countless rows of newly planted saplings, if at the same time we were to neglect as a nation the agencies already at hand to preserve against greed and vandalism the magnificent endowments which nature has committed to our care.

Therefore too much stress cannot be laid upon the farreaching influence of the policy inaugurated by Secretary Noble, with President Harrison's cordial approval, whereby are saved for all time the chief of those great natural monuments which remain the property of the Government. The work of the Massachusetts Metropolitan Park Commission and of the Trustees of Public Reservations, as above set forth, comes more nearly home to every citizen or villager, and finds a corollary in the crying need of professional instruction in the

care of natural scenery—a subject to which we call attention, and which may well commend itself to our universities. The massing of these topics makes a comprehensive showing of some of the intelligent and patriotic efforts now on foot for the conservation of natural scenery, and, we hope, will serve to stimulate those who see in these movements another step forward in the prosperity of our people, both as local communities and as a nation.

Since the above was