemployed are discussed.

STRIKES.—The report states that the coal miners' strike, which occurred in May and June, 1894, lasting twenty-seven working days and involving from 3,500 to 3,700 miners, was the only labor disturbance in the State during the year that involved the complete suspension of any industry. This was the third big strike in Maryland during the past seventeen years. A detailed history is given of this and the other minor labor troubles that have occurred since the publication of the preceding report.

NEW HAMPSHIRE.

The Second Annual Report of the Bureau of Labor of New Hampshire is for the year 1894. The introduction, consisting of 16 pages, recites the objects and presents some of the principal features of the several investigations; also makes a number of recommendations for additional legislation to increase the efficiency of the bureau. The subjects treated are as follows: Labor movement and labor organizations, 96 pages; financial statistics, by towns, cities, and counties, 54 pages; town statistics, 117 pages; wage-earners' statistics, 167 pages; temporary aid to unemployed, 20 pages; strikes and lockouts, 20 pages; statistics of manufactures, 34 pages; industrial chronology, 7 pages.

LABOR MOVEMENT AND LABOR ORGANIZATIONS.—A brief historical sketch is given of labor and of labor organizations from their origin in the guilds of the middle ages; also the present status of such organizations in the United States and in foreign countries. The date of organization, character of industry, membership, and facts concerning the objects of the organization, also in some instances a historical sketch, are shown for each labor organization in the State. There were 58 organizations reported for 1894, with a membership of 3,294, of whom 2,980 were males and 314 females.

FINANCIAL STATISTICS BY TOWNS, CITIES, AND COUNTIES.—These statistics are presented in twenty-four tables, which show for towns, cities, and counties the assessed valuation, taxes committed for collection for the year ending March 31, 1894, receipts, amount paid for salaries of school-teachers and other school expenses, for highways, for pauper aid, and miscellaneous expenses, indebtedness, surplus, and cash in treasury, compiled from the latest obtainable data. The indebtedness, the surplus where there is no indebtedness, and cash in treasury are computed for the year ending February 15, 1894.

TOWN STATISTICS.—The information given under this title consists of a brief statement for each town and city in the State as to its location; principal (nearest, if not in town) railroad stations; line of railroad on which located; banking town; population; number of ratable polls; assessed valuation of land and buildings, mills and machinery, stock in trade, money on hand, at interest or on deposit, stock in banks or corporations in State; valuation of assessed live stock, and various other facts of general interest.

WAGE-EARNERS' STATISTICS.—These statistics are the leading feature of the work of the bureau for the year 1894. The data were secured by correspondence, returns being received from 711 individual workmen, representing over thirty branches of industry. The information for the individual reports is grouped by industries, and the totals for each industry are brought forward in summary form. There are numerous facts presented in the individual reports concerning the nativity of the wage-earner, parent nativity, conjugal condition, number in family, number of children attending school, number dependent in family, age at beginning work, time worked in present occupation and for present employer, hours employed per week, days and weeks unemployed, cause of nonemployment, weekly and yearly wages, increase or decrease in wages, times of payment, wages withheld, income other than wages, total yearly income, expenses of single and of married men, living expenses, savings, value of property, number owning homes, number belonging to societies, and amount of dues and of benefits.

Of the 711 workingmen who made reports 84+ per cent were born in America and 15+ per cent in foreign countries. The parents of 72+ per cent of the number were American born, the percentage being the same for both father and mother. The conjugal condition showed 72+ per cent married, 25+ per cent unmarried, and 2+ per cent widowed. Of the married persons 65+ per cent reported children in the family and 34+ percent no children. One hundred and thirty-nine families reported one child each. In the various occupations in which the wage-earners were engaged, 358 have worked from one to ten years each, and 179 from ten to twenty years each. The number of hours worked weekly varied from thirty-six to ninety-eight, according to occupation, clerks working by far the greatest number, they averaging 70+ hours. Of the total number, 64+ per cent were unemployed from three days to nearly the

entire year, the average time unemployed being ten weeks and five days. Of the entire number 672 reported amount of wages received, which varied from \$5 to \$27 per week. More received \$12 per week than any other sum, which is slightly above the average amount received by the entire number reporting. Nearly 30 per cent (211) reported wages decreased, 429 no decrease in wages, and 71 made no report; in only one instance was an increase in wages reported. The yearly earnings and expenses are reported by trades, and 305 wage-earners, or 42+ per cent, reported earnings more than enough to pay living expenses; 283, or 39+ per cent, reported to the contrary, and 123 made no report on the subject. Thirty-three per cent (220) of those reporting upon the subject of home ownership owned homes, 443 did not, and 48 made no report. The tendency to join fraternal organizations for the purpose of obtaining care and relief in the event of sickness and insurance for the family in case of death is well-nigh universal. Four hundred and fifty-five, or 64 per cent, reported as belonging to from one to six societies each.

The opinions of a number of workmen on hours of work, labor organizations, and other kindred subjects follow immediately the analysis of wage-earners' statistics.

TEMPORARY AID TO UNEMPLOYED.—During the financial depression of 1893-94 there was very little suffering in the State through lack of employment, and in but a very few places were unusual means taken to either provide work for the unemployed or to furnish aid to the unfortunate poor. In order to ascertain to what extent the towns and cities of the State had been called upon to give assistance during the winter of 1893-94, over and above the amount paid the year before, the bureau, by circular letter, requested the selectmen and city clerks to furnish such information.

The estimated number of persons, as reported to the bureau, out of work and unable to obtain employment in the State during the whole or a part of the winter of 1893-94, was 2,580; the number wholly or in part dependent upon charity for support, 1,580; the number receiving temporary aid at public expense, 1,782; and the amount paid for temporary aid over and above the previous year, \$15,997.40. The exhibit closes with the statement: "In view of the wide prevailing distress in all sections of the country this is a remarkable showing, and it is doubtful if the working people in any other State felt the effects of the hard times less keenly, or received less public aid in excess of former years, than the laboring classes of New Hampshire." No attempt was made to procure the amount expended for relief by charitable organizations.

The comments of city clerks and selectmen, given in reply to the question, "What measures (if any) were adopted in your town for securing work or obtaining relief for the unemployed during the winter," are quoted in full.

STRIKES AND LOCKOUTS.—This subject is introduced with a brief historical statement concerning strikes in America. The strikes that have occurred in the State, with the exception of those in the period from 1887 to 1893, to be covered by the report of the United States Department of Labor, are treated in detail, beginning with the first in 1838, which occurred at Dover and was participated in by factory girls who struck against a proposed reduction in wages.

STATISTICS OF MANUFACTURES.—The statistics of manufactures in New Hampshire, as published by the Eleventh Census of the United States, are reproduced. The bureau secured, by correspondence, reports from 299 manufacturing establishments in the State concerning their operations during the year 1893, and covering nearly the entire range of industry. These statistics are presented by industries, and comparisons are made between them and the statistics for the previous year for 166 identical establishments.

The 299 establishments reported as invested capital, \$18,069,648; cost of material, \$11,838,802; wages paid, \$5,777,161; value of product, \$21,151,826; total number of employees, 16,959, of whom 11,507 were males and 5,452 females. Compared with the United States Census of 1890 these totals represent 22+ per cent of the entire capital invested in the manufactures of the State, 24+ per cent of the value of product and material used, 23 per cent of the total wages paid, and 26 per cent of the total employees.

Calculated on a basis of 308 days to the year, the average number of days of work per establishment for the 299 reporting was 269, or 87.33 per cent of full time, and the average proportion of business done was 72 per cent of the full capacity of the establishments.

A comparison of the returns for the 166 establishments reporting in both 1893 and 1894 shows a decrease in capital of 3.20 per cent, in cost of material 4.85 per cent, and in value of product 13.85 per cent. The total number of employees decreased 5.46 per cent, while the total wages decreased 9.87 per cent. The average yearly earnings per individual, without regard to sex or age, decreased from \$341 to \$325. The average number of days establishments were in operation decreased from 273 to 269, while the average proportion of business done decreased from 73.75 to 71.48 per cent.

INDUSTRIAL CHRONOLOGY.—A description is given of the additions and improvements to factories and shops, and a statement made of other matters pertaining to changes in industrial establishments in the different towns and cities of the State.

OHIO.

The Eighteenth Annual Report of the Bureau of Labor Statistics of the State of Ohio for the year 1894 treats of the following subjects: Ohio marine interests, 47 pages; "sweating" in Cincinnati, 12 pages; tenement houses in Cincinnati, 29 pages; child labor in Cincinnati, 7

pages; convict labor, special report, 5 pages; mining, 19 pages; manufacturing, 238 pages; employment offices, 7 pages.

OHIO MARINE INTERESTS.—The object of the report on this subject, as stated in the introduction, is “to give those whose interests lie in other lines an insight into the achievements and characteristics of the Ohio seaman, rather than to compile a document that would meet the technical criticism of the seaman himself.”

The merchant marine of the Great Lakes, exclusive of barges and canal boats other than steam, and of small pleasure craft, was on January 1, 1894, placed at 3,056 vessels, having an aggregate tonnage of 1,160,371 tons. Of this fleet there were owned at or controlled from Ohio ports 475 vessels, with an aggregate capacity of 344,138 tons.

The statistics presented show the number of the different kinds of vessels for each city or town of the State in which they are owned or managed. In 1890 the combined receipts and shipments of all lake ports of any importance reached a total of 63,979,589 tons. Ohio's share of this traffic was 12,016,898 tons, or 18 per cent. The receipts and shipments of different commodities are shown for the principal lake cities of the State, and the statistics of commerce through Saint Mary Falls Canal, Michigan, for the seasons of 1892 and 1893 are shown in detail.

During the year 1893 there were 10 vessels of different classes built in the yards of the State that had an aggregate capacity of 8,021 tons.

The fishing industry of Ohio is described and a statistical statement given which shows the average daily and yearly earnings, and number of days worked during the year, for the different classes of employees engaged in the industry. Reports from about seven-eighths of the Ohio fisheries show the capital invested to be \$549,000, with 80 boats, and giving employment to 587 men.

Freight rates on Lake Superior traffic, in which Ohio tonnage is largely engaged, are given for different commodities for each year from 1887 to 1893. The average rate for all classes of freight passing in and out of Lake Superior in 1893 was 1.1 mills per ton mile.

The passenger traffic of the Great Lakes is touched upon. A description is also given of the ports of Ohio, which is followed by a statement of the interest taken in and protection afforded to the marine interests of the State by the United States Government. A short historical sketch is given of the Lake Erie sailor and an account of his present status, including his earnings. Statistical tables of wages, hours of work, and days employed during the year are shown for different classes of employees on shipboard and for dockmen. The methods of loading and unloading vessels and docks are treated and the present condition and future of Ohio's marine interests are discussed.

“SWEATING” IN CINCINNATI.—The information on this subject is the result of a personal investigation by the agents of the bureau. Of the places of manufacture visited, a comparatively small number were

found to be in tenement houses, while a much larger proportion were in shops contained in dwelling houses, but separate from the living rooms and usually affording fair sanitary conditions. But unfortunately shops of the latter class, although still numbering nearly one-half of the total number in Cincinnati, are fast passing away, owing to the competition of Russian Jews and Italians in the city tenements, and in still larger degree of suburban and country workers. These home workers receive their work from the hands of the large manufacturers and not from smaller shops contracting with manufacturers, thus strikingly differentiating the system in Cincinnati from that of most other large cities. The home manufacture of ready-made clothing in Cincinnati has passed largely out of the province of the regular trade, and has come almost entirely into the hands of those who look upon the work as a means of gaining "pin money." Some of the results shown in the tables presented are as follows:

SWEAT SHOPS IN CINCINNATI.

Garments made.	Places visited.	Shops in—			Average—					
		Tenement living rooms.	Homes, but apart from living rooms.	Buildings separate from homes.	Price per piece.	Reduction in price during year (per cent).	Weekly earnings of sweater's family.	Persons in sweater's family.	Rooms occupied.	Monthly rent.
Cloaks.....	16	10	3	3	\$0.57½	46.25	\$9.39	6.00	2.70	\$9.40
Coats.....	98	20	57	16	.51	32.23	11.93	5.00	3.87	15.42
Overcoats (b).....	18				.94	31.00				
Vests.....	46	20	23	3	.21½	20.53	11.22	3.32	2.59	12.62
Pants.....	32	13	13	6	.23½	31.00	8.17	4.52	3.05	11.42
Pants (finishers) (c).....	12	4	1		.05½	12.00	7.67	2.73	2.00	5.50
Boys' suits.....	4	4			.37	20.00	10.00	2.00	2.25	7.16
Buttonholes.....	4		2	2	.62½	42.00	9.25	4.25	2.20	12.37
Custom coats.....	9	5	3	1	4.66	32.00	16.33	3.29	2.43	10.13

a In 27 instances the rent from which this average is made includes rent of shop, and this is generally equal to or greater than rent of living rooms, which varies from \$10 to \$27 a month.

b Overcoats are made in same shops as other coats, and the 18 places averaged are included in the 98 coat shops visited. They are given separately only to show difference in price.

c Only 5 places in which pants finishers were found were engaged exclusively in finishing; the remaining 7 are included in the returns of pants-making shops and represent those in which the work was so subdivided.

d Price per 100.

TENEMENT HOUSES IN CINCINNATI.—This investigation was limited to that part of the tenement-house population engaged in the trades or in factories or at common day labor, the canvass being confined to one representative ward of the city. The statistics gathered by the agents of the bureau are shown in detail for each return and cover the social and sanitary conditions and earnings of those reporting. Of the total number of fathers of families reported 165, or 22 per cent, and of mothers, 206, or 29 per cent, were Americans; 498, or 65 per cent, of the fathers and 442, or 61 per cent, of the mothers, native Germans; the remaining 96, or 13 per cent, of the fathers and 75, or 10 per cent, of the mothers being natives of other foreign countries. The 948 families reported occupied 2,160 rooms; the average monthly

rent for a tenement was \$6.94 ; and 56 families owned their own homes. There were 50 male and 32 female lodgers and 1,453 children reported.

CHILD LABOR IN CINCINNATI.—These statistics are the result of a personal canvass of 40 establishments, embracing 15 industries and employing 7,699 persons, of whom 946 were children under 16 years of age, 482 being males and 464 females. Three hundred and eighteen of these children began work before they were 14 years of age. The number of children working with machinery was 135, and the number of adults displaced by child labor during the year was reported as 42. Of the 946 children only 29 were orphans ; 204 reported fathers deceased, and 39 invalid fathers. From this investigation it appears that child labor in Cincinnati is more of a custom than a necessity.

The statistics are presented in two tables. The first table shows for each of the 15 industries the number of establishments, total number employed, number of males and females, respectively, under 16 years of age, hours employed and earnings per week, number working with machinery, number of adults displaced, and number learning a trade. The second table contains figures that tend to show the ability of the parents to support their families independent of the earnings of the children.

CONVICT LABOR—SPECIAL REPORT.—The bureau having received complaints that the provisions of the law to regulate the employment of the inmates of the penitentiaries, reformatories, and workhouses in the State of Ohio, enacted April 16, 1892, and amended April 24, 1893, were being violated, an investigation was instituted to determine to what extent the industries in the penitentiaries and workhouses affected industries of the same kind employing free labor. According to the provisions of the law the number of persons employed in the penitentiaries and workhouses should not exceed 10 per cent of the number of persons manufacturing the same kind of goods in the State outside of the penitentiaries and workhouses. January 1, 1894, was fixed as the date of investigation. The statistics show for the different industries conducted in the penitentiaries and workhouses, that are affected by the law, the number of convicts employed ; number of persons employed ; free labor ; the number (10 per cent) of convicts allowed by law ; the number actually employed in excess of the 10 per cent allowed by law ; also the number that could be lawfully employed.

MINING.—The period covered by the statistics presented on this subject is from January 1 to December 31, 1893. The results are placed in comparison with similar data for the year 1892. No analysis is made of the figures as it is believed the tables are sufficiently explicit. These tables give, by county totals, numerous facts concerning the character of the mines, methods of work, output, cost of mining, number and wages of different classes of employees, and days worked for the year. The figures are preceded by a synopsis of the record of the coal miners' strike of 1894.

MANUFACTURING.—The presentation under this title consists entirely of statistical tables, which cover numerous occupations and all branches of manufacturing industry in the State. The industries and occupations are grouped by specified cities, cities not specified, and villages, the totals in some instances being summarized for the entire State.

The first group of tables shows for males and females, respectively, the number employed, number of days worked during the years 1892 and 1893, hours of daily labor, average daily wages, yearly earnings for 1893, and per cent of increase or decrease in wages for the year ending December 31, 1893. The second and third groups of tables show, for 1892 and 1893, the number of establishments reported, and the number of males and females, respectively, employed during each month of the year for the different industries. The fourth group of tables shows the number of establishments reported, total amount paid in wages during 1892 and 1893, number and monthly salaries of the different classes of office help, and total capital invested. The fifth group of tables shows the number of establishments reported, value of goods made and materials used, respectively, from January 1, 1893, to January 1, 1894; value of manufactured articles and materials, respectively, on hand January 1, 1893, and January 1, 1894, and the amount of capital invested.

The statistics form a complete exposition of the manufacturing industries of the State, especially of wages in all classes of occupations in the different industries and localities.

EMPLOYMENT OFFICES.—The introductory paragraph to this subject opens with the statement: “In 1894 the five free public employment offices of the State found work for nearly 10,000 people. Although this is a falling off of 3,000, compared with 1893, the showing is a very satisfactory one when it is remembered that the dullness in all lines of industry has been more widespread this year than last.” The statistical tables show by weeks, for each office, the number of situations wanted and positions secured for males and females, respectively. The totals for the five offices of the State during 1894 are as follows:

POSITIONS SECURED THROUGH EMPLOYMENT OFFICES, 1894.

City.	Help wanted.		Situations wanted.		Positions secured.	
	Males.	Females.	Males.	Females.	Males.	Females.
Cincinnati	297	1,387	2,778	3,162	267	1,144
Cleveland	283	2,065	2,942	3,517	273	1,846
Columbus	605	1,852	2,672	2,226	456	1,343
Toledo	441	1,693	2,472	1,950	367	1,359
Dayton	300	2,447	3,657	3,761	777	1,934
Total	2,426	9,444	14,521	14,616	2,140	7,626

TRADE UNIONS IN GREAT BRITAIN AND IRELAND.

The Seventh Annual Report of the Labor Department of the British Board of Trade, on the subject of trade unions, covering 284 pages, gives valuable and exhaustive information relative to that class of organizations in Great Britain and Ireland for the year 1893. The nature and extent of the information supplied by this report are described as follows:

The trade unions of the kingdom may, broadly speaking, be regarded in two aspects. They are, in the first place, organizations having for chief object the protection of the industrial interests of their members, and, in the second place, many of them are provident societies, arranging for the support of their members in cases of sickness, old age, or other contingencies incidental to the life of workmen. Under whichever aspect they are viewed, they form a most important feature in the social life of the kingdom, and it is, therefore, eminently desirable that record should be made of both classes of their operations. In the present report, therefore, information is given with regard to all the chief points of interest in connection with both the trade and provident working of these unions.

The report deals alike with registered and nonregistered unions, but distinguishes the one from the other, and detailed information concerning them is given in the appendices, of which there are five, occupying 277 of the 284 pages of the report.

The first appendix, covering 109 pages, consists of a table showing, in detail, the number and names of trade unions, the number of branches of such unions, the number and percentage of members receiving certain benefits provided by each union during 1893, the amount of funds on hand at the end of 1892, the amount and analysis of annual income and expenditure, and the amount of funds on hand at the end of 1893. The information is given for each union separately, and the unions are classified according to industries.

The second appendix, covering 110 pages, contains three tables, the first of which shows the number of members belonging to the same unions dealt with in Appendix I at the end of each of the different years from 1870 to 1893, inclusive; the second table shows the contributions, per member, of the same unions during each of the years covered by the first table; the third table shows the amount paid, per member, of certain specified trade unions for unemployed, sick, and superannuation benefits in various years prior to and including 1893.

The third appendix consists of a directory giving the names and addresses of the secretaries of the unions, concerning which data are given in the preceding appendices, and the fourth appendix gives sta-

tistics in relation to disablement and mortality among members of trade unions.

In order that the position of the unions may, to some extent, be presented from their own point of view, extracts have been made from the general addresses of the chief officers of some of the principal unions to their members, through their annual or periodical reports, relative to their operations and progress, financial and otherwise. These extracts constitute the fifth appendix, which closes the report.

For the purposes of this report returns were obtained from 687 trade unions. Of these, 513 were registered under the trade union act, and 174 were not so registered—an increase of 31 registered and 57 unregistered societies as compared with the number reporting in 1892. Ninety-seven of the unions concerning which information is published had local sections or branches to the number of 6,879, at the end of 1893.

In addition to the unions from which returns were secured, the Labor Department had knowledge of the existence of 118 other unregistered unions at the end of 1893, concerning which no information was obtainable beyond the fact that their total membership amounted to 90,660; there were also 41 other such unions of which information concerning the membership could not be secured.

The following summary shows the total number of members, amount of annual income and expenditure, and balance of funds of all unions for which accounts for 1893 were obtained:

Number of unions for which accounts were received	687
Number of members of 677 unions at the end of 1893	1, 270, 789
Total funds of 662 unions in hand at beginning of 1893	\$9, 258, 015
Total income of 687 unions for the year	9, 718, 259
Total expenditures of 687 unions for the year	10, 932, 665
Total funds of 683 unions at end of 1893	8, 044, 655

The discrepancy of \$1,046 in the above summary is explained by the statement that two unions, which did not report the amount of their funds at the beginning and end of the year, had an excess of expenditures over income to that amount.

Detailed particulars as to the chief items of expenditure were furnished by 682 unions, and are shown in the following statement:

EXPENDITURES, ETC., OF 682 TRADE UNIONS, 1893.

Items.	Amounts.	Unions.	Members.
Out-of-work benefits	\$2, 496, 169	378	827, 840
Dispute benefit	3, 567, 364	331	1, 083, 904
Sick benefit	1, 161, 823	228	622, 908
Accident benefit	126, 889	99	414, 989
Superannuation benefit	571, 030	89	458, 678
Funeral benefit	458, 385	387	983, 834
Other benefits, grants, etc	555, 570	391	842, 202
Grants to other trade unions	299, 927	405	996, 618
Working and other expenses	1, 690, 919	679	1, 269, 070
Total	10, 928, 076		

The discrepancy between the total number of unions making the different expenditures, as shown in the preceding statement, and the

total number reporting in reference thereto is explained by the fact that only a limited number of the unions make payments for all the purposes set forth; and there may have been some unions liable to make certain of the payments which may not have been called on to make such payments during the year.

For the purpose of comparing 1893 with 1892, as regards membership and financial operations of trade unions, the returns of 534 trade unions which supplied details for the two years are available, and the figures are presented in the following table:

MEMBERSHIP AND FINANCIAL OPERATIONS OF 534 TRADE UNIONS, 1892 AND 1893.

Items.	1892.	1893.	Increase (+) or decrease (-).
Total membership at end of year.....	1, 195, 932	1, 166, 922	- 29, 010
Total annual income.....	\$8, 511, 990	\$9, 233, 210	+ \$721, 220
Total annual expenditure.....	8, 375, 164	10, 497, 819	+2, 122, 655
Total funds at end of year.....	8, 859, 142	7, 573, 067	-1, 286, 075

^a The figures given here do not quite balance. There is a discrepancy of \$21,466, which is due to the fact that 24 unions showed \$40,567 less funds at the beginning of 1893 than they reported at the end of the previous year, while 44 unions showed \$19,101 more.

In regard to the falling off in membership shown in the preceding table, it is said:

Many of the societies represented have, of course, largely increased their number of members during the year, but the above figures show the net change in the total membership of all the unions. The classes of trade unions most affected by this diminution in aggregate numbers are those which represent the less skilled branches of industry. Indeed, those which suffered most heavily from this falling away of numbers were the unions of unskilled labor. Fourteen unions of men engaged in transport and other branches of such labor show a decrease of 37,000 on the year. In the mining and quarrying group of trades, eight of the unions show a loss of 8,000 members.

Notwithstanding the loss in membership there was a substantial increase, amounting to \$721,220, in the total income of these unions. This is explained by the fact that in the class of unions to which the loss of members is chiefly due the contributions of members are the lowest, while in the organizations of skilled labor, in which the contributions are highest, there has been an increase of membership. It is also to be noted that in many unions when the funds begin to fall below a certain limit the contributions of the members are proportionately increased, so that in bad years their total incomes are greater than in good years. It is also to be remembered that owing to the long duration of extensive labor disputes in 1893, and the large numbers of men engaged in them, great sums of money were contributed in special ways to certain unions for their support, which further increased the gross income for the year.

The increase of expenditures in 1893 over 1892 was chiefly due to the increase of want of employment and of trade disputes. The effect of the industrial depression in both 1892 and 1893 is shown by comparing the expenditures in 1893 with those of 1891. In 1891 the total

expenditure per member of the unions reporting was \$5.38, while in 1893 it had risen to \$8.97. The funds on hand at the end of the year 1893 amounted to \$6.47 per member.

The powers of trade unions as to the investment or deposit of their funds vary considerably, some having almost unlimited discretion, while others are strictly confined to investments of an absolutely safe character. The bulk of these accumulated funds is deposited in Government savings banks, or invested in Government stock, but some of the funds are invested in joint stock companies, municipal stock, or real estate. A sufficient amount, available for immediate use, is kept in the hands of the union officials.

The details of expenditures for different purposes by the 534 trade unions reporting the facts for 1892 and 1893 are shown in the following table, in which are also shown the number and membership of the unions making expenditures for each purpose in each year:

EXPENDITURES, ETC., OF 534 TRADE UNIONS, 1892 AND 1893.

Items.	1892.			1893.			Increase(+) or decrease (-) in expenditures.
	Unions.	Members.	Expenditures.	Unions.	Members.	Expenditures.	
Out-of-work benefits ...	271	728,030	\$1,872,576	300	754,688	\$2,409,141	+ \$536,565
Dispute benefit	280	1,070,788	2,178,898	271	1,010,649	3,428,727	+ 1,247,828
Sick benefit	190	578,608	1,043,655	190	604,920	1,147,511	+ 103,856
Accident benefit	80	348,395	86,716	76	382,216	124,862	+ 38,246
Superannuation benefit	72	428,914	515,727	80	454,398	567,507	+ 51,780
Funeral benefit	300	887,326	403,574	312	908,496	440,958	+ 37,384
Other benefits, grants, etc	387	1,081,338	633,550	430	1,053,666	798,870	+ 165,320
Working and other expenses	527	1,190,928	1,626,009	530	1,166,444	1,578,376	- 47,633
Total			\$8,360,705			\$10,494,052	

α The difference between this total of expenditure and that given in the preceding summary is due to some of the unions not reporting the details of their expenditures.

The above table deals with the returns of 534 unions which furnished information as to certain details of their expenditures in either 1892 or 1893. As the same number of unions did not, in any instance, make expenditures for the same purpose in both years the table contains an element of uncertainty. In order to secure a proper basis of comparison the subjoined table is given, which shows for each of the items of expenditure the facts for only such unions or societies as made an expenditure for that purpose in both 1892 and 1893.

EXPENDITURES, ETC., OF TRADE UNIONS REPORTING FOR BOTH 1892 AND 1893.

Items.	Unions.	Members.		Expenditures.		Increase.
		1892.	1893.	1892.	1893.	
Out-of-work benefits	249	700,880	706,380	\$1,815,380	\$2,359,484	\$544,104
Dispute benefit	213	1,007,017	972,446	2,059,381	3,288,487	1,209,106
Sick benefit	167	551,333	557,677	1,033,148	1,138,527	105,379
Accident benefit	63	327,687	331,521	80,852	120,908	40,056
Superannuation benefit	68	425,600	430,307	514,968	584,027	49,059
Funeral benefit	268	880,885	875,297	400,946	429,746	28,800
Other benefits, grants, etc.....	351	995,126	987,588	620,581	768,951	148,370
Total				6,525,256	8,650,130	2,124,874

WAGES AND HOURS OF LABOR IN GREAT BRITAIN AND IRELAND.

The following is a synopsis of the principal features of a report on this subject published by the Labor Department of the British Board of Trade. The report consists of three parts, which treat, respectively, of—changes in rates of wages and hours of labor reported as having occurred during 1893, also some preliminary figures on the same subject for 1894; standard piece rates; standard time rates.

CHANGES IN RATES OF WAGES AND HOURS OF LABOR.—The object of the report is to put on record the principal changes which have been reported in market rates of wages and recognized hours of labor in various districts in the chief industries of the United Kingdom during the year to which the report refers.

The data were obtained principally from the tables of changes in wages and hours of labor published monthly in the Labor Gazette. The material was originally secured from newspaper extracts (which were in all cases verified); reports from local correspondents, secretaries of employers' and workmen's associations, and others, on special forms distributed for that purpose; superintendents of mercantile marine, and miscellaneous sources. The information thus secured was subjected to a careful revision prior to publication in the Gazette. The data obtained from the Labor Gazette were supplemented as follows: Information concerning changes not reported at the time they occurred was obtained from the annual reports of trade unions, especially those which publish standard rates of wages. The changes reported during the year were grouped by industries, and printed slips containing the changes reported in each industry were distributed for corrections and additions to the secretaries of the trade unions and of the various employers' associations concerned with those trades, and also to the local correspondents of the department. In certain trades in which no changes had been reported during the year special inquiries were sent to the secretaries of associations. The information concerning the police was supplied by the chief constables and that relating to employees of local authorities by the clerks of such local authorities.

The information concerning changes in seamen's wages is based on returns made by superintendents of mercantile marine to the registrar general of shipping and seamen, and that for agricultural laborers is confined to a comparison for certain districts of the limits of the rates at which laborers of various classes were hired at the yearly and half-yearly hiring fairs in 1892 and 1893.

The field of employment covered more or less by the inquiry included the great majority of the wage-earning population, excepting domestic

servants. Agriculture, however, and railway service were very imperfectly covered, and though all the changes in predominant rates for seamen at the principal ports have been recorded, the peculiar conditions of that industry make it impossible to compute the number affected by changes in rates of wages.

If the industries above mentioned be excluded, the groups of industries in which actual changes have been reported cover a total of nearly 7,000,000 persons of all classes and include all the important fluctuating trades.

For the purpose of this report a change in the rate of wages is defined as a change in the weekly or hourly rate of remuneration of a certain class of work people, apart from any change in the nature of the work performed.

The following classes of changes, which are apt to be confused with changes in the rates of wages, are excluded from the report:

1. Changes in the average earnings in a trade which are due, not to an alteration in the scales of pay for particular classes of work, but to alterations in the proportions which the higher and lower paid classes of work people bear to each other.

2. Changes in the rates of pay for individuals due to promotions, or progressive "increments" of wages. In some classes of undertakings (for example, the police force) the rates of pay of various classes of employees are regulated by scales. The rates of pay, therefore, of individuals may be continually altering. Such internal changes, however, are not to be regarded as real changes in the rates of wages so long as the limits of the scales for each class of employees remain unaltered for work of the same kind.

3. Purely "seasonal" changes in weekly wages which regularly occur at certain periods of the year in certain trades. This change as a rule is accompanied by a change of hours of labor for the summer and winter months, respectively, and merely represents the effect on weekly wages of this change of hours, the hourly rate of pay remaining the same.

4. Changes in the terms of employment which merely provide for extra compensation for extra work.

Exclusive of changes affecting seamen and agricultural laborers, there were 836 cases of changes of wages reported for 1893, and in 706 cases full particulars were obtained. Of the total number of changes 587 were increases and 249 decreases. There were 549,977 individuals affected directly by the 706 changes for which full particulars were secured, but of this number 151,140 finished the year with their wages at the same level as at the beginning, and for the purpose of comparing wages at the end of 1892 and 1893 may be regarded as having their wages unchanged. Of the remaining 398,837 employees, 142,364, or 26 per cent of the whole number affected, gained a net increase of wages, and 256,473, or 47 per cent of the whole number, sustained a net loss. Judged, therefore, by the standard of the number of per-

sons affected, the decreases of wages during the year preponderated over the increases. Nevertheless the net result of all the changes during the year was a slight rise of wages, the average amount of the increases per head being so much greater than that of the decreases as to overbalance the superiority of numbers.

In presenting the statistics the various subdivisions of industry are arranged in seven general groups, the totals being given for each group and each subdivision. The details for each change in wages and hours of labor are also given, the reports being arranged by localities and industries. In the following summaries only the totals for the general groups are presented and those cases considered for which full particulars were secured.

In many cases the same individual was involved in more than one change during the year, and to obtain the aggregate number of employees affected should be counted more than once. The two statements immediately following show the number of changes (increases or decreases in weekly wages) during the year, the number of individual employees affected, and the total and average increase or decrease:

NUMBER OF INCREASES OR DECREASES IN WEEKLY WAGES, AND EMPLOYEES AFFECTED, 1893.

Industries.	Changes.			Employees affected.			
	In-creases.	De-creases.	Total.	Wages in-creased.	Wages de-creased.	Wages same at end as at begin-ning of year.	Total.
Building	265	22	287	40,017	4,521	.....	44,538
Metal, engineering, and shipbuilding ..	35	111	146	5,377	95,279	α 20,600	121,256
Mining and quarrying	40	40	80	75,834	103,802	α 130,290	309,926
Textiles	28	4	32	4,196	50,891	.....	55,087
Clothing	18	.....	18	3,599	.....	.....	3,599
Other trades and occupations	43	18	61	3,210	1,944	α 250	5,404
Employees of public authorities	79	3	82	10,131	36	.....	10,167
Total	508	198	706	142,364	256,473	α 151,140	549,977

α These employees are included in obtaining the average net increase or decrease.

AMOUNT OF INCREASE OR DECREASE IN WEEKLY WAGES, 1893.

Industries.	Increase.				Decrease.			
	Total.	Aver- age per em- ployee.	Net.		Total.	Aver- age per em- ployee.	Net.	
			Total.	Aver- age per em- ployee.			Total.	Aver- age per em- ployee.
Building	\$20,200.35½	\$0.50½	\$18,925.82	\$0.42½	\$1,274.53½	\$0.28	.....	.....
Metal, engineering, and shipbuilding	1,992.83½	.37	.....	.....	23,593.85	.30	\$26,601.01½	\$0.22
Mining and quarrying	86,388.89	1.14	70,546.24½	.23	15,842.64½	.15½	.....	.....
Textiles	848.96	.20	.....	.....	5,540.51	.11	4,691.55	.08½
Clothing	1,388.65½	.38½	1,388.65½	.38½	.....	.....	.....	.....
Other trades and occupa- tions	1,251.42	.39	.....	.....	1,367.00	.70½	115.58	.02
Employees of public au- thorities	3,885.90	.38½	3,871.05½	.38	14.84½	.41	.....	.....
Total	115,957.01½	.81½	63,323.63	.11½	52,633.38½	.20½	.....	.....

The computed net effect upon wages of the total changes of the year, so far as reported in detail, was a rise of \$63,323.63 a week. By this statement is meant that the total wages bill of the country, in industries covered by the returns, for a full week's work at the end of 1893 would exceed that for the corresponding week at the end of 1892 by \$63,323.63. For the purposes of the calculation internal changes during the year are disregarded, and the state of the weekly wages bill is compared at the end of each year. In other words, the comparison deals with the rates of payment at two given points of time; not with the total payments over two given periods of time.

The average weekly rise of wages per head calculated on the total number of persons receiving a rise was 81½ cents, while the average weekly fall per head calculated in a similar way was only 20½ cents. The average net weekly change per head calculated on the total number of persons affected by changes of wages during the year was a rise of 11½ cents. If the net gain be spread over the total estimated number of persons engaged in the trades to which the returns relate, the rise is 47½ cents per head per annum. The number of employees affected by changes in wages formed about 8 per cent of the total number of persons employed in the industries covered.

The sum of the increases, \$115,957.01½, shown in the above statement is itself the balance of much larger amounts of increases and decreases affecting the same individuals, and the same is true of the sum of the decreases, as all internal changes during the year were excluded. The amount of the total weekly increases recorded was \$292,854.78, and of the total decreases \$229,531.15, the difference between which is of course the same as that between the increases and decreases shown in the above table.

The total number of employees (not necessarily separate individuals) affected by the 706 changes for which full particulars were reported, and the total and average of the aggregate increases and decreases per week, are shown in the two following statements:

EMPLOYEES AFFECTED BY CHANGES IN WEEKLY WAGES, 1893.

[A single employee may be affected by more than one change, and hence counted two or more times in this table.]

Industries.	In-creases.	De-creases.	Total.	Average number to each change.		
				In-creases.	De-creases.	Total.
Building	40, 217	5, 071	45, 288	152	231	158
Metal, engineering, and shipbuilding	30, 827	159, 458	190, 285	881	1, 437	1, 303
Mining and quarrying	562, 524	549, 844	1, 112, 368	14, 083	13, 746	13, 905
Textiles	4, 246	50, 891	55, 137	152	12, 723	1, 723
Clothing	3, 599	.....	3, 599	200	.....	200
Other trades and occupations	3, 460	2, 194	5, 654	30	122	93
Employees of public authorities	10, 141	36	10, 177	128	12	124
Total	655, 014	767, 494	1, 422, 508	1, 289	3, 876	2, 015

INCREASE OR DECREASE IN AGGREGATE WEEKLY WAGES, 1893.

[A single employee may be affected by more than one change, and hence counted two or more times in this table.]

Industries.	Increase.	Decrease.	Total change.	Average per employee.		
				Increase.	Decrease.	Total change.
Building.....	\$20,200.35½	\$1,274.53½	\$21,474.89	\$0.50	\$0.25	\$0.47½
Metal, engineering, and shipbuilding.....	5,460.70	32,061.72	37,522.42	.17½	.20	.19½
Mining and quarrying.....	259,697.12½	189,150.88	448,848.00½	.46	.34½	.40½
Textiles.....	848.96	5,540.51	6,389.47	.20	.11	.11½
Clothing.....	1,388.65½	.....	1,388.65½	.38½	.....	.38½
Other trades and occupations.....	1,373.08½	1,498.66	2,871.74½	.39½	.68	.50½
Employees of public authorities.....	3,885.90	14.84½	3,900.74½	.38½	.41	.38½
Total.....	292,854.78	229,531.15	522,385.93	.44½	.30	.36½

There were 164 changes in hours of labor reported as having occurred during 1893, of which one-half (82) occurred in the building trades. Full particulars were secured concerning 155 of these changes, of which 139 were decreases and 16 increases. The total number of employees affected by the 155 changes was 34,649, of whom 1,530 had an increase, and 33,119 a decrease in their hours of labor. The following statements show the number and the extent of changes in the hours of labor for which full particulars were reported, also the number of employees affected for the different groups of industry:

NUMBER OF CHANGES IN HOURS OF LABOR PER WEEK AND EMPLOYEES AFFECTED, 1893.

Industries.	Changes.			Employees affected.		
	Increases.	Decreases.	Total.	Increases.	Decreases.	Total.
Building.....	11	63	74	1,283	11,982	13,265
Metal, engineering, and shipbuilding.....	1	9	10	200	4,092	4,292
Mining and quarrying.....	.....	1	1	.....	250	250
Textiles.....	.....	6	6	.....	2,021	2,021
Clothing.....	.....	7	7	.....	7,840	7,840
Other trades and occupations.....	.....	30	30	.....	5,288	5,288
Employees of public authorities.....	4	23	27	47	1,646	1,693
Total.....	16	139	155	1,530	33,119	34,649

EMPLOYEES AFFECTED BY CHANGES IN AVERAGE HOURS OF LABOR PER WEEK, 1893.

Industries.	Hours per week.								
	Increase.			Decrease.					
	Under 1.	1 and under 2.	2 and under 4.	Under 1.	1 and under 2.	2 and under 4.	4 and under 6.	6 and under 8.	8 and over.
Building.....	480	803	.....	5,365	2,604	3,944	69	.....	.....
Metal, engineering, and shipbuilding.....	.....	.....	200	100	1,690	1,400	705	197	.....
Mining and quarrying.....	.....	.....	.....	.....	250	.....	.....	.....	.....
Textiles.....	.....	.....	.....	.....	1,000	1,021	.....	.....	.....
Clothing.....	.....	.....	.....	.....	200	7,580	.....	60	.....
Other trades and occupations.....	.....	.....	.....	.....	3,784	667	564	100	173
Employees of public authorities.....	.....	.....	47	73	272	446	153	654	48
Total.....	480	803	247	5,538	9,800	15,058	1,491	1,011	221

The net effect of the changes in each industry as well as that of the whole of the changes reported was a reduction of hours of labor. Attention is called to the fact that in the mining industry, which was more disturbed by wage changes than any other group of industries, and in which proposals had been made for some time past to obtain a reduction of hours by legislative means, not a single change in weekly hours of labor was reported. The one change shown for the group occurred in the quarries.

In order to compute the average effect of the changes, they have been grouped according to the average amount of the increase or decrease per week taken over the whole year. In the case of the building trades, in which the summer and winter weekly hours differ considerably, many of the changes reported affect only summer hours, or only winter hours, or do not affect summer and winter hours to the same extent. In all cases, therefore, the average effect of the change spread over the entire year has been computed for the purpose of the present calculation, due regard being paid to the number of weeks in the year in which the summer and winter rates prevail, respectively.

The net effect of the whole of the changes of hours reported was equivalent to an average reduction of two hours per week for the whole number of persons affected by the changes. The following statement classifies the total number of employees affected by changes of hours, according to the magnitude of the increase or decrease:

EMPLOYEES AFFECTED, CLASSIFIED BY EXTENT OF CHANGE IN HOURS OF LABOR.

Change in hours per week.	Employees affected.		
	Increase.	Decrease.	Total.
Under 2 hours.....	1, 283	15, 338	16, 621
2 and under 4.....	247	15, 053	15, 305
4 and under 6.....		1, 491	1, 491
6 and under 8.....		1, 011	1, 011
8 and over.....		221	221
Total.....	1, 530	33, 119	34, 649

The effect of these changes on the average weekly hours of labor of the entire body of persons engaged in the groups of industries included in the returns was, of course, inappreciable.

The average number of persons affected by a change of hours was 224. In the building trades it was 179, in the printing and paper trades (which are included in the class of other trades and occupations) 350, in the textiles 337, in the clothing 1,120.

The preliminary figures given for 1894 are considered as too incomplete to be used for comparison with 1893, and should only be accepted as indicating the general tendency of wages for that year. The number of changes in wages reported for 1894 is 589, of which 411 were increases and 178 decreases. The total number of individual employees affected by the changes for which full particulars were received was

592,000, of whom 160,000 gained a net increase and 432,000 sustained a net decrease. The total effect of the changes in wages in 1894 was a decrease. In this respect the year 1894 differs from 1893, in which the effect of the decline was for the time more than counterbalanced by temporary increases in miners' wages. In 1894 there was a widespread fall in miners' wages, affecting over 380,000 persons.

If the mining, metal, and glass bottle making industries be excluded, it will be found that the remaining industries show in the aggregate an increase. If increases be balanced against decreases, a slight rise appears to have taken place in the cotton, boot and shoe, and printing industries, while in the engineering, shipbuilding, and some other groups wages remained throughout 1894 practically as they were at the end of 1893.

The aggregate number of employees (not necessarily separate individuals) involved in the wage changes, so far as reported for 1894, was 1,070,000, of whom 281,000 were involved in increases and 789,000 in decreases. A considerable part of this aggregate is accounted for by the Welsh miners, whose rates of wages changed no less than six times during the year, and who consequently figured six times in the total.

Reports have been received of 215 reductions of hours of labor in 1894, affecting 70,000 individuals, of whom about 42,000 were Government employees. The net effect of the changes in hours in 1894 was a decrease, as in 1893.

STANDARD PIECE RATES AND STANDARD TIME RATES.—This portion of the report presents selections from some of the more important lists of piece and time rates of wages in force in the year 1893. The lists shown are those prepared by various organizations of either employers or employees, or as agreed upon by both classes of organizations in the different trades, the object being to illustrate the working of the standard lists of wages by which many industries are governed. In some cases lists prepared by employers and employees, respectively, are placed in comparison, and, when practicable, data are also given for 1892.

It is not practicable to make a summary of the different lists, and the lack of space will not permit of a reproduction of any of them with the notes and text necessary to a proper understanding of the figures.

STRIKES IN SWITZERLAND IN RECENT YEARS.

The eighth annual report of the Comité Directeur de la Fédération Ouvrière Suisse, 1894, contains a historical review of strikes, lockouts, and employees' demands, followed by statistical summaries, covering the period of 1860 to 1894, inclusive.

The information, as explained by the editor, has been obtained largely from labor journals and other publications, but unfortunately the files of some of the most important periodicals were incomplete and other important journals could not be obtained, especially for the earlier periods. Frequently the information found was very meager, and in such cases the missing data were sought by correspondence. But this means of obtaining information was only partly successful. While thus there are many gaps in the statistics presented, they are sufficiently complete to furnish some idea of this feature of the labor movement in Switzerland. The following table shows the number of strikes, lockouts, and demands amicably settled, and their results:

STRIKES, LOCKOUTS, AND DEMANDS, BY RESULTS, 1860 TO 1894.

Year.	Demands not resulting in strikes.				Strikes.					Lockouts.					
	Suc- ceed- ed.	Suc- ceed- ed part- ly.	Fail- ed.	Not re- port- ed.	To- tal.	Suc- ceed- ed.	Suc- ceed- ed part- ly.	Fail- ed.	Not re- port- ed.	To- tal.	Suc- ceed- ed.	Suc- ceed- ed part- ly.	Fail- ed.	Not re- port- ed.	To- tal.
1860						1		1		2	1				1
1861	4				4			1		1					
1862	1		1		2										
1863	2				2										
1864	2				2										
1865	2			1	3										
1866						1			4	5					
1867			1		1			1		1					
1868						8	2	2		12			1		1
1869	10		3	2	15	7		3		10				1	1
1870	1			2	3	2		3	2	7				1	1
1871	2		3		5	3	1	2	1	7			1		1
1872	7		2	4	13	9	2	6		17			1		1
1873	4	2			6	2	6	5	1	14					
1874	1			2	3	3			4	7					
1875	1				1	5	1	1	2	9					
1876	1				1	2	1	4		7					
1877								3		3					
1878						2	1			3					
1879															
1880								1		1					
1881							1	2	1	4					
1882															
1883						2			1	3					
1884					1	1				2					
1885	1				1	11		2	4	17					
1886	8		1	2	11	6		5		11					
1887	1	1			2	13		2	2	17			2		2
1888	3		2		5	4	3	2	1	10					
1889	18	3	3	1	25	14	2	4	1	21					
1890	17	3	4	9	33	10	5	4	1	20					
1891	13	9	5	4	31	21	1	6	4	32				1	1
1892	9	1	2	1	13	15	3	5	1	24	1				
1893		2	4	1	7	11	1	3	2	17					
1894	5	4	6		15	7		9	1	27					
Total..	113	25	37	29	204	160	35	77	34	306	2		5	3	10

It will be noticed that the number of successful and partly successful demands and strikes greatly exceeds that of the number of failures. This, it is explained, may be due to some extent to the lack of complete data and to the sources of information. Nevertheless, the excess of successful over unsuccessful demands and strikes shown in more recent years, when almost complete returns were obtained, would seem to indicate that, in general, the relative results are fairly accurate.

The following table shows the strikes, demands, and lockouts by causes. Owing to lack of space successful and partly successful labor disputes were combined in one column, and those that failed and those whose results were not reported are consolidated in another. While the latter grouping may not be entirely fair, it is claimed that it is justified on the ground that, in general, the results would have been announced in the labor journals had they been successful. Under the reduction of hours are also included strikes and other disputes where shorter hours was one of several demands, because, as a rule, this was the most important of the demands made in such cases:

STRIKES, LOCKOUTS, AND DEMANDS, BY CAUSES, 1860 TO 1894.

[Under dismissals and lockouts the strikes, lockouts, and demands are reported as having succeeded, succeeded partly, or failed, according as the employees succeeded, succeeded partly, or failed.]

Year.	For reduction of hours.		For increase of wages.		For other improvements.		Against increase of hours.		Against reduction of wages.		Dismissals and lockouts.		Against other acts of employers.		Total.	
	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.	Succeeded and not reported partly.	Failed and not reported.
1860									1	1				1	1	2
1861			4	1											4	1
1862			1	1											1	1
1863			2												2	
1864			2												2	
1865			1		1									1		1
1866	1						4								1	4
1867							2								1	2
1868	3		2				1			1	1					2
1869	4	2	11	6	2										11	8
1870	1	2	1	2	5	2		1	1				1		18	8
1871	3	2	1	1	1	1			2						3	6
1872	10	3	5	5	6	1	1		2		1				19	12
1873	7	3	3	7	3					1					14	6
1874		5		3					1					1	4	6
1875	3		3	3					1					1	7	3
1876		2		2					2						4	4
1877									3							3
1878							1		2						3	
1879																
1880										1						1
1881	1									3					1	3
1882																
1883			1	1			1								2	1
1884			1							1					1	1
1885	3		7	2				1	2	3					12	6
1886	8	4	5	2	1				1		1				14	8
1887	2		4						4	4	2		5		17	4
1888	5	1	1	2					4	2					10	5
1889	9	1	23	6	1				3	1	1	1			37	9
1890	22	10	5	3	1	1	1	1	4	2	1	1	1		35	18
1891	17	7	16	4					9	5	2	4			44	20
1892	7	2	5	2				1	1	11	4	3	1	1	28	10
1893	4	4	3	2		1			6	2	2		1	1	14	10
1894	11	8	4	1	2				1	2	5	2		1	21	16
Total.	126	59	121	52	10	10	4	5	55	41	14	8	9	6	369	181

The following summary, taken by five-year periods, is interesting as showing the progress of the movement for shorter working days:

DEMANDS AND STRIKES FOR REDUCTION OF HOURS, BY FIVE-YEAR PERIODS, 1865 TO 1894.

Years.	Demands and strikes for—							
	11 hours per day.		10 hours per day.		9 hours per day.		Time not reported.	
	Suc- ceeded and succeeded partly.	Failed and result not re- ported.	Suc- ceeded and succeeded partly	Failed and result not re- ported.	Suc- ceeded and succeeded partly.	Failed and result not re- ported.	Suc- ceeded and succeeded partly.	Failed and result not re- ported.
1865-1869.....	4	.....	9	2	.....	.....	.....	.....
1870-1874.....	6	4	13	9	1	.....	1	5
1875-1879.....	1	1	2	1	.....	.....	.....	.....
1880-1884.....	1	.....	.....	.....	.....	.....	.....	.....
1885-1889.....	3	1	23	3	.....	.....	1	2
1890-1894.....	3	1	49	25	4	5	5	.....
Total.....	18	7	96	40	5	5	7	7

The next table shows the strikes, lockouts, and demands by occupations for the period of thirty-five years from 1860 to 1894:

STRIKES, LOCKOUTS, AND DEMANDS, BY OCCUPATIONS, 1860-1894.

Occupation.	Demands not resulting in strikes.			Strikes.			Lockouts.		
	Suc- ceeded and suc- ceeded partly.	Failed.	Not re- ported.	Suc- ceeded and suc- ceeded partly.	Failed.	Not re- ported.	Suc- ceeded and suc- ceeded partly.	Failed.	Not re- ported.
Printers.....	36	2	1	7	13	3	1	.....	.....
Bindery employees.....	2	2	1	2	3	.....	.....	.....	.....
Stonecutters.....	4	2	1	2	1	1	.....	.....	1
Masons.....	5	5	2	8	2	2	1	.....	.....
Roofers.....	.....	.....	.....	6	.....	.....	.....	.....	.....
Excavators.....	1	1	.....	3	2	2	.....	.....	.....
Potters and stove makers.....	1	2	2	2	.....	.....	.....	.....	.....
Carpenters.....	2	.....	3	15	3	1	.....	.....	.....
Joiners.....	13	3	5	22	10	3	.....	1	.....
Glaziers.....	.....	.....	.....	8	2	3	.....	1	.....
Painters.....	6	2	2	3	2	1	.....	.....	.....
Watchmakers.....	4	1	.....	21	1	2	.....	1	1
Engravers and watch case makers.....	.....	.....	.....	11	4	1	.....	.....	.....
Jewelers.....	1	.....	.....	4	.....	2	.....	.....	.....
Tailors.....	10	.....	.....	22	4	1	.....	.....	.....
Shoemakers.....	11	2	.....	11	6	4	.....	.....	.....
Other clothing trades.....	1	.....	.....	1	.....	1	.....	.....	.....
Molders.....	.....	1	.....	2	2	1	.....	.....	.....
Machinists.....	1	6	2	3	2	.....	.....	.....	.....
Ironworkers.....	6	.....	.....	2	3	1	.....	.....	.....
Tinsmiths.....	6	2	.....	9	.....	1	1	.....	.....
Blacksmiths and wagon makers.....	6	2	1	9	3	.....	.....	.....	.....
Employees in weaving establishments.....	5	3	2	9	7	3	.....	2	.....
Dyers, etc.....	4	.....	.....	4	2	.....	.....	.....	.....
Employees in tobacco works.....	2	.....	.....	3	3	.....	.....	.....	.....
Brewers.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Coopers.....	.....	.....	.....	5	.....	1	.....	.....	.....
Saddlers.....	3	.....	2	2	.....	.....	.....	.....	.....
Miscellaneous.....	6	1	4	.....	2	1	.....	.....	.....
Total.....	138	37	29	196	77	33	3	5	2

The report calls attention to the fact that the statistics for the printing trade are the most complete, because the printers have long been

well organized, and have published a special trade journal. This table shows that while there were in all 39 demands that were amicably settled, only 21 strikes and lockouts are reported. In the totals for the other occupations the reverse condition is found, namely, 165 demands as against 295 strikes and lockouts. This result in the case of the printers is probably due to their superior skill and better organization.

In order to better illustrate the effects of labor organization in reference to disputes between employees and their employers, the following summary is presented of the number of demands amicably settled, and of offensive and defensive strikes—lockouts being classed with the latter.

DEMANDS NOT FOLLOWED BY STRIKES AND STRIKES COMPARED.

Years.	Demands not followed by strikes.	Offensive strikes.	Defensive strikes.
1860-1864	10	2	2
1865-1869	19	24	6
1870-1874	30	43	12
1875-1879	2	11	11
1880-1884 .....	.....	2	8
1885-1889	44	44	34
1890-1894	99	63	54

During the first five-year period nearly all the disputes affected only the printers, which fact accounts for the great excess of demands over strikes. In the two succeeding periods other occupations appear, hence the number of offensive strikes is greatest. During the next two periods, the industrial crisis reduced the number of labor disputes to a minimum. In the sixth period of the summary the influence of the organization of the Swiss reserve fund (Caisse Suisse de Réserve) becomes apparent. Notwithstanding the rapidly increasing number of labor disputes, the number of demands amicably settled equals that of the offensive strikes, while the number of defensive strikes is quite considerable. During the last period the number of demands amicably settled considerably exceeds either that of the offensive or of the defensive strikes. This result is due to the thorough organization of the federation of labor unions and to the activity of their executive committee.

NOTES CONCERNING THE MONEY OF THE UNITED STATES AND OTHER COUNTRIES.

BY WILLIAM C. HUNT.

The following information relative to money has been compiled from the report of the Director of the Mint, and includes a brief statement concerning the monetary system of the United States; the value of the coins of the United States, together with the authority for coining and total amount coined; the value of the pure silver in a United States silver dollar, as compared with the market price of silver; the commercial ratio of silver to gold since 1687; the total production of the precious metals in the world since the discovery of America, and in the United States since 1792; the values of foreign coins expressed in terms of the United States gold dollar, and the approximate stocks of money in the principal countries of the world at the present time.

The widespread interest that is now being taken in information of this nature affords ample justification for its reproduction in the Bulletin of this Department.

MONETARY SYSTEM OF THE UNITED STATES.—In 1786 the Congress of the Confederation chose as the monetary unit of the United States the dollar of 375.64 grains of pure silver. This unit had its origin in the Spanish piaster, or milled dollar, which constituted the basis of the metallic circulation of the English colonies in America. It was never coined, there being at that time no mint in the United States.

The act of April 2, 1792, established the first monetary system of the United States. The bases of the system were: The gold dollar, containing 24.75 grains of pure gold, and stamped in pieces of \$10, \$5, and \$2½ (denominated, respectively, eagles, half eagles, and quarter eagles), and the silver dollar, containing 371.25 grains of pure silver. A mint was established. The coinage was unlimited and there was no mint charge. The ratio of gold to silver in coinage was 1:15. Both gold and silver were legal tender. The standard was double.

The act of 1792 undervalued gold, which was therefore exported. The act of June 28, 1834, was passed to remedy this, by changing the mint ratio between the metals to 1:16.002. This latter act fixed the weight of the gold dollar at 25.8 grains, but lowered the fineness from 0.916⅔ to 0.899225. The fine weight of the gold dollar was thus reduced to 23.2 grains. The act of 1834 undervalued silver as that of 1792 had

undervalued gold, and silver was attracted to Europe by the more favorable ratio of 1:15½. The act of January 18, 1837, was passed to make the fineness of the gold and silver coins uniform. The legal weight of the gold dollar was fixed at 25.8 grains, and its fine weight at 23.22 grains. The fineness was, therefore, changed by this act to 0.900 and the ratio to 1:15.988+.

Silver continued to be exported. The act of February 21, 1853, reduced the weight of the silver coins of a denomination less than \$1, which the acts of 1792, 1834, and 1837 had made exactly proportional to the weight of the silver dollar, and provided that they should be legal tender to the amount of only \$5. Under the acts of 1792, 1834, and 1837 they had been full legal tender. By the act of 1853 the legal weight of the half dollar was reduced to 192 grains and that of the other fractions of the dollar in proportion. The coinage of the fractional parts of the dollar was reserved to the Government.

The act of February 12, 1873, provided that the unit of value of the United States should be the gold dollar of the standard weight of 25.8 grains, and that there should be coined besides the following gold coins: A quarter eagle, or 2½-dollar piece; a 3-dollar piece; a half eagle, or 5-dollar piece; an eagle, or 10-dollar piece, and a double eagle, or 20-dollar piece—all of a standard weight proportional to that of the dollar piece. These coins were made legal tender in all payments at their nominal value when not below the standard weight and limit of tolerance provided in the act for the single piece, and when reduced in weight they should be legal tender at a valuation in proportion to their actual weight. The silver coins provided for by the act were a trade dollar, a half dollar, or 50-cent piece, a quarter dollar, and a 10-cent piece; the weight of the trade dollar to be 420 grains Troy; the half dollar, 12½ grams; the quarter dollar and the dime, respectively, one-half and one-fifth of the weight of the half dollar. The silver coins were made legal tender at their nominal value for any amount not exceeding \$5 in any one payment. The charge for converting standard gold bullion into coin was fixed at one-fifth of 1 per cent. Owners of silver bullion were allowed to deposit it at any mint of the United States to be formed into bars or into trade dollars, and no deposit of silver for other coinage was to be received.

Section II of the joint resolution of July 22, 1876, recited, that the trade dollar should not thereafter be legal tender, and that the Secretary of the Treasury should be authorized to limit the coinage of the same to an amount sufficient to meet the export demand for it. The act of March 3, 1887, retired the trade dollar and prohibited its coinage. That of September 26, 1890, discontinued the coinage of the 1-dollar and 3-dollar gold pieces.

The act of February 28, 1878, directed the coinage of silver dollars of the weight of 412½ grains Troy, of standard silver, as provided in the act of January 18, 1837, and that such coins, with all silver coins

theretofore coined, should be legal tender at their nominal value for all debts and dues, public and private, except where otherwise expressly stipulated in the contract.

The Secretary of the Treasury was authorized and directed by the first section of the act to purchase from time to time silver bullion at the market price thereof, not less than \$2,000,000 worth nor more than \$4,000,000 worth per month, and to cause the same to be coined monthly, as fast as purchased, into such dollars. A subsequent act, that of July 14, 1890, enacted that the Secretary of the Treasury should purchase silver bullion to the aggregate amount of 4,500,000 ounces, or so much thereof as might be offered, each month, at the market price thereof, not exceeding \$1 for 371.25 grains of pure silver, and to issue in payment thereof Treasury notes of the United States, such notes to be redeemable by the Government, on demand, in coin, and to be legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract. The act directed the Secretary of the Treasury to coin each month 2,000,000 ounces of the silver bullion purchased under the provisions of the act into standard silver dollars until the 1st day of July, 1891, and thereafter as much as might be necessary, to provide for the redemption of the Treasury notes issued under the act. The purchasing clause of the act of July 14, 1890, was repealed by the act of November 1, 1893.

The act of June 9, 1879, made the subsidiary silver coins of the United States legal tender to the amount of \$10. The minor coins are legal tender to the amount of 25 cents.

GOLD, SILVER, AND MINOR COINS OF THE UNITED STATES.—The following table shows the denominations of the gold, silver, and minor coins of the United States which have been authorized by Congress, giving the dates of the acts authorizing their coinage, their original weight and fineness (or composition in the case of the minor coins), changes in weight and fineness authorized by subsequent acts of Congress, the dates of the acts discontinuing their coinage in certain cases, and the total amount coined to June 30, 1895. In those cases where their coinage has been discontinued by act of Congress, the figures given in the last column of the table represent the total amount coined to the date of that act as given in the column immediately preceding. In the case of the Columbian half dollar and Columbian quarter dollar, the figures represent the total amount coined under the special act by which their coinage was authorized:

AUTHORITY FOR COINING, CHANGES IN WEIGHT AND FINENESS, AND AMOUNT COINED, FOR EACH COIN.

Denomination.	Act authorizing coinage or change in weight or fineness.	Weight (grains).	Fineness.	Act discontinuing coinage.	Total amount coined to June 30, 1895.
GOLD COINS.					
Double eagle (\$20).....	March 3, 1849.....	516	.900	.....	\$1,225,818,760.00
Eagle (\$10).....	April 2, 1792.....	270	.916 $\frac{1}{2}$	.....
	June 28, 1834.....	258	.899225	.....	262,380,780.00
	January 18, 1837.....	.....	.900	.....
Half eagle (\$5).....	April 2, 1792.....	135	.916 $\frac{1}{2}$	.....	217,814,395.00
	June 28, 1834.....	129	.899225	.....
	January 18, 1837.....	.....	.900	.....
Quarter eagle (\$2.50).....	April 2, 1792.....	67.5	.916 $\frac{1}{2}$	.....	28,681,115.00
	June 28, 1834.....	64.5	.899225	.....
	January 18, 1837.....	.....	.900	.....
Three-dollar piece.....	February 21, 1853.....	77.4	.900	September 26, 1890.....	1,619,376.00
One dollar.....	March 3, 1849.....	25.8	.900	September 26, 1890.....	19,499,337.00
SILVER COINS.					
Dollar.....	April 2, 1792.....	416	.8924	.....	431,320,457.00
	January 18, 1837.....	412 $\frac{1}{2}$	.900	February 12, 1873.....	
	February 28, 1878.....	.....	.....	.....
Trade dollar (b).....	February 12, 1873.....	420	.900	March 3, 1887.....	35,965,924.00
Half dollar.....	April 2, 1792.....	208	.8924	.....	130,857,276.50
	January 18, 1837.....	206 $\frac{1}{2}$	.900	.....
	February 21, 1853.....	192	.....	.....
Columbian half dollar....	February 12, 1873.....	c 192.9	.....	.....	2,501,052.50
Quarter dollar.....	August 5, 1892.....	192.9	.900	.....
	April 2, 1792.....	104	.8924	.....	49,160,461.25
	January 18, 1837.....	103 $\frac{1}{2}$	.900	.....
	February 21, 1853.....	96	.....	.....
Columbian quarter dollar	February 12, 1873.....	e 96.45	.....	.....	10,005.75
Twenty-cent piece.....	March 3, 1893.....	96.45	.900	.....
Dime.....	March 3, 1875.....	f 77.16	.900	May 2, 1878.....	271,000.00
	April 2, 1792.....	41.6	.8924	.....	28,775,218.30
	January 18, 1837.....	41 $\frac{1}{2}$	.900	.....
	February 21, 1853.....	38.4	.....	.....
Half dime.....	February 12, 1873.....	g 38.58	.....	.....	4,880,219.40
	April 2, 1792.....	20.8	.8924	.....
	January 18, 1837.....	20 $\frac{1}{2}$	.900	.....
Three-cent piece.....	February 21, 1853.....	19.2	.....	February 12, 1873.....	1,282,087.20
	March 3, 1851.....	12 $\frac{1}{2}$	.750	.....
	March 3, 1853.....	11.52	.900	February 12, 1873.....	
MINOR COINS.					
Five cent (nickel).....	May 16, 1866.....	77.16	(h)	.....	13,884,582.20
Three cent (nickel).....	March 3, 1865.....	30	(h)	September 26, 1890.....	941,849.48
Two cent (bronze).....	April 22, 1864.....	96	(i)	February 12, 1873.....	912,020.00
Cent (copper).....	April 2, 1792.....	264	.....	.....	1,562,887.44
	January 14, 1793.....	208	.....	.....
	January 26, 1796 (j).....	168	.....	February 21, 1857.....	
Cent (nickel).....	February 21, 1857.....	72	(k)	April 22, 1864.....	2,007,720.00
Cent (bronze).....	April 22, 1864.....	48	(i)	.....	7,612,226.12
Half cent (copper).....	April 2, 1792.....	132	.....	.....	39,926.11
	January 14, 1793.....	104	.....	.....
	January 26, 1796 (j).....	84	.....	February 21, 1857.....	

a Amount coined to February 12, 1873, \$8,031,238.

b Coinage limited to export demand, joint resolution, July 22, 1876.

c 12 $\frac{1}{2}$ grams, or 192.9 grains.

d Total amount coined.

e 6 $\frac{1}{2}$ grams, or 96.45 grains.

f 5 grams, or 77.16 grains.

g 2 $\frac{1}{2}$ grams, or 38.58 grains.

h Composed of 75 per cent copper and 25 per cent nickel.

i Composed of 95 per cent copper and 5 per cent tin and zinc.

j By proclamation of the President, in conformity with act of March 3, 1795.

k Composed of 88 per cent copper and 12 per cent nickel.

The total coinages to June 30, 1895, are as follows: Gold, \$1,755,813,763; silver, \$685,023,701.90; minor, \$26,960,711.35; a grand total of \$2,467,798,176.25.

VALUE OF THE SILVER IN A UNITED STATES SILVER DOLLAR.—
 The following table shows the value of the pure silver in a United States silver dollar, reckoned at the commercial price of silver bullion from \$0.50 to \$1.2929 (parity) per fine ounce:

VALUE OF PURE SILVER IN A UNITED STATES SILVER DOLLAR ACCORDING TO PRICE OF SILVER BULLION.

Price of silver per fine ounce.	Value of pure silver in a silver dollar.	Price of silver per fine ounce.	Value of pure silver in a silver dollar.	Price of silver per fine ounce.	Value of pure silver in a silver dollar.
\$0.50	\$0.387	\$0.77	\$0.596	\$1.04	\$0.804
.51	.394	.78	.603	1.05	.812
.52	.402	.79	.611	1.06	.820
.53	.410	.80	.619	1.07	.828
.54	.418	.81	.626	1.08	.835
.55	.425	.82	.634	1.09	.843
.56	.433	.83	.642	1.10	.851
.57	.441	.84	.650	1.11	.859
.58	.449	.85	.657	1.12	.866
.59	.456	.86	.665	1.13	.874
.60	.464	.87	.673	1.14	.882
.61	.472	.88	.681	1.15	.889
.62	.480	.89	.688	1.16	.897
.63	.487	.90	.696	1.17	.905
.64	.495	.91	.704	1.18	.913
.65	.503	.92	.712	1.19	.920
.66	.510	.93	.719	1.20	.928
.67	.518	.94	.727	1.21	.936
.68	.526	.95	.735	1.22	.944
.69	.534	.96	.742	1.23	.951
.70	.541	.97	.750	1.24	.959
.71	.549	.98	.758	1.25	.967
.72	.557	.99	.766	1.26	.975
.73	.565	1.00	.773	1.27	.982
.74	.572	1.01	.781	1.28	.990
.75	.580	1.02	.789	1.29	.998
.76	.588	1.03	.797	a 1.2929	1.00

a Parity.

The following table shows the highest, lowest, and average value of a United States silver dollar, measured by the market price of silver, and the quantity of silver purchasable with a silver dollar at the average London price of silver, for each calendar year from 1873 to 1894:

BULLION VALUE AND PURCHASING POWER IN SILVER OF A UNITED STATES SILVER DOLLAR, 1873 TO 1894.

Year.	Bullion value of a silver dollar.			Grains of pure silver at average price purchasable with a United States silver dollar (a).
	Highest.	Lowest.	Average.	
1873.....	\$1.016	\$0.981	\$1.004	369.77
1874.....	1.008	.970	.988	375.76
1875.....	.977	.941	.964	385.11
1876.....	.991	.792	.894	415.27
1877.....	.987	.902	.929	399.62
1878.....	.936	.839	.891	416.66
1879.....	.911	.828	.868	427.70
1880.....	.896	.875	.886	419.49
1881.....	.896	.862	.861	421.87
1882.....	.887	.847	.878	422.83
1883.....	.868	.847	.858	432.69
1884.....	.871	.839	.861	431.18
1885.....	.847	.794	.823	451.09
1886.....	.797	.712	.769	482.77
1887.....	.799	.733	.758	489.78
1888.....	.755	.706	.727	510.66
1889.....	.752	.746	.724	512.93
1890.....	.926	.740	.810	458.83
1891.....	.827	.738	.764	485.76
1892.....	.742	.642	.674	550.79
1893.....	.655	.513	.604	615.10
1894.....	.538	.457	.491	756.04

a 371.25 grains of pure silver are contained in a silver dollar.

PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES AND IN THE WORLD.—The following table shows the production of the precious metals in the world for each calendar year from 1873 to 1894. The silver product is given at its commercial value, reckoned at the average market price of silver each year, as well as at its coining value in United States dollars :

PRODUCTION OF GOLD AND SILVER IN THE WORLD FOR EACH CALENDAR YEAR FROM 1873 TO 1894.

Year.	Gold.		Silver.		
	Fine ounces.	Value.	Fine ounces.	Commercial value.	Coining value.
1873	4, 653, 675	\$96, 200, 000	63, 267, 187	\$82, 120, 800	\$81, 800, 000
1874	4, 390, 031	90, 750, 000	55, 300, 781	70, 674, 400	71, 500, 000
1875	4, 716, 563	97, 500, 000	62, 261, 719	77, 578, 100	80, 500, 000
1876	5, 016, 486	103, 700, 000	67, 753, 125	78, 322, 600	87, 600, 000
1877	5, 512, 196	113, 947, 200	62, 679, 916	75, 278, 600	81, 040, 700
1878	5, 761, 114	119, 092, 800	73, 385, 451	84, 540, 000	94, 882, 200
1879	5, 262, 174	108, 778, 800	74, 383, 495	83, 532, 700	96, 172, 600
1880	5, 148, 860	106, 436, 800	74, 795, 273	85, 640, 600	96, 705, 000
1881	4, 983, 742	103, 023, 100	79, 020, 872	89, 925, 700	102, 168, 400
1882	4, 934, 086	101, 996, 600	86, 472, 091	98, 232, 300	111, 802, 300
1883	4, 614, 568	95, 392, 000	89, 175, 023	98, 984, 300	115, 297, 000
1884	4, 921, 169	101, 729, 600	81, 567, 801	90, 785, 000	105, 461, 400
1885	5, 245, 572	108, 435, 600	91, 609, 959	97, 518, 800	118, 445, 200
1886	5, 135, 679	106, 163, 900	93, 297, 290	92, 793, 500	120, 626, 800
1887	5, 116, 861	105, 774, 900	96, 123, 589	94, 031, 000	124, 281, 000
1888	5, 330, 775	110, 196, 900	108, 827, 606	102, 185, 900	140, 706, 400
1889	5, 973, 790	123, 489, 200	120, 213, 611	112, 414, 100	155, 427, 700
1890	5, 749, 306	118, 848, 700	128, 095, 062	131, 937, 000	163, 032, 000
1891	6, 320, 194	130, 650, 000	137, 170, 919	135, 500, 200	177, 352, 300
1892	7, 102, 180	146, 815, 100	153, 151, 762	133, 404, 400	198, 014, 400
1893	7, 608, 787	157, 287, 600	166, 092, 047	129, 551, 800	214, 745, 300
1894	8, 737, 788	180, 626, 100	167, 752, 561	108, 522, 900	216, 892, 200
Total	122, 235, 638	2, 526, 834, 900	2, 130, 397, 137	2, 151, 474, 700	2, 754, 452, 900

The total production of gold and silver in the world since 1493 is shown in the first of the following tables. The second table shows the production of gold and silver from the mines of the United States by periods of years from 1792 to 1844, and annually from 1845 to 1894.

PRODUCTION OF GOLD AND SILVER IN THE WORLD SINCE THE DISCOVERY OF AMERICA.

[Production for 1493 to 1885 is from a table of averages for certain periods compiled by Dr. Adolph Soetbeer. For the years 1886 to 1894 the production is the annual estimate of the Bureau of the Mint.]

Years.	Gold.			
	Annual average for period.		Total for period.	
	Fine ounces.	Value.	Fine ounces.	Value.
1493-1520	186, 470	\$3, 855, 000	5, 221, 160	\$107, 931, 000
1521-1544	230, 194	4, 759, 000	5, 524, 656	114, 205, 000
1545-1560	273, 596	5, 656, 000	4, 377, 544	90, 492, 000
1561-1580	219, 906	4, 546, 000	4, 398, 120	90, 917, 000
1581-1600	237, 267	4, 965, 000	4, 745, 340	98, 095, 000
1601-1620	273, 918	5, 062, 000	5, 478, 360	113, 248, 000
1621-1640	266, 845	5, 516, 000	5, 336, 900	110, 524, 000
1641-1660	281, 955	5, 828, 000	5, 639, 110	116, 571, 000
1661-1680	297, 709	6, 154, 000	5, 954, 180	123, 084, 000
1681-1700	346, 095	7, 154, 000	6, 921, 895	143, 088, 000
1701-1720	412, 163	8, 520, 000	8, 243, 260	170, 403, 000
1721-1740	613, 422	12, 681, 000	12, 263, 440	253, 611, 000
1741-1760	791, 211	16, 356, 000	15, 824, 230	327, 116, 000
1761-1780	665, 666	13, 761, 000	13, 313, 315	275, 211, 000
1781-1800	571, 948	11, 823, 000	11, 438, 970	236, 464, 000
1801-1810	571, 563	11, 815, 000	5, 715, 627	118, 152, 000
1811-1820	367, 957	7, 606, 000	3, 679, 568	76, 063, 000
1821-1830	457, 044	9, 448, 000	4, 570, 444	94, 479, 000
1831-1840	652, 291	13, 484, 000	6, 522, 913	134, 841, 000
1841-1850	1, 760, 502	36, 393, 000	17, 605, 018	363, 923, 000
1851-1855	6, 410, 324	132, 513, 000	32, 051, 621	662, 566, 000
1856-1860	6, 486, 262	134, 083, 000	32, 431, 312	670, 415, 000
1861-1865	5, 949, 582	122, 989, 000	29, 747, 913	614, 944, 000
1866-1870	6, 270, 086	129, 614, 000	31, 350, 430	648, 071, 000
1871-1875	5, 591, 014	115, 577, 000	27, 955, 068	577, 883, 000
1876-1880	5, 543, 110	114, 586, 000	27, 715, 550	572, 931, 000
1881-1885	4, 794, 755	99, 116, 000	23, 973, 773	495, 582, 000
1886	5, 135, 679	106, 163, 900	5, 135, 679	106, 163, 900
1887	5, 116, 861	105, 774, 900	5, 116, 861	105, 774, 900
1888	5, 330, 775	110, 196, 900	5, 330, 775	110, 196, 900
1889	5, 973, 790	123, 489, 200	5, 973, 790	123, 489, 200
1890	5, 749, 306	118, 848, 700	5, 749, 306	118, 848, 700
1891	6, 320, 194	130, 650, 000	6, 320, 194	130, 650, 000
1892	7, 102, 180	146, 815, 100	7, 102, 180	146, 815, 100
1893	7, 608, 787	157, 287, 600	7, 608, 787	157, 287, 600
1894	8, 737, 788	180, 626, 100	8, 737, 788	180, 626, 100
Total			415, 080, 077	8, 580, 467, 400

MONEY OF THE UNITED STATES AND OTHER COUNTRIES. 189

PRODUCTION OF GOLD AND SILVER IN THE WORLD SINCE THE DISCOVERY OF AMERICA.

[Production for 1493 to 1835 is from a table of averages for certain periods compiled by Dr. Adolph Soetbeer. For the years 1836 to 1894 the production is the annual estimate of the Bureau of the Mint.]

Silver.				Percentage of production.			
Annual average for period.		Total for period.		By weight.		By value.	
Fine ounces.	Coining value.	Fine ounces.	Coining value.	Gold.	Silver.	Gold.	Silver.
1,511,050	\$1,954,000	42,309,400	\$54,703,000	11	89	66.4	33.6
2,899,930	3,749,000	69,598,320	89,986,000	7.4	92.6	55.9	44.1
10,017,940	12,952,000	160,287,040	207,240,000	2.7	97.3	30.4	69.6
9,628,925	12,450,000	192,578,500	248,990,000	2.2	97.8	26.7	73.3
13,467,635	17,413,000	269,952,700	348,254,000	1.7	98.3	22	78
13,596,235	17,579,000	271,924,700	351,579,000	2	98	24.4	75.6
12,654,240	16,361,000	253,084,800	327,221,000	2.1	97.9	25.2	74.8
11,776,545	15,226,000	35,530,900	304,525,000	2.3	97.7	27.7	72.3
10,384,550	14,008,000	216,691,000	280,166,000	2.7	97.3	30.5	69.5
10,992,085	14,212,000	219,841,700	284,240,000	3.1	96.9	33.5	66.5
11,432,540	14,781,000	223,650,800	295,629,000	3.5	96.5	36.6	63.4
13,963,080	17,924,000	277,261,600	353,480,000	4.2	95.8	41.4	58.6
17,140,612	22,162,000	342,812,235	443,232,000	4.4	95.6	42.5	57.5
20,985,591	27,135,000	419,711,820	542,658,000	3.1	96.9	33.7	66.3
28,261,779	36,540,000	565,235,580	730,810,000	2	98	24.4	75.6
28,746,922	37,188,000	287,469,225	371,677,000	1.9	98.1	24.1	75.9
17,385,755	22,479,000	173,857,555	224,786,000	2.1	97.9	25.3	74.7
14,807,004	19,144,000	148,070,040	191,444,000	3	97	33	67
19,175,867	24,793,000	191,758,675	247,930,000	3.3	96.7	35.2	64.8
25,090,342	32,440,000	250,903,422	324,400,000	6.6	93.4	52.9	47.1
28,488,597	36,824,000	142,442,986	184,169,000	18.4	81.6	78.3	21.7
29,095,428	37,618,000	145,477,142	188,092,000	18.2	81.8	78.1	21.9
35,401,972	45,772,000	177,009,862	228,861,000	14.4	85.6	72.9	27.1
43,051,583	55,663,000	215,257,914	278,313,000	12.7	87.3	70	30
63,317,014	81,864,000	316,585,069	409,322,000	8.1	91.9	58.5	41.5
73,775,602	101,851,000	393,878,009	509,256,000	6.6	93.4	53	47
92,003,944	118,955,000	460,019,722	594,773,000	5	95	45.5	54.5
93,297,290	120,626,800	93,297,290	120,626,800	5.2	94.8	46.8	53.2
96,123,586	124,281,000	96,123,586	124,281,000	5	95	45.9	54.1
108,827,606	140,706,400	108,827,606	140,706,400	4.6	95.4	43.9	56.1
120,213,611	155,427,700	120,213,611	155,427,700	4.7	95.3	44.3	55.7
126,095,062	163,032,000	126,095,062	163,032,000	4.3	95.7	42.1	57.9
137,170,919	177,352,300	137,170,919	177,352,300	4.4	95.6	42.4	57.6
153,151,762	198,014,400	153,151,762	198,014,400	4.4	95.6	42.5	57.5
166,092,047	214,745,300	166,092,047	214,745,300	4.4	95.6	42.4	57.6
167,752,561	216,892,200	167,752,561	216,892,200	4.9	95.1	45.6	54.4
-----		7,836,325,160	10,131,814,100	5	95	45.6	54.4

PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES FROM 1792 TO 1894.

[The estimate for 1792 to 1873 is by R. W. Raymond, Commissioner, and since by the Director of the Mint.]

Years.	Gold.	Silver.	Total.
April 2, 1792-July 31, 1834	\$14,000,000	Insignificant.	\$14,000,000
July 31, 1834-December 31, 1844	7,500,000	\$250,000	7,750,000
1845	1,008,327	50,000	1,058,327
1846	1,139,357	50,000	1,189,357
1847	889,085	50,000	939,085
1848	10,000,000	57,000	10,057,000
1849	40,000,000	50,000	40,050,000
1850	50,000,000	50,000	50,050,000
1851	55,000,000	50,000	55,050,000
1852	60,000,000	50,000	60,050,000
1853	65,000,000	50,000	65,050,000
1854	60,000,000	50,000	60,050,000
1855	55,000,000	50,000	55,050,000
1856	55,000,000	50,000	55,050,000
1857	55,000,000	50,000	55,050,000
1858	50,000,000	500,000	50,500,000
1859	50,000,000	100,000	50,100,000
1860	46,000,000	150,000	46,150,000
1861	43,000,000	2,000,000	45,000,000
1862	39,200,000	4,500,000	43,700,000
1863	40,000,000	8,500,000	48,500,000
1864	46,100,000	11,000,000	57,100,000
1865	53,225,000	11,250,000	64,475,000
1866	53,500,000	10,000,000	63,500,000
1867	51,725,000	13,500,000	65,225,000
1868	48,000,000	12,000,000	60,000,000
1869	49,500,000	12,000,000	61,500,000
1870	50,000,000	16,000,000	66,000,000
1871	43,500,000	23,000,000	66,500,000
1872	36,000,000	28,750,000	64,750,000
1873	36,000,000	35,750,000	71,750,000
1874	33,500,000	37,300,000	70,800,000
1875	33,400,000	31,700,000	65,100,000
1876	39,900,000	38,800,000	78,700,000
1877	46,900,000	39,800,000	86,700,000
1878	51,200,000	45,200,000	96,400,000
1879	38,900,000	40,800,000	79,700,000
1880	36,000,000	39,200,000	75,200,000
1881	34,700,000	43,000,000	77,700,000
1882	32,500,000	46,800,000	79,300,000
1883	30,000,000	46,200,000	76,200,000
1884	30,800,000	48,800,000	79,600,000
1885	31,800,000	51,600,000	83,400,000
1886	35,000,000	51,000,000	86,000,000
1887	33,000,000	53,350,000	86,350,000
1888	33,175,000	59,195,000	92,370,000
1889	32,800,000	64,646,000	97,446,000
1890	32,845,000	70,465,000	103,310,000
1891	33,175,000	75,417,000	108,592,000
1892	33,000,000	82,101,000	115,101,000
1893	35,955,000	77,576,000	113,531,000
1894	39,500,000	64,000,000	103,500,000
Total	2,013,336,769	1,296,850,000	3,310,186,769

VALUES OF FOREIGN COINS.—The following table gives the value of foreign coins on January 1, 1896, as estimated by the Director of the Mint, in pursuance of the provisions of section 25 of the act of August 28, 1894, as follows:

That the value of foreign coins as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated quarterly by the Director of the Mint and be proclaimed by the Secretary of the Treasury immediately after the passage of this act and thereafter quarterly on the 1st day of January, April, July, and October in each year.

VALUES OF FOREIGN COINS JANUARY 1, 1896, AS ESTIMATED BY THE DIRECTOR OF THE MINT.

Country.	Standard.	Monetary unit.
Argentina.....	Gold and silver.....	Peso.....
Austria-Hungary.....	Gold.....	Crown.....
Belgium.....	Gold and silver.....	Franc.....
Bolivia.....	Silver.....	Boliviano.....
Brazil.....	Gold.....	Milreis.....
British Possessions in North America (except Newfoundland).	Gold.....	Dollar.....
Central American States:		
Costa Rica.....	} Silver.....	} Peso.....
Guatemala.....		
Honduras.....		
Nicaragua.....		
Salvador.....		
Chile.....	Gold and silver.....	Peso.....
China.....	Silver.....	Tael.....
		{ Shanghai..
		{ Hankwan
		{ (customs)..
		{ Tientsin..
		{ Chefoo..
Colombia.....	Silver.....	Peso.....
Cuba.....	Gold and silver.....	Peso.....
Denmark.....	Gold.....	Crown.....
Ecuador.....	Silver.....	Sucre.....
Egypt.....	Gold.....	Pound (100 piasters).....
Finland.....	Gold.....	Mark.....
France.....	Gold and silver.....	Franc.....
German Empire.....	Gold.....	Mark.....
Great Britain.....	Gold.....	Pound sterling.....
Greece.....	Gold and silver.....	Drachma.....
Haiti.....	Gold and silver.....	Gourde.....
India.....	Silver.....	Rupee.....
Italy.....	Gold and silver.....	Lira.....
Japan.....	Gold and silver (a).....	Yen.....
		{ Gold..
		{ Silver..
Liberia.....	Gold.....	Dollar.....
Mexico.....	Silver.....	Dollar.....
Netherlands.....	Gold and silver.....	Florin.....
Newfoundland.....	Gold.....	Dollar.....
Norway.....	Gold.....	Crown.....
Persia.....	Silver.....	Kran.....
Peru.....	Silver.....	Sol.....
Portugal.....	Gold.....	Milreis.....
Russia.....	Silver (c).....	Ruble.....
		{ Gold..
		{ Silver..
Spain.....	Gold and silver.....	Peseta.....
Sweden.....	Gold.....	Crown.....
Switzerland.....	Gold and silver.....	Franc.....
Tripoli.....	Silver.....	Mahbub of 20 piasters.....
Turkey.....	Gold.....	Piaster.....
Venezuela.....	Gold and silver.....	Bolivar.....

a Gold the nominal standard. Silver practically the standard.
 c Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

VALUES OF FOREIGN COINS JANUARY 1, 1896, AS ESTIMATED BY THE DIRECTOR OF THE MINT.

Value in terms of United States gold dollar.	Coins.
\$0.965	Gold, argentine (\$4.824) and $\frac{1}{2}$ argentine; silver, peso and divisions.
.203	{ Gold, former system, 4 florins (\$1.929), 8 florins (\$3.858), ducat (\$2.287) and 4 ducats (\$9.149); silver, 1 and 2 florins; gold, present system, 20 crowns (\$4.052), 10 crowns (\$2.026).
.193	Gold, 10 and 20 francs; silver, 5 francs.
.491	Silver, boliviano and divisions.
.546	Gold, 5, 10, and 20 milreis; silver, $\frac{1}{2}$, 1, and 2 milreis.
1.000	
.491	Silver, peso and divisions.
.912	Gold, escudo (\$1.824), doubloon (\$4.561), and condor (\$9.123); silver, peso and divisions.
.725	
.808	
.769	
.759	
.491	Gold, condor (\$9.647) and double condor; silver, peso.
.926	Gold, doubloon (\$5.017); silver, peso.
.268	Gold, 10 and 20 crowns.
.491	Gold, condor (\$9.647) and double condor; silver, sucre and divisions.
4.943	Gold, pound (100 piasters), 5, 10, 20, and 50 piasters; silver, 1, 2, 5, 10, and 20 piasters.
.193	Gold, 20 marks (\$3.859), 10 marks (\$1.93).
.193	Gold, 5, 10, 20, 50, and 100 francs; silver, 5 francs.
.238	Gold, 5, 10, and 20 marks.
4.866 $\frac{1}{2}$	Gold, sovereign (pound sterling) and $\frac{1}{2}$ sovereign.
.193	Gold, 5, 10, 20, 50, and 100 drachmas; silver 5 drachmas.
.965	Silver, gourde.
.233	Gold, mohur (\$7.105); silver, rupee and divisions.
.193	Gold, 5, 10, 20, 50, and 100 lire; silver, 5 lire.
.987	Gold, 1, 2, 5, 10, and 20 yen.
.529	Silver, yen.
1.000	
.533	Gold, dollar (\$0.983), 2 $\frac{1}{2}$, 5, 10, and 20 dollars; silver, dollar (or peso) and divisions.
.402	Gold, 10 florins; silver, $\frac{1}{2}$, 1, and 2 $\frac{1}{2}$ florins.
1.014	Gold, 2 dollars (\$2.027).
.268	Gold, 10 and 20 crowns.
.090	Gold, $\frac{1}{2}$, 1, and 2 tomans (\$3.409); silver, $\frac{1}{2}$, $\frac{1}{4}$, 1, 2, and 5 krans.
.491	Silver, sol and divisions.
1.080	Gold, 1, 2, 5, and 10 milreis.
.772	Gold, imperial (\$7.718) and $\frac{1}{2}$ imperial (b) (\$3.86).
.393	Silver, $\frac{1}{2}$, $\frac{1}{4}$, and 1 ruble.
.193	Gold, 25 pesetas; silver, 5 pesetas.
.268	Gold, 10 and 20 crowns.
.193	Gold, 5, 10, 20, 50, and 100 francs; silver, 5 francs.
.443	
.044	Gold, 25, 50, 100, 250, and 500 piasters.
.193	Gold, 5, 10, 20, 50, and 100 bolivars; silver, 5 bolivars.

^b Coined since January 1, 1886. Old half-imperial = \$3.986.

MONETARY SYSTEMS AND APPROXIMATE STOCKS OF MONEY IN THE AGGREGATE
AND PER CAPITA IN THE PRINCIPAL COUNTRIES OF THE WORLD.

[This table of the monetary systems and the approximate stock of gold, silver, and uncovered
obtainable, and, while necessarily but an estimate, is believed

	Countries.	Monetary system.	Ratio between gold and full legal-tender silver.	Ratio between gold and limited-tender silver.	Population.	Stock of gold.
1	United States (a)	Gold and silver.	1 to 15.98	1 to 14.95	70,400,000	\$618,100,000
2	United Kingdom	Gold.	.....	1 to 14.28	38,900,000	550,000,000
3	France	Gold and silver.	1 to 15½	1 to 14.38	38,300,000	850,000,000
4	Germany	Gold.	.....	1 to 13.957	51,200,000	625,000,000
5	Belgium	Gold and silver.	1 to 15½	1 to 14.38	6,300,000	555,000,000
6	Italy	Gold and silver.	1 to 15½	1 to 14.38	30,700,000	698,200,000
7	Switzerland	Gold and silver.	1 to 15½	1 to 14.38	3,000,000	14,900,000
8	Greece	Gold and silver.	1 to 15½	1 to 14.38	2,200,000	550,000
9	Spain	Gold and silver.	1 to 15½	1 to 14.38	17,500,000	640,000,000
10	Portugal	Gold.	.....	1 to 14.08	5,100,000	58,000,000
11	Roumania	Gold and silver.	.....	.....	5,800,000	68,600,000
12	Servia	Gold and silver.	.....	.....	2,300,000	63,000,000
13	Austria-Hungary	Gold.	.....	1 to 13.69	43,500,000	6140,000,000
14	Netherlands	Gold and silver.	1 to 15½	1 to 15	4,700,000	629,200,000
15	Norway	Gold.	.....	1 to 14.88	2,000,000	67,500,000
16	Sweden	Gold.	.....	1 to 14.88	4,800,000	68,000,000
17	Denmark	Gold.	.....	1 to 14.88	2,300,000	64,500,000
18	Russia and Finland	Silver.	1 to 15½	1 to 12.90	126,000,000	6480,000,000
19	Turkey	Gold and silver.	1 to 15½	1 to 15½	22,000,000	650,000,000
20	Australia	Gold.	.....	1 to 14.28	4,700,000	6115,000,000
21	Egypt	Gold.	.....	1 to 15.68	6,800,000	6120,000,000
22	Mexico	Silver.	1 to 16½	.....	12,100,000	65,000,000
23	Central American States	Silver.	1 to 15½	.....	5,600,000	6500,000
24	South American States	Silver.	1 to 15½	.....	36,000,000	640,000,000
25	Japan	Gold and silver.	1 to 16.18	.....	41,100,000	680,000,000
26	India	Gold and silver.	1 to 15	.....	296,000,000	.....
27	China	Silver.	.....	.....	360,000,000	.....
28	Straits Settlements	Gold and silver.	.....	.....	3,800,000	.....
29	Canada	Gold.	.....	1 to 14.28	4,800,000	614,000,000
30	Cuba	Gold and silver.	1 to 15½	.....	1,800,000	618,000,000
31	Haiti	Gold and silver.	1 to 15½	.....	1,000,000	63,000,000
32	Bulgaria	Gold and silver.	1 to 15½	1 to 14.38	4,300,000	6800,000
	Total .....	.....	.....	.....	.....	4,086,800,000

a November 1, 1895; all other countries, January 1, 1895.

b Estimate, Bureau of the Mint.

MONEY OF THE UNITED STATES AND OTHER COUNTRIES. 195

MONETARY SYSTEMS AND APPROXIMATE STOCKS OF MONEY IN THE AGGREGATE AND PER CAPITA IN THE PRINCIPAL COUNTRIES OF THE WORLD.

paper money in the principal countries of the world has been compiled from the latest information to show approximately the stock of money in the world.]

Stock of silver.			Uncovered paper.	Per capita.				
Full tender.	Limited tender.	Total.		Gold.	Silver.	Paper.	Total.	
\$548,400,000	\$77,200,000	\$625,600,000	\$416,700,000	\$8.78	\$8.89	\$5.92	\$23.59	1
.....	b 115,000,000	115,000,000	c 113,400,000	14.91	2.96	2.91	20.78	2
b 430,000,000	c 67,900,000	487,900,000	c 32,100,000	22.19	12.94	.84	35.77	3
b 105,000,000	b 110,000,000	215,000,000	c 60,400,000	12.21	4.20	1.18	17.59	4
b 48,000,000	b 6,900,000	54,900,000	c 65,400,000	8.73	8.71	10.38	27.82	5
b c 21,400,000	b c 20,000,000	41,400,000	c 191,800,000	3.20	1.35	6.24	10.79	6
b 10,000,000	5,000,000	15,000,000	.....	4.97	5.00	.....	9.97	7
b 500,000	b 1,000,000	1,500,000	c 22,400,000	.23	.68	10.18	11.09	8
b 126,000,000	b 40,000,000	166,000,000	c 83,700,000	2.28	9.49	4.78	16.55	9
.....	b 24,800,000	24,800,000	c 55,100,000	7.45	4.86	10.80	23.11	10
.....	c 10,600,000	10,600,000	c 11,700,000	6.65	1.83	2.02	10.50	11
.....	c 1,900,000	1,900,000	b 3,800,000	1.30	.83	1.65	3.78	12
.....	b 40,000,000	120,000,000	c 204,300,000	3.22	2.76	4.69	10.67	12
.....	c 3,200,000	56,200,000	c 28,600,000	6.21	11.96	6.08	24.25	14
.....	b 2,000,000	2,000,000	c 3,800,000	3.75	1.00	1.90	6.65	15
.....	c 4,800,000	4,800,000	c 2,100,000	1.66	1.00	.43	3.10	16
.....	b 5,400,000	5,400,000	c 5,400,000	6.30	2.35	2.35	11.00	17
.....	b 48,000,000	48,000,000	c 539,000,000	3.80	.38	4.28	8.46	18
b 30,000,000	d 10,000,000	40,000,000	.....	2.27	1.82	.....	4.09	19
.....	b 7,000,000	7,000,000	.....	24.47	1.49	.....	25.96	20
.....	b 15,000,000	15,000,000	.....	17.65	2.20	.....	19.85	21
.....	.....	55,000,000	b 2,000,000	.41	4.54	.....	4.95	22
.....	.....	12,000,000	c 8,000,000	.09	2.14	1.43	3.66	23
.....	.....	30,000,000	b 550,000,000	1.11	.83	15.28	17.22	24
.....	c 16,300,000	84,300,000	.....	1.95	2.05	.....	4.00	25
.....	.....	950,000,000	b 37,000,000	.....	3.21	.12	3.33	26
.....	.....	750,000,000	.....	.....	2.08	.....	2.08	27
.....	.....	115,000,000	.....	.....	3.26	.....	3.26	28
.....	b 5,000,000	5,000,000	b 29,000,000	2.92	1.04	6.04	10.00	29
.....	.....	1,500,000	.....	10.00	.83	.....	10.83	30
.....	b 800,000	2,800,000	c 4,200,000	3.00	2.90	4.20	10.10	31
.....	b 3,400,000	6,800,000	.....	.18	1.58	.....	1.76	32
3,439,300,000	631,200,000	4,070,500,000	2,469,900,000	.....	.....	.....	.....	.....

c Information furnished through United States representatives.

d Haupt.

COMMERCIAL RATIO OF SILVER TO GOLD.—The commercial ratio of silver to gold for each year from 1687 to 1894 is shown in the following table:

COMMERCIAL RATIO OF SILVER TO GOLD FOR EACH YEAR FROM 1687 TO 1894.

[From 1687 to 1832 the ratios are taken from Dr. Adolph Soetbeer's tables; from 1833 to 1878 from Pixley and Abell's tables; from 1879 to 1894 from daily cablegrams from London to the Bureau of the Mint.]

Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.
1687...	14.94	1722...	15.17	1757...	14.87	1792...	15.17	1827...	15.74	1862...	15.35
1688...	14.94	1723...	15.20	1758...	14.85	1793...	15.00	1828...	15.78	1863...	15.37
1689...	15.02	1724...	15.11	1759...	14.15	1794...	15.37	1829...	15.78	1864...	15.37
1690...	15.02	1725...	15.11	1760...	14.14	1795...	15.55	1830...	15.82	1865...	15.44
1691...	14.98	1726...	15.15	1761...	14.54	1796...	15.65	1831...	15.72	1866...	15.43
1692...	14.92	1727...	15.24	1762...	15.27	1797...	15.41	1832...	15.73	1867...	15.57
1693...	14.83	1728...	15.11	1763...	14.99	1798...	15.59	1833...	15.93	1868...	15.59
1694...	14.87	1729...	14.92	1764...	14.70	1799...	15.74	1834...	15.73	1869...	15.60
1695...	15.02	1730...	14.81	1765...	14.83	1800...	15.68	1835...	15.80	1870...	15.57
1696...	15.00	1731...	14.94	1766...	14.80	1801...	15.46	1836...	15.72	1871...	15.57
1697...	15.20	1732...	15.09	1767...	14.85	1802...	15.26	1837...	15.83	1872...	15.63
1698...	15.07	1733...	15.18	1768...	14.80	1803...	15.41	1838...	15.85	1873...	15.92
1699...	14.94	1734...	15.39	1769...	14.72	1804...	15.41	1839...	15.62	1874...	16.17
1700...	14.81	1735...	15.41	1770...	14.62	1805...	15.79	1840...	15.62	1875...	16.59
1701...	15.07	1736...	15.18	1771...	14.66	1806...	15.52	1841...	15.70	1876...	17.88
1702...	15.52	1737...	15.02	1772...	14.52	1807...	15.43	1842...	15.87	1877...	17.22
1703...	15.17	1738...	14.91	1773...	14.62	1808...	16.08	1843...	15.93	1878...	17.94
1704...	15.22	1739...	14.91	1774...	14.62	1809...	15.96	1844...	15.85	1879...	18.40
1705...	15.11	1740...	14.94	1775...	14.72	1810...	15.77	1845...	15.92	1880...	18.05
1706...	15.27	1741...	14.92	1776...	14.55	1811...	15.53	1846...	15.90	1881...	18.19
1707...	15.44	1742...	14.85	1777...	14.54	1812...	16.11	1847...	15.80	1882...	18.16
1708...	15.41	1743...	14.85	1778...	14.68	1813...	16.25	1848...	15.85	1883...	18.64
1709...	15.31	1744...	14.87	1779...	14.80	1814...	15.04	1849...	15.78	1884...	18.57
1710...	15.22	1745...	14.98	1780...	14.72	1815...	16.26	1850...	15.70	1885...	19.41
1711...	15.29	1746...	15.13	1781...	14.78	1816...	15.28	1851...	15.46	1886...	20.78
1712...	15.31	1747...	15.26	1782...	14.42	1817...	15.11	1852...	15.59	1887...	21.13
1713...	15.24	1748...	15.11	1783...	14.48	1818...	15.35	1853...	15.33	1888...	21.99
1714...	15.13	1749...	14.80	1784...	14.70	1819...	15.33	1854...	15.33	1889...	22.10
1715...	15.11	1750...	14.55	1785...	14.92	1820...	15.62	1855...	15.38	1890...	19.76
1716...	15.09	1751...	14.39	1786...	14.96	1821...	15.95	1856...	15.38	1891...	20.92
1717...	15.13	1752...	14.54	1787...	14.92	1822...	15.80	1857...	15.27	1892...	23.72
1718...	15.11	1753...	14.54	1788...	14.65	1823...	15.84	1858...	15.38	1893...	26.49
1719...	15.09	1754...	14.48	1789...	14.75	1824...	15.82	1859...	15.19	1894...	32.56
1720...	15.04	1755...	14.68	1790...	15.04	1825...	15.70	1860...	15.29		
1721...	15.05	1756...	14.94	1791...	15.05	1826...	15.76	1861...	15.50		

THE WEALTH AND RECEIPTS AND EXPENSES OF THE UNITED STATES.

BY WILLIAM M. STEUART.

Numerous methods of presenting the wealth of the country and the receipts and expenses of the Federal, State, and local governments have been used, each depending on the amount of detail desired and the particular features to be emphasized. The presentation here adopted is not designed to develop details, but to show at a glance the increase and decrease in the wealth of the country and in the receipts and expenses of the Government.

From the reports of the Eleventh Census it appears that the total true valuation of the real and personal property in the United States in 1890 amounted to \$65,037,091,197; the total value of the products of productive industry, which include manufactures, and farm, fishery, and mineral products for the same year, amounted to \$12,148,380,626. The total revenues collected during 1890 by the Federal, State, and local governments are reported at \$1,040,473,013 and the expenditures at \$915,954,055, the receipts exceeding the expenditures by \$124,518,958, of which amount the excess in the transactions of the Federal government, including postal service, amounted to \$108,936,066, leaving \$15,582,892 as a surplus arising from the financial transactions of the State and local governments. The total Federal, State, county or parish, municipal, and school district debts of the country, including the debts of irrigation districts in California and the fire districts of Massachusetts, amounted to \$2,027,170,546.

Complete statistics concerning the wealth, income, expenses, and indebtedness for the entire country are not available for any year except 1890. The data given in the accompanying tables show the total population at the different censuses from 1800 to 1890, inclusive, the wealth (namely, the true value (*a*) of real and personal property) and the value of manufactures, and farm, fishery, and mineral products as reported at the different censuses from 1850 to 1890, inclusive, also the total national debt, less the cash in the Treasury, at the close of the fiscal years 1860, 1870, 1880, and 1890. The figures showing the fiscal operations of the Federal government give the average annual receipts and expenses for the ten decades ending with each of the census years

a The true value is what would be deemed a fair selling price for the property, and is thus termed in distinction from the assessed valuation.

from 1800 to 1890, inclusive. The receipts and expenses of the Federal government include premiums and interest. The division of the expenses into ordinary and extraordinary is arbitrary, the intention being to group under the latter title a number of items of expense that may be considered as not forming a part of the ordinary, current, necessary expenses of the Government. The extraordinary expenses include amounts paid as pensions; for the support of the Indians; the improvement of rivers and harbors; the erection and repair of forts, arsenals, armories, custom-houses, court-houses, and post-offices; payments on interest and as premiums; also expenditures for the increase of the Navy since 1885.

The totals grouped under the respective heads enumerated are shown in the following tables:

POPULATION, WEALTH, VALUE OF PRODUCTS OF INDUSTRY, AND DEBT.

Census year.	Population.	Wealth.	Value of manufactures, and farm, fishery, and mineral products.	Total national debt less cash in Treasury at end of fiscal year.
1800.....	5,308,483			
1810.....	7,289,881			
1820.....	9,633,822			
1830.....	12,866,020			
1840.....	17,069,458			
1850.....	23,191,876	\$7,135,780,228	a \$1,029,106,798	
1860.....	31,443,321	16,159,616,068	a 1,898,785,768	\$59,964,402.01
1870.....	38,558,371	30,068,518,507	b 6,843,559,616	2,331,169,956.21
1880.....	50,155,733	43,642,000,000	c 7,974,097,438	1,919,326,747.75
1890.....	62,622,250	65,037,091,197	d 12,148,380,626	890,784,370.53

a Not including value of farm products.

b Value of farm products includes betterments and addition to stock.

c Certain duplications in statistics of manufactures as published have been eliminated.

d Not including certain manufacturing industries not fully enumerated at prior censuses.

AVERAGE ANNUAL RECEIPTS AND EXPENSES OF THE FEDERAL GOVERNMENT.

Decade ending—	Receipts.	Expenses (exclusive of payments on public debt).		
		Ordinary.	Extraordinary.	Total.
1800.....	\$6,776,891.80	\$3,944,452.40	\$2,889,330.46	\$6,833,832.86
1810.....	13,056,864.78	4,877,316.43	3,982,137.23	8,859,453.66
1820.....	21,066,958.73	17,406,690.57	6,474,175.99	23,880,866.56
1830.....	21,923,071.60	9,506,394.62	6,652,161.93	16,158,556.55
1840.....	30,461,109.62	17,266,408.59	7,226,801.02	24,493,209.61
1850.....	27,117,363.77	26,432,418.51	5,884,075.60	32,316,494.11
1860.....	60,237,254.13	48,964,936.88	11,206,918.92	60,171,855.80
1870.....	304,100,050.83	418,932,409.30	111,731,417.79	530,713,827.09
1880.....	312,476,778.23	109,531,577.51	159,515,636.05	269,047,263.56
1890.....	371,204,582.21	117,267,583.36	151,124,961.91	268,412,545.27

The values of the products of industry shown for 1850 and 1860 do not include some elements that enter into the values for subsequent years. This fact, combined with the improvement in statistical methods and the greater care bestowed on the enumeration at subsequent censuses, will not permit of the use of percentages based on these figures or on the total wealth as indicating the exact increase. The percentages given for the other items in the following tables are based on definitely ascertained totals and show actual conditions. War expenses and

various other conditions controlling the receipts, expenses, and debt of the Government, as well as the inflated value of currency in 1870 as compared with gold, and the relatively prosperous or depressed condition of business during the respective census years must also be considered in accepting the percentages given in the following tables :

PERCENTAGES OF INCREASE OF POPULATION, WEALTH, VALUE OF PRODUCTS OF INDUSTRY, AND DEBT.

Census year.	Population.	Wealth.	Value of manufactures, and farm, fishery, and mineral products.	Total national debt, less cash in Treasury.	Census year.	Population.	Wealth.	Value of manufactures, and farm, fishery, and mineral products.	Total national debt, less cash in Treasury.
1800					1850	35.87			
1810	36.38				1860	35.58	126.46	84.51	
1820	33.07				1870	22.63	86.07	260.41	3,787.59
1830	33.55				1880	30.08	45.14	16.52	α 17.67
1840	32.67				1890	24.86	49.02	52.35	α 53.59

α Decrease.

PERCENTAGES OF INCREASE OF RECEIPTS AND EXPENSES OF THE FEDERAL GOVERNMENT.

Decade ending—	Average annual receipts.	Average annual expenses.			Decade ending—	Average annual receipts.	Average annual expenses.		
		Ordinary.	Extraordinary.	Total.			Ordinary.	Extraordinary.	Total.
1800					1850	α 10.98	53.09	α 18.58	31.94
1810	92.67	23.65	37.82	29.64	1860	122.14	85.25	90.46	86.20
1820	61.35	256.89	62.58	169.35	1870	404.84	755.58	897.43	782.00
1830	4.06	α 45.39	2.75	α 32.34	1880	2.75	α 73.85	42.70	α 49.30
1840	38.95	81.63	8.64	51.58	1890	18.79	7.08	α 5.26	α .24

α Decrease.

These tables, showing increases or decreases from decade to decade, when accompanied by the following tables, which show, per capita, the items given in the tables above, present in convenient summaries the available data pertaining to the growth of the country and the financial operations of the Federal government during the past ninety years :

PER CAPITA WEALTH, VALUE OF PRODUCTS OF INDUSTRY, AND DEBT.

Census year.	Wealth.	Value of manufactures, and farm, fishery, and mineral products.	Total national debt, less cash in Treasury.	Census year.	Wealth.	Value of manufactures, and farm, fishery, and mineral products.	Total national debt, less cash in Treasury.
1800				1850	\$307.68	\$44.37	
1810				1860	513.93	60.39	\$1.91
1820				1870	779.82	177.49	60.46
1830				1880	870.13	158.99	38.27
1840				1890	α 1,036.01	193.99	14.22

α Not including the values for Indian Territory.

PER CAPITA RECEIPTS AND EXPENSES OF THE FEDERAL GOVERNMENT.

Decade ending—	Average annual receipts.	Average annual expenses.			Decade ending—	Average annual receipts.	Average annual expenses.		
		Ordinary.	Extraordinary.	Total.			Ordinary.	Extraordinary.	Total.
1800	\$1.28	\$0.74	\$0.55	\$1.29	1850	\$1.17	\$1.14	\$0.25	\$1.39
1810	1.80	.67	.55	1.22	1860	1.92	1.56	.35	1.91
1820	2.19	1.81	.67	2.48	1870	7.89	10.86	2.90	13.76
1830	1.70	.74	.52	1.26	1880	6.23	2.18	3.18	5.36
1840	1.78	1.01	.42	1.43	1890	5.93	1.87	2.41	4.23

While no extended explanation will be made of apparent inconsistencies in the above tables, attention is called to the tables showing percentages of increase. The large increases shown for 1870 are due principally to expenses of the civil war and the inflated value of currency as compared with gold. The largest percentages of increase during the decade ending with 1870 are shown for extraordinary expenses and the total debt less cash in the Treasury, the large increase in both these items being due primarily to war expenses. On the other hand, the amount of extraordinary expenses per capita, as shown by the last table, is the smallest per capita item shown for 1870, and is due to the comparatively small total of such expenses.

While, for the reasons given, the totals for wealth and values of products of industry can only be used in a general way for comparison, the totals for 1860 may be accepted as showing the conditions prevailing during the decade immediately preceding the civil war and those for 1890 as indicating the conditions that prevailed during a decade after the direct effects of the war had disappeared. The two totals therefore indicate normal conditions. Comparing the two years it appears that the total wealth per capita increased from \$513.93 to \$1,036.01, or 101.59 per cent, and the per capita value of the products of industry increased from \$60.39 to \$193.99, or 221.23 per cent, while the receipts per capita of the Government increased from \$1.92 to \$5.93, or 208.85 per cent, and the total expenses from \$1.91 to \$4.28, or 124.08 per cent. The actual increase per capita in expenses was \$2.37, of which increase the ordinary expenses constituted 31 cents, increasing 19.87 per cent, and the extraordinary \$2.06, increasing 588.57 per cent. One of the largest items of expense entering into the average total of extraordinary expenses for the decade ending with 1890 is pensions. Excluding this item the yearly average for the decade would be \$80,901,696.76, giving an extraordinary expense per capita of \$1.29, an increase over that of 1860 of 268.57 per cent.

While the tables giving the percentages of increase show that the total receipts and expenses of the Government have increased largely as was necessary to be in keeping with the development of the nation in all directions, the tables giving the per capita items show that the receipts and expenses have not increased abnormally when compared with the increase in wealth and industry. An increase is shown in per capita wealth and values of industry since 1870, while a varying decrease is shown in receipts and expenses, as well as in the national debt.

DECISIONS OF COURTS AFFECTING LABOR.

In Bulletin No. 1, issued in November, 1895, by the Department of Labor, it was stated in the introduction that one of the intended departments of information in each issue of the bulletin would consist in "the reproduction, immediately after their passage, of new laws that affect the interests of the working people whenever such are enacted by State legislatures or by Congress; also, the reproduction of the decisions of courts interpreting labor laws or passing upon any subject which involves the relations of employer and employee. Attention likewise will be called to any other matters pertaining to law which may be of concern and value to the industrial interests of the country, and which might not be obtained without expense or trouble from other sources."

In conformity with the above announcement, certain recent decisions rendered by the supreme courts of various States and the United States, passing upon the validity of labor laws or deciding cases arising under such laws or under the common law governing the relations of employers and employees, are here published. These decisions are not, as a rule, reproduced in full, their length and the space limitations of the bulletin preventing such a course; but when not given in full, their substance and the reasons upon which they are based are given in the language of the courts; in other words, they are quoted, when not fully reproduced, at sufficient length to give a full and clear understanding of the basis and scope of each opinion.

The decisions herein published are classed with reference to the character of the law under which they were rendered, those deciding cases which arose under legislative enactments being first presented, followed by such as determine cases under the common law.

DECISIONS UNDER STATUTORY LAW.

By act approved October 21, 1891, the legislature of the State of Georgia required certain corporations to give to their discharged employees or agents the causes of removal or discharge, the language of the act being as follows:

SECTION 1. Hereafter, when any railroad company, telegraph company, express company, or electric street railroad company shall discharge or remove any agent or employee, it shall be the duty of such company, when requested, in writing, by such discharged agent or

employee, to give a specific statement, in writing, setting forth the reason or reasons which have prompted, caused, or induced such discharge or removal, and if such discharge or removal has been prompted, caused, or induced, in whole or in part, by any complaint or communication made to such company, it shall be the duty of the company to inform the discharged agent or employee of the substance and nature of such communication or complaint, and when and by whom such complaint or communication was made.

SEC. 2. The written request provided for in the preceding section of this act, to be effective, must be signed by the discharged agent or employee, and be delivered, by an officer authorized to serve the process of citation of a court within this State, either to the president, secretary, or treasurer of such company, or to the local agent representing such company in any county within this State, or by leaving the same at the principal office of such company during office hours.

SEC. 3. Any company to whom has been delivered a written request, as provided for in the preceding section of this act, shall have twenty days from the date of the delivery thereof within which to give the information requested. The statement required by such company to be given to a discharged agent or employee may be delivered to such agent or employee by an officer authorized to serve the process of citation, or by leaving the same, addressed to such discharged agent or employee, with the county clerk of the county in which the written request was preferred. If such company shall fail or refuse to give the information as hereinafore provided for, or shall give a false statement thereof, it shall be liable to such discharged agent or employee for damages in the sum of five thousand dollars.

One Wallace brought suit under this statute against the Georgia, Carolina and Northern Railway Company, to recover the sum of \$5,000, alleging that after the company, by contract made July 9, 1892, had employed him as its chief car inspector, and while he was performing his duties as such on August 12, 1892, the company discharged him. On August 18, 1892, he made a written request of the company to give him a specific statement in writing of the reasons which had caused his discharge, and, if the same had been induced in whole or in part by any communication made to the company, to inform him of the nature and substance of such communication or complaint, and when and by whom it was made. This written request was signed by him, and on the same day was served on the company by being delivered to the local agent of the company at its office in Fulton County by the sheriff of that county. Afterwards the plaintiff waited for more than twenty days, within which time the defendant should have delivered the written statement, as requested, to the plaintiff, or left it, addressed to him, with the county clerk; but the defendant failed and refused to give the information as requested, and as required by law, whereby it became liable to the plaintiff in the sum of \$5,000, etc.

The suit was dismissed by the city court of Atlanta, and the judgment of that court was affirmed by the supreme court of the State, June 18, 1894. Said decision, which declares the act in question to be unconstitutional, is published on page 579 of volume 22 of the South-

eastern Reporter, and the syllabus of the same, prepared by the court, is as follows:

The public, whether as many or one, whether as a multitude or a sovereignty, has no interest to be protected or promoted by a correspondence between discharged agents or employees and their late employers, designed not for public but for private information, as to the reasons for discharges and as to the import and authorship of all complaints or communications which produced or suggested them. A statute which undertakes to make it the duty of incorporated railroad, express, and telegraph companies to engage in correspondence of this sort with their discharged agents and employees, and which subjects them in each case to a heavy forfeiture under the name of damages for failing or refusing to do so, is violative of the general private right of silence enjoyed in this State by all persons, natural or artificial, from time immemorial, and is utterly void and of no effect. Liberty of speech and of writing is secured by the constitution, and incident thereto is the correlative liberty of silence, not less important nor less sacred. Statements or communications, oral or written, wanted for private information can not be coerced by mere legislative mandate at the will of one of the parties and against the will of the other. Compulsory private discovery, even from corporations, enforced not by suit or action but by statutory terror, is not allowable where rights are under the guardianship of due process of law.

It follows from the foregoing that the act of October 21, 1891, entitled "An act to require certain corporations to give their discharged employees or agents the causes of their removal or discharge when discharged or removed," is unconstitutional, and that an action founded thereon for the recovery of \$5,000 as penalty or arbitrary damages, fixed by the statute for noncompliance with its mandates, can not be supported.

By act approved June 17, 1893, the legislature of Illinois undertook "to regulate the manufacture of clothing, wearing apparel, and other articles in this State, and to provide for the appointment of State inspectors to enforce the same, and to make an appropriation therefor."

Upon the complaint of the factory inspector, appointed under this law, a warrant was issued by a justice of the peace of Cook County against William E. Ritchie for violating section 5 of the statute in question by employing a certain adult female, more than 18 years of age, at work in a factory more than eight hours on a certain day in February, 1894. The case was tried in the criminal court of Cook County, on appeal from the judgment of the justice of the peace, and the defendant was convicted and fined, whereupon the case was brought, on writ of error, before the supreme court of Illinois, which tribunal, on March 14, 1895, reversed the judgment of the criminal court and decided that section 5 of the act which declares that "no female shall be employed in any factory or workshop more than eight hours in any one day or forty-eight hours in any one week" is unconstitutional; the court also decided the first clause of section 10, which appropriated \$20,000 for the salaries of the factory inspectors, to be unconstitutional.

The decision in this case, which is published in full in volume 40 of the Northeastern Reporter, page 454, is followed in the case of *Tilt v.*

People, and in several other cases, all of which are named on page 462 of the volume referred to.

The substance of the decision in the Ritchie case, delivered by Judge Magruder, is as follows :

While some of the language of this act is broad enough to embrace within its terms the manufacture of all kinds of goods or products, other provisions of the act are limited to the manufacture of "coats, vests, trousers, knee pants, overalls, cloaks, skirts, ladies' waists, purses, feathers, artificial flowers, or cigars, or any wearing apparel of any kind whatsoever." The act is entitled "An act to regulate the manufacture of clothing, wearing apparel, and other articles," etc. If it be construed as applying only to manufacturers of clothing, wearing apparel, and articles of a similar nature, there appears to be no reasonable ground for prohibiting such manufacturers and their employees from contracting for more than eight hours in one day, while other manufacturers are not forbidden to so contract. If the act be construed as applying to manufacturers of all kinds of products there is no good reason why the prohibition should be directed against manufacturers and their employees, and not against merchants, or builders, or contractors, or carriers, or farmers, or persons engaged in other branches of industry and their employees. Women employed by manufacturers are forbidden by section 5 of the act in question to make contracts to labor longer than eight hours per day, while women employed as saleswomen in stores, or as domestic servants, bookkeepers, stenographers, typewriters, or in laundries, or other occupations not embraced under the head of manufacturing, are at liberty to contract for as many hours of labor per day as they choose. The manner in which this section discriminates against one class of employers and employees, and in favor of all others, renders it invalid.

But aside from its partial and discriminating character this enactment is a purely arbitrary restriction upon the fundamental right of the citizen to control his or her own time and faculties. It substitutes the judgment of the legislature for the judgment of the employer and employee in a matter about which they are competent to agree with each other. It assumes to dictate to what extent the capacity to labor may be exercised by the employee, and takes away the right of private judgment as to the amount and duration of the labor to be put forth in a specified period. Section 2 of article 2 of the constitution of Illinois provides that "no person shall be deprived of life, liberty, or property without due process of law." The privilege of contracting is both a liberty and property right—the right to use, buy, and sell property and to contract in respect thereto is protected by the constitution. Labor is property, and the laborer has the same right to sell his labor and to contract with reference thereto as has any other property owner. The legislature has no power to prevent persons who are sui juris from making their own contracts, nor can it interfere with the freedom of contract between the workman and the employer. The right to labor or employ labor, and make contracts in respect thereto upon such terms as may be agreed upon between the parties, is included in the constitutional guaranty above quoted. "Liberty" includes the right to make contracts as well with reference to the amount and duration of labor to be performed as concerning any other lawful matter. Hence, the right to make contracts is an inalienable one, and any attempt to unreasonably abridge it is opposed to the constitution.

The protection of property is one of the objects for which free governments are instituted among men. The right to acquire, possess, and protect property includes the right to make reasonable contracts; and when an owner is deprived of one of the attributes of property, like the right to make contracts, he is deprived of his property within the meaning of the constitution.

The right to contract is the only way by which a person can rightfully acquire property by his own labor. This right to contract, which is thus included in the fundamental rights of liberty and property, can not be taken away without "due process of law." The words "due process of law" have been held to be synonymous with the words "law of the land." The "law of the land" is general public law, binding upon all members of the community, under all circumstances, and not partial or private laws, affecting the rights of private individuals or classes of individuals. The legislature has no right to deprive one class of persons of privileges allowed to other persons under like conditions. If one man is denied the right to contract as he has hitherto done under the law, and as others are still allowed to do by the law, he is deprived of both liberty and property to the extent to which he is thus deprived of the right. Applying these principles to the consideration of section 5 we are led irresistibly to the conclusion that it is an unconstitutional and void enactment.

It is claimed that this section can be sustained as an exercise of the police power of the State. The police power of the State is that power which enables it to promote the health, comfort, safety, and welfare of society. It is very broad and far-reaching, but is not without its limitations. Legislative acts passed in pursuance of it must not be in conflict with the constitution, and must have some relation to the ends sought to be accomplished; that is to say, to the comfort, welfare, or safety of society. When the ostensible object of an enactment is to secure the public comfort, welfare, or safety it must appear to be adapted to that end. There is nothing in the title of the act of 1893 to indicate that it is a sanitary measure. There is nothing in the nature of the employment contemplated by the act which is in itself unhealthy or unlawful or injurious to the public morals or welfare. It is not the nature of things done, but the sex of the persons doing them, which is made the basis of the claim that the act is a measure for the promotion of the public health. It is sought to sustain the act as an exercise of the police power upon the alleged ground that it is designed to protect woman on account of her sex and physique. But inasmuch as sex is no bar under the constitution and law to the endowment of woman with the fundamental and inalienable rights of liberty and property, which includes the right to make her own contracts, the mere fact of sex will not justify the legislature in putting forth the police power of the State for the purpose of limiting her exercise of those rights, unless the courts are able to see that there is some fair, just, and reasonable connection between such limitation and the public health, safety, or welfare proposed to be secured by it.

We can not more appropriately close the discussion of this branch of the case than by quoting and adopting as our own the following words of the New York court of appeals in *re Jacobs* (98 N. Y., 98): "When a health law is challenged in the courts as unconstitutional, on the ground that it arbitrarily interferes with personal liberty and private property, without due process of law, the courts must be able to see that it has at least in fact some relation to the public health, that the public health is the end actually aimed at, and that it is appropri-

ate and adapted to that end. This we have not been able to see in this law, and we must, therefore, pronounce it unconstitutional and void."

The first clause of section 10 of said act, which appropriates \$20,000 for the salaries of the inspectors, is unconstitutional for the reason that it is not germane to the subject expressed in the title, and also for the reason that it is in violation of section 16 of article 4 of the constitution, which provides that no bill making appropriations for the salaries of government officials shall contain a provision on any other subject.

The legislature of the State of Missouri, by act approved March 6, 1893, made it unlawful for an employer to prohibit an employee from joining any labor or trade union, or other lawful organization or society, or to require an employee to withdraw therefrom.

Under this act George Julow, who had discharged an employee, not hired for a definite term, because he would not withdraw from a lawful organization, was convicted in the St. Louis court of criminal correction and fined \$50. He appealed to the supreme court of the State, which reversed the judgment of the lower tribunal, by decision of June 18, 1895, and declared the law under which he was convicted to be unconstitutional. The substance of the decision of the supreme court, delivered by Judge Sherwood, which is published in full in the thirty-first volume of the Southwestern Reporter, page 781, is as follows:

The act of March 6, 1893, in making it unlawful for an employer to prohibit an employee from joining or to require an employee to withdraw from a trade or labor union or other lawful organization, violates the fifth amendment to the Constitution of the United States, and article 2, section 30, of the constitution of the State, which provide that no person shall be deprived of life, liberty, or property without due process of law. These terms, "life," "liberty," and "property," are representative terms, and cover every right to which a member of the body politic is entitled under the law, and all our liberties, personal, civil, and political—in short, all that makes life worth living—and of none of these rights or liberties can anyone be deprived except by due process of law.

Each of the rights heretofore mentioned carries with it, as its natural and necessary coincident, all that effectuates and renders complete the full, unrestrained enjoyment of that right.

Take, for instance, that of property. Necessarily blended with that right are those of acquiring property by labor, by contract, and also of terminating that contract at pleasure. In the case at bar the contract was not made for any definite period. From these premises it follows that depriving an owner of property of one of its essential attributes is depriving him of his property within the constitutional provision. Here the law under review declares that to be a crime which consists alone in the exercise of a constitutional right, to wit, that of terminating a contract, one of the essential attributes of property, indeed property itself. If an owner, etc., obeys the law on which this prosecution rests, he is thereby deprived of a right and a liberty to contract or terminate a contract, as all others may; if he disobeys it, then he is punished for the performance of an act wholly innocent, unless, indeed, the doing of such act, guaranteed by the organic law, the exercise of a right of which the legislature is forbidden to deprive him, can by that body be conclusively pronounced criminal.

We deny the power of the legislature to do this, and consequently we hold that the statute which professes to exert such a power is nothing more or less than a "legislative judgment," and an attempt to deprive all who are included within its terms of a constitutional right without due process of law. But the statute is also obnoxious to criticism on other grounds. It does not relate to persons or things as a class—to all workmen, etc.—but only to those who belong to some "lawful organization or society," referring to a trade union, labor union, etc. Where a statute does this it is a special, as contradistinguished from a general law. Here a nontrades-union or a nonlabor-union man could be discharged without ceremony, without let or hindrance, whenever the employer so desired, with or without reason therefor, while in the case of a trades-union or labor-union man he could not be discharged if such discharge rested on the ground of his being a member of such an organization. In other words, the legislature have undertaken to limit the power of the owner or employer as to his right of contract with particular persons of a class; the statute which does this is a special, not a general law, and therefore is in violation of the State constitution.

The statute is also in conflict with section 1, article 14, of the Constitution of the United States, forbidding that "any State deprive any person of life, liberty, or property without due process of law."

Nor can the statute escape censure by assuming the label of a "police regulation." It has none of the elements or attributes which pertain to such a regulation, for it does not, in terms or by implication, promote or tend to promote the public health, welfare, comfort, or safety; and if it did, the State would not be allowed, under the guise and pretense of a police regulation, to encroach or trample upon any of the just rights of the citizen, which the Constitution intended to secure against diminution or abridgment.

In an action by Thomas Durkin against the Kingston Coal Company and William Jones, damages were recovered in the court of common pleas, Luzerne County, Pa., by the plaintiff for injuries received while he was an employee in the coal mine of which the defendant company was owner and defendant Jones was certified foreman, through the negligence of the foreman. The defendants appealed, and the supreme court of Pennsylvania, on October 7, 1895, reversed the judgment as to the coal company, holding that the act of 1891, of Pennsylvania, relating to anthracite coal mines (P. L., p. 176) is unconstitutional and void in so far as it makes the owner of such mine liable for injuries to other employees occasioned by the negligence of a mine foreman, licensed, certified, and employed under the requirements of the statute. The judgment was, however, affirmed as to Jones, the mine foreman, who was held to be liable, independently of, as well as under, the statute, for injury to an employee due to his want of attention to his proper duties.

The decision in this case, delivered by Judge Williams, is published in volume 33 of the Atlantic Reporter, page 237, and so much thereof as bears on the constitutionality of the law in question, and on the responsibility of the mine foreman, is given here:

The first article of the constitution of this State, known as the "bill of rights," declares that all men are possessed of certain inherent and

inalienable rights. One of these is the right to acquire, possess, and protect property. The preservation of this right requires, both that every man should be answerable for his own acts and engagements, and that no man should be required to answer for the acts and engagements of strangers over whom he has no control. A statute that should impose such a liability, or that should take the property of one person and give it to another or to the public without making just compensation therefor, would violate the bill of rights, and would be, for that reason, unconstitutional and void.

It is in furtherance of the right to acquire, possess, and protect property that section 17 of the bill of rights prohibits the enactment of laws that shall interfere with or impair the obligation of contracts. The tendency toward class legislation for the protection of particular sorts of labor has been so strong, however, that several statutes have recently been passed that could not be sustained under the provisions of the bill of rights. Such was the case in *Godcharles v. Wigeman* (113 Pa. St., 431 ; 6 Atl., 354); such was the case with some recent provisions relating to mechanics' liens, and such is alleged by the appellants to be the case with some of the provisions of the act of 1891, under which this action was brought. The title of the act of 1891 is "An act to provide for the health and safety of persons employed in and about the anthracite coal mines of Pennsylvania and for the protection and preservation of property connected therewith." It divides the anthracite region into eight districts, and provides for the appointment by the governor of a competent mine inspector in each district, who shall have a general oversight of mining operations within his district. It creates an examining board for each district, with power to examine candidates, and recommend such as they shall deem qualified for the position of mine foreman to the secretary of internal affairs. It is made the duty of this officer to issue certificates to those who apply therefor and have been recommended by the board of examiners.

Article 8, section 1, declares that no person "shall be permitted to act as mine foreman or assistant mine foreman of any coal mines or colliery" who has not been examined by the board of examiners, recommended to the secretary of internal affairs, and provided by that officer with a certificate. The employment of a certified mine foreman is made obligatory upon all mine owners and operators, and a failure to do so is punished by a fine of \$20 per day, which may be collected from the owner, the operator, or the superintendent in charge of the mine. The duties of the mine foreman are prescribed by the act, and the owner or operator of the mine can not interfere with them. He is especially to "visit and examine every working place in the mine at least once every alternate day while the men of such place are or should be at work, and direct that each and every working place is properly secured by props or timber, and that safety in all respects is assured by directing that all loose coal or rock shall be pulled down or secured, and that no person shall be permitted to work in an unsafe place unless it be for the purpose of making it secure." (Article 12, rule 12.)

The mine foreman is also required to examine, at least once every day, "all slopes, shafts, main roads, ways, signal apparatus, pulleys, and timbering, and see that they are in safe and efficient working condition." (Rule 13.)

After having thus most effectually taken the management of his mining operations out of his hands, and committed it to officers of its own creation, whose employment is made compulsory upon him, the statute, in section 8 of article 17, imposes upon the mine owner a lia-

bility for the neglect or incompetency of the men whom he is compelled to employ, in these words: "That for any injury to person or property occasioned by any violation of this act or any failure to comply with its provisions by any mine foreman, a right of action shall accrue to the party injured against said owner or operator for any direct damages he may have sustained thereby; and in case of loss of life by reason of such neglect or failure aforesaid a right of action shall accrue to the widow and lineal heirs of the person whose life shall be lost for like recovery of damages for the injury they shall have sustained."

This statute, regarded as a whole, is an extraordinary piece of legislation. Through it, the lawmakers say to the mine owner: "You can not be trusted to manage your own business. Left to yourself, you will not properly care for your own employees. We will determine what you shall do. In order to make it certain that our directions are obeyed, we will set a mine foreman over your mines, with authority to direct the manner in which your operations shall be conducted, and what precautions shall be taken for the safety of your employees. You shall take for this position a man whom we certify to as competent. You shall pay him his salary. What he orders done in your mines you shall pay for. If, notwithstanding our certificate, he turns out to be incompetent or untrustworthy, you shall be responsible for his ignorance or negligence." Under the operation of this statute the mine foreman represents the Commonwealth. The State insists on his employment by the mine owner, and, in the name of the police power, turns over to him the determination of all questions relating to the comfort and the security of the miners, and invests him with the power to compel compliance with his directions. Incredible as it may seem, obedience on the part of the mine owner does not protect him; but, if the mine foreman fails to do properly what the statute directs him to do, the mine owner is declared to be responsible for all the consequences of the incompetency of the representative of the State. This is a strong case of binding the consequences of the fault or folly of one man upon the shoulders of another. This is worse than taxation without representation. It is civil responsibility without blame, and for the fault of another. The same conclusion may be reached by another road.

It has been long settled that a mining boss or foreman is a fellow-servant with the other employees of the same master, engaged in a common business, and that the master is not liable for an injury caused by the negligence of such mining boss. The duty of the mine owner is to employ competent bosses or foremen to direct his operations. When he does this he discharges the full measure of his duty to his employees, and he is not liable for an injury arising from the negligence of the foreman. A vice-principal is one to whom an employer delegates the performance of duties which the law imposes on him, and the employer is responsible because the duty is his own. As to the acts of workmen, and the manner in which they do their work, the duty of the employer is to employ persons who are reasonably competent to do the work assigned them, and, if he finds himself mistaken in regard to their competency, to discharge them when the mistake is discovered. But he is not responsible for the consequences of their negligence as these may affect each other. Now, the act of 1891 undertakes to reverse the settled law upon this subject, and declares that the employer shall be responsible for an injury to an employee resulting from the negligence of a fellow-workman. Prior to the act of 1891, the man whose negligence caused the injury was alone liable to respond in damages. He might not always have property out of which a judgment could be

collected, but the plaintiff must, in any case, take his chances of the solvency of the defendant against whom his cause of action lies.

The act of 1891 undertakes to furnish a responsible defendant for the injured person to pursue. Passing over the head of the fellow-servant at whose hands the injury was received, it fastens on the owner of the property on which the accident happened, and declares him to be the guilty person on whose head the consequences of the accident shall fall. To see the true character of this legislation we must keep both lines of objection in mind. We must remember that the injury complained of is due to the negligence of a fellow-workman, for which the master is responsible neither in law nor morals. We must also remember that this fellow-workman has been designated by the State, his duties defined, and his powers conferred by statute, and his employment made compulsory, under heavy penalties, by the same statute. Finally, we must remember that it is the negligence of this fellow-servant, whose competency the State has certified, and whose employment the State has compelled, for which the employer is made liable. The State says: "He is competent. You must employ him. You shall surrender to his control the arrangements for the security of your employees." It then says, in effect: "If we impose upon you by certifying to the competency of an incompetent man, or if the man to whom we commit the conduct of your mines neglects his duty you shall pay for our mistake and for his negligence." We have no doubt that so much, at least, of section 8 of article 17 of the act of 1891 as imposes liability on the mine owner for the failure of the foreman to comply with the provisions of the act which compels his employment and defines his duties, is unconstitutional and void.

But why should the certified mine foreman be relieved from the consequences of his negligence? The jury have found that the injury was due to his want of attention to his proper duties, and his liability is clear, without regard to our mining laws. But the statute required him to examine the roads and ways in use in the mine each day. He knew the film of rock separating the upper from the lower working was but 8 feet thick, at best; he knew that the supports for this film were not in line with each other in the upper and lower workings; he knew that layers of the rock were falling off, that the thickness of the floor was reduced under the way on which the accident occurred to about 5 feet, and that, not far away, it had fallen down into the lower working; yet, with all this knowledge he did nothing, so far as we can learn, to increase the security of the way. Whether his conduct be considered with reference to the statute, or regardless of it, his failure to do what he must have known to be necessary was a neglect of duty such as should render him liable to his fellow servant who has suffered from it. We are not prepared to hold the act of 1891 unconstitutional as a whole. It relates to all anthracite coal mines, and defines what shall be regarded as such mines. Coal may be taken out of the ground by farm owners for their own use, or it may be taken in such small quantities and for such local purposes as to make the application of the mining laws to the operations so conducted not only unnecessary, but burdensome to the extent of absolute prohibition. Such limited or incipient operations are not within the mischief, to remedy which the mining laws were devised. They are ordinarily conducted for the purposes of exploration, or for family supply, and ought not to be classed with operations conducted for the supply of the public. The business of coal mining, like that of insurance or banking, may be defined by the legislature. The definition found in the act of 1891 seems to us reason-

able, to be within the fair limits of a legislative definition, and to exclude only such operations as are too small to make the general regulations provided by the act applicable to them. The ground on which we place our judgment is not, therefore, that the act is local, but that the provisions of it which we have considered are in violation of the bill of rights.

Section 1 of chapter 270 of the acts of 1887 of Massachusetts provides that where personal injury is caused to an employee, who is himself in the exercise of due care and diligence at the time, by reason of the negligence of any person in the service of the employer, entrusted with and exercising superintendence, whose sole or principal duty is that of superintendence, the employee shall have the same right of compensation and remedies against the employer as if the employee had not been an employee of nor in the service of the employer, nor engaged in its work.

Under this act Norman J. Dane sued the Cochran Chemical Company for personal injuries as an employee, the circumstances of his employment having been as follows: The company employed Frederick Johnson, a carpenter, under a continuing contract to make all repairs and alterations required in its works, he to furnish tools and the company the materials, at \$2.50 per day for his own services, and 25 cents per day for each man employed by Johnson in addition to the amount of wages which Johnson agreed to pay the man. He hired, paid, superintended, and discharged the men employed by him, but the company directed how the work was to be done. Dane was hired by Johnson, and in the course of his employment received the injuries for which he sought compensation.

The case was decided adversely to Dane by the superior court of Suffolk County, Mass., and having been brought before the supreme judicial court of Massachusetts on exceptions by the plaintiff, the latter tribunal, on October 19, 1895, overruled the exceptions and sustained the decision of the superior court, holding that Dane, having been hired by the carpenter, was an employee of the carpenter and not of the company, and hence could not recover damages for his injuries from the company.

The decision of the supreme judicial court in this case, delivered by Chief Justice Field, is published in full in volume 41 of the *Northeastern Reporter*, page 678, and is based on the following reasoning:

The fundamental question in the present case is whether the relation between the plaintiff and defendant, as shown by the evidence, was that of employer and employee. Could the plaintiff have recovered his wages of the defendant if they had not been paid by Johnson? Did Johnson hire the plaintiff on his own account or as agent for the defendant? At common law the defendant, on the evidence, would not be liable to the plaintiff, because, if Johnson was a servant of the defendant in hiring the plaintiff and the other workmen, then the plaintiff and Johnson were servants of the defendant, and a master is

not liable, at common law, for the injury to one servant occasioned by the negligence of his fellow servants; and if Johnson was an independent contractor, and Dane was his servant, then the defendant would not be liable for any injury occasioned by the negligence of Johnson or of one of his servants to another of his servants. We are of opinion that the only reasonable inference to be drawn from the evidence in the exceptions is that the plaintiff was an employee of Johnson, and not of the defendant, within the meaning of the statute of 1887, chapter 270, and the amendments thereto.

It does not appear that Johnson was authorized to hire workmen on account of the defendant, or that the workmen hired by Johnson ever understood that they were to be paid by the defendant, or that the defendant or Johnson so understood. The fact that the defendant retained the right to decide how work should be done on its premises does not of itself make the workmen employed by Johnson employees of the defendant. Apparently Johnson employed whom he pleased, and directed the men employed by him in the performance of their work, whether upon the premises of the defendant or upon other premises where he might be doing work. On the evidence we do not think that the jury could properly find that the relation of employee and employer existed between the parties. If the relation of employer and employee did not exist between the parties, then the action can not be maintained under the statute of 1887, chapter 270.

A suit for damages was brought by William A. Perry against the Old Colony Railroad Company to recover damages for injuries received while making repairs on a locomotive engine in a roundhouse, through the alleged negligence of one Straw, an engineer claimed to have been in charge of the locomotive, in blowing down the engine.

He recovered in the superior court of Suffolk County, Mass., under chapter 270 of the acts of 1887 of Massachusetts, section 1 of which provides that where personal injury is caused to an employee, who is himself in the exercise of due care and diligence at the time, by reason of the negligence of any person in the service of the employer who has the charge or control of any signal, switch, locomotive engine, in train upon a railroad, the employee shall have the same right of compensation and remedies against the employer as if the employee had not been an employee of nor in the service of the employer, nor engaged or its work. The railroad company carried the case, on exceptions, to the supreme judicial court of the State, and that tribunal, on September 14, 1895, sustained the exceptions, holding that the case was not within the purview of the statute above quoted. The decision, delivered by Judge Morton, is published in volume 41 of the *Northeastern Reporter*, page 289, and so much thereof as bears on the applicability of the statute to ute to the case is given here:

Even if Straw was negligent in blowing down, which we do not decide, we do not think he had charge or control of a locomotive upon a railroad track, within the meaning of the act. The statute, as it is said in *Thyng v. Fitchburg R. R. Co.* (156 Mass., 18; 13 N. E., 169),

“seems chiefly to contemplate the damages from a locomotive engine or train as a moving body, and to provide against the negligence of those who, either wholly or in part, control its movements.” This engine was stalled in the roundhouse for repairs, and was not “upon a railroad track,” as those words are ordinarily used. The case would be different, perhaps, if it had been standing on a track waiting to be coupled to a train or for some temporary purpose. If the engine had been in the repair shop, no one, we think, would contend that it was upon a railroad track, within the fair meaning of the act. The fact that it was in the roundhouse, instead, where such repairs were made as could be made comfortably, does not, it seems to us, make any difference. It is also a matter of great doubt whether the engine was in the charge or control of Straw. The testimony tended to show that when an engine came into the roundhouse it was generally assigned to a pit, the tender brake set up, and the wheels blocked, and then the engineer went off and the engine was in charge of the train dispatcher, or, as the plaintiff put it, “the engineer had no duties in the roundhouse any more than if he has a little job on his engine to do, he does it,” which is far from saying that in the roundhouse he has charge and control of the engine. The blowing down of the engine was in response to an outside suggestion, and might as well have been done by anyone else, for aught that appears. But even if the engine was in charge or control of Straw, that is not sufficient. In order to make the defendant liable, it must also have been upon a railroad track, which we do not think it was.

On November 21, 1894, W. H. Clune, a local officer of the American Railway Union, was convicted, with others, in the United States district court for the southern district of California, of conspiracy to obstruct the passage of the United States mails during the time of the great railway strike in the summer of 1894. Motions for a new trial and in arrest of judgment were overruled, and the defendants were each sentenced to pay a fine of \$1 and to be imprisoned in the county jail of Los Angeles County, Cal., for the period of eighteen months. The case was brought before the Supreme Court of the United States on writ of error, which court sustained the conviction by decision of November 15, 1895, as published in volume 16 of the Supreme Court Reporter, page 125.

The principal question of law in the case was raised in the argument, and related to the competency of Congress to impose a heavier penalty for conspiracy to commit a crime than that imposed for the crime itself. On this point Mr. Justice Brewer, in delivering the opinion of the court, said:

By section 3995, Revised Statutes United States, the offense of obstructing the passage of the mails is made punishable by a fine of not more than \$100. By section 5440, Revised Statutes United States, a conspiracy to commit any offense against the United States is punishable by a fine of not less than \$1,000 nor more than \$10,000, and by imprisonment for not more than two years. Upon this he (the counsel for the defendants) contended that a conspiracy to commit an offense

can not be punished more severely than the offense itself, and also that when the principal offense itself is, in fact, committed, the mere conspiracy is merged in it.

The language of the section is plain and not open to doubt. A conspiracy to commit an offense is denounced as itself a separate offense, and the punishment thereof is fixed by the statute, and we know of no lack of power in Congress to thus deal with a conspiracy. Whatever may be thought of the wisdom or propriety of a statute making a conspiracy to do an act punishable more severely than the doing of the act itself, it is a matter to be considered solely by the legislative body. The power exists to separate the conspiracy from the act itself and to affix distinct and independent penalties to each.

With regard to the suggestion that the conspiracy was merged in the completed act, it is enough that we can not, upon the record, hold that the mails were obstructed. All the testimony not being preserved, it may be that the testimony satisfied the jury that there was, in fact, no obstruction of the mails, but only, as charged, a conspiracy to obstruct. If so, the suggestion of a merger falls to the ground.

DECISIONS UNDER COMMON LAW.

The supreme court of Indiana on October 16, 1895, reversed the judgment of the circuit court of Sullivan County in the case of *Margaret C. Tohill v. Evansville and Terre Haute Railroad Company*, and decided that the plaintiff was not entitled to recover damages from the railroad company for the death of her husband, who was killed while in the performance of his duty as an engineer in the employ of the company in a collision between his train, No. 20, which was run as a "regular," and another train, No. 19, which was being run as an "extra," or inferior train.

The supreme court held that the proximate cause of the collision was not in ordering the running of the extra train and failing to notify the deceased engineer of the regular train of the fact, but was the failure of the deceased engineer's fellow-servants in charge of the extra train to comply with the company's rules, by keeping out of the way of the regular train, and hence that the railroad company was not responsible for the accident.

The substance of the decision, delivered by Judge Hackney, which is published in full in volume 41 of the *Northeastern Reporter*, page 709, is as follows:

We think it may be conceded to be the law that a railroad company, operating a complicated system of trains, is required to provide for the reasonable safety of the operatives of such trains against collisions; that it would not be a compliance with such requirement to direct one train to run by schedule and another to run over the same track without schedule, in conflict with such schedule train and without notice to the schedule trainmen, by rule or otherwise, or without some limitation upon the extra or nonscheduled train, under which it would so run as to guard against collision with the schedule train. There are many authorities to the proposition that it is the duty of a railroad company to use ordinary care and prudence in making and promulgating

reasonably necessary and sufficient rules for the safe running of its trains and for the government of its employees, so as to furnish them a reasonable degree of safety, taking into consideration the nature of the service. But this requirement does not deny the right of railway companies to vary from the time tables in any instance, nor does it mean that every variation involves negligence on the part of the company. From the very nature of the business of carrying on an extensive railway system, trains must be expected to run out of schedule time, some from unavoidable delays and others as extra trains carrying an accumulation of freight and passengers beyond the line of business ordinarily expected and regularly prepared for. As said in the case of *Slater v. Jewett* (85 N. Y., 61), "it is at times a necessity to do so, and a necessity so frequent as to fall within the occurrences that a railway servant is bound to expect in the course of his employment. Even as regards the public and passengers, a railway manager has a right, when needs press, to vary from his general time-table. All that can then be required from him by the public and passengers is that, when he makes a variation, he act under it with reasonable care and diligence."

This is all that a servant could ask or expect. If, therefore, in the present case, the company made and promulgated such rules as, by their faithful observance, secured reasonable safety to operatives of schedule trains against collision with extra trains, the company must be held to have performed its duty in this respect. The special verdict in this case expressly found that the company maintained rules under which regular trains might be converted into extra trains; that trains of an inferior class should clear the right of way for trains of a superior class by taking a side track at least five minutes before the arrival of any schedule train at the last station to which it was safe for such inferior train to run; that No. 19 [the extra train] wholly failed to act in accordance with said rules, and did not take the side track at Pursell, where No. 20 [the regular train] could have passed in safety, but continued beyond said station to where the collision occurred. Thus it appears that obedience to said rules by No. 19 [the extra train] would have made the passage of No. 20 [the regular train], running by the schedule, entirely safe. A rule easily followed by servants, and when followed securing safety to coservants, is a reasonable compliance with the duty owing by the master to his servants upon this question. As held in *Rose v. Railway Company* (58 N. Y., 217), obedience to the regulations of a railway company in regard to the running of trains is a matter of executive detail, which neither the corporation nor any general agent can personally oversee, but as to which employees must be relied on. If those employees fail in their duty by breaking existing regulations, and in consequence other employees are injured, no action can be maintained for the injury, as it will be deemed to have been caused by the negligence of a fellow-servant.

As we have seen, the negligence of those in charge of No. 19 [the extra train] was the proximate cause of the collision, and the order of the train dispatcher was not negligently issued. That the operatives of No. 19 [the extra train] were the fellow-servants of the unfortunate engineer is not questioned by the appellee's counsel, but is conceded.

That injury resulting from the negligent act of a fellow-servant creates no liability against the master is not only well settled, but is conceded also by appellee's counsel. It was error, therefore, to deny the appellant's motion for judgment upon the special verdict. The judgment is reversed.

The supreme court of Michigan decided on October 22, 1895, in the case of *Shackleton v. Manistee and Northeastern Railroad Company* (reported in volume 64 of the *Northwestern Reporter*, page 728) that, under the conditions of the case, the railroad company was not answerable for the death of an employee who, while in the discharge of his duty, was thrown from a way car and killed, by reason of the absence of a hand railing, which had been removed from the car. The circumstances of the case are set forth in the opinion of the court, delivered by Judge Montgomery, which is as follows:

The plaintiff, as administratrix, sues to recover damages for the death of her husband, alleged to have been caused by the defendant's negligence. The deceased was a conductor on a freight train of the defendant company, and the injuries resulting in his death were caused by his being thrown off the rear end of the way car to the track and the train passing over him. The car from which he was thrown had hand rails provided on either side of the steps, the rear hand rail extending to the brake, so that a sudden lurch of the car would not result in throwing one attempting to alight from the car. On the occasion in question, however, this rear hand rail had been removed, and the testimony offered by the plaintiff tends to show that while deceased was stepping down from the car he was thrown off by reason of this defect. There is no room for attributing any negligence to the defendant, unless it be for the absence of the hand rail at this time. A few days before the accident deceased and his trainmen, when using the way car in question, allowed it to run against a car loaded with logs, which extended over the ends of the car on which they were loaded, so that, coming in contact with the hand rail, they bent it nearly against the side of the car. Deceased thereupon called the attention of a workman in the defendant's repair shops to the hand rail, and asked him to take it off and repair it. The workman replied "All right," and took it off. Deceased then started off with the car, without reporting the defect to the superintendent, as required by the rules of the company, and without making any objection to using the defective car to those in authority, or to anyone connected with the defendant in any way. While on his trip that day the assistant superintendent saw the car and said to the deceased, "You want to see that that is fixed. Get it fixed." Deceased again called the attention of the workman in the repair shop to it, and he again promised to fix it, but neglected to do so. Deceased, however, continued in the use of the car without protest, until he was killed in the manner above described.

The plaintiff's counsel recognize the general rule that the servant who engages in the use of, or continues in the use of, defective machinery or appliances, assumes the risk incident to the employment—but seeks to bring this case within the exception to the rule which obtains in case the servant has been induced to continue the use of the defective appliances by reason of the master's promise to repair. The present case is not within any such exception to the rule. No one representing the master had induced deceased to continue in the use of the car in its then condition. The employee in the car-repair shop certainly gave deceased no such directions. On the contrary, he was acting under instructions received from the deceased. The statement of the assistant superintendent, so far from being authority to continue the use of the car, was more in the nature of a rebuke for using it in its then condition. The most that can be said is that the company might have been

negligent in not repairing the car sooner, but such negligence was open to the observation of the deceased, and he saw fit to continue in the use of the car. He made no objection to using it in its crippled condition; he gave no notice to anyone in authority which would indicate to defendant that he refused to take the risk, which was as apparent to him as to anyone connected with the road. The circuit judge was right in directing a verdict for the defendant.

A question of great interest, and one which has rarely been judicially passed upon, recently arose in the case of *William Mattison v. The Lake Shore and Michigan Southern Railway Company*, before the court of common pleas of Lucas County, Ohio.

The case involved the right of a discharged employee, who had been blacklisted by his former employer, to recover pecuniary damages for the injury suffered by him by reason of the blacklisting.

The facts in the case were substantially as follows: Mattison had been employed by the railway company as a conductor, at wages of \$120 per month, and he declared in his petition that, having been appointed as a representative of other workmen, he made objection to certain rules adopted by the defendant company and "by all other trunk-line railroads in the United States," designated as "blacklist rules." Shortly after having made such objection, he was discharged from the service of the company, "without cause or provocation," and the company thereupon, conspiring with other railroad companies in order to prevent him from securing employment in his chosen avocation, caused the said blacklist rules to be enforced against him, thus preventing him from obtaining such employment. He was compelled to seek work elsewhere, and secured employment as a policeman, but as such had only been able to earn \$720 per year, instead of \$1,440 per year, which he had received as a railroad conductor.

The company demurred to Mattison's complaint, and the question arose as to whether the blacklist, resulting in injury to an innocent discharged employee, is a wrong for which such employee can obtain financial redress.

Judge Pratt, on September 25, 1895, sustained the right of Mattison to sue the company for damages. The report of the case, furnished the Department of Labor by the official stenographer of the court, shows the substance of the opinion to be as follows:

The employee's right to employment is equally sacred with the right of the employer to employ him; it is not only a serious right, affecting a man's life, but you may say that it is his life. The laboring man's employment is the only thing that stands between him and starvation, or what is little less than starvation—pauperism—and it is for the public interest and for the public good that the right of a man to his own employment, in any honest work which he may seek, should not be interfered with or violated.

This, of course, does not meddle at all with the right of a company, or of a man, to judge himself who he will have to work for him; and it makes no difference whether he refuses to let a man work for him because he is incompetent or because he dislikes him. He has a right to seek his own employees, but, as is frequently said, one man's right ends where another man's commences, and the right of the employer to discharge ends with his own employment, and he must not trench upon the right of the employee to seek other employment by which he may support himself and his family, and it is for the public interest that the largest liberty to seek employment should be before every man, whatever may be his employment or whatever may be his business, trade, or occupation. It is also a matter of public interest to encourage men in becoming proficient in their employment. It is, of course, a matter of public policy that a railroad company should have the right to employ such men as it sees fit and to judge for itself of the competency of its employees. There is no doubt about that. It is, however, for the public interest that a man who is skilled and who has become proficient in his employment should be able to find employment, if not with one railroad, with another railroad, or some other railroad—at least that the field should be open to him, that he should have that right; and while a railroad company may discharge its men and not employ them themselves, they trench upon the rights of the employees whenever they, by one deed or another, seek to prevent their employees from getting employment of other railroad companies, or combine or conspire in any way to prevent it, as is charged in this petition, and the matters alleged in the petition are, on demurrer, to be taken as confessed.

Of course there may be an injury that is not a legal injury resulting from a company discharging one of its employees, and so long as they simply discharge him their right to make the discharge should not be questioned; but if they make a combination, as is charged in this petition, with other companies that they shall not employ him, then it seems to me they go beyond their legal right.

The matters alleged here are sufficient to constitute a cause of action against the defendant, and the demurrer will therefore be overruled.

EXTRACT RELATING TO LABOR FROM THE NEW CONSTITUTION OF UTAH.

By act of Congress approved July 16, 1894, it was provided that the people of the Territory of Utah might call a convention to form a constitution and do other necessary things toward their becoming a State of the Union. This convention assembled in Salt Lake City March 4, 1895, and continued in session until May 8, 1895. It framed a State constitution, which was submitted to the voters of the Territory at an election held November 5, 1895, and was by them adopted. The only further action needed to constitute Utah a sovereign State of the nation was the issue by the President of the usual, formal proclamation to that effect which took place Saturday, January 4, 1896.

The following is a copy of Article XVI, relating to labor:

SECTION 1. The rights of labor shall have just protection through laws calculated to promote the industrial welfare of the State.

SEC. 2. The legislature shall provide by law for a board of labor, conciliation, and arbitration, which shall fairly represent the interests of both capital and labor. The board shall perform duties and receive compensation as prescribed by law.

SEC. 3. The legislature shall prohibit:

First. The employment of women or of children under the age of 14 years in underground mines.

Second. The contracting of convict labor.

Third. The labor of convicts outside prison grounds, except on public works under the direct control of the State.

Fourth. The political and commercial control of employees.

SEC. 4. The exchange of black lists by railroad companies or other corporations, associations, or persons is prohibited.

SEC. 5. The right of action to recover damages for injuries resulting in death shall never be abrogated, and the amount recoverable shall not be subject to any statutory limitation.

SEC. 6. Eight hours shall constitute a day's work on all works or undertakings carried on or aided by the State, county, or municipal governments, and the legislature shall pass laws to provide for the health and safety of employees in factories, smelters, and mines.

SEC. 7. The legislature, by appropriate legislation, shall provide for the enforcement of the provisions of this article.

NOTE REGARDING BUREAUS OF STATISTICS OF LABOR.

The following minor emendations are offered to the table relating to dates of establishment, etc., of bureaus of labor statistics printed on pages 110 and 111 of Bulletin No. 1:

MARYLAND.—February 25, 1892, a new organic act relating to this bureau was passed in which, in addition to ordinary labor statistics, provision was made for gathering statistics of agriculture, mining, transportation by railroad and other means, and of shipping and commerce. Also that reports should be made annually instead of biennially as heretofore. The new bureau is known officially as the Bureau of Industrial Statistics.

CONNECTICUT.—During the existence of the original bureau (July 12, 1873, to July 23, 1875) two annual reports were made, instead of one as stated in Bulletin No. 1, one in May, 1874, and one in May, 1875.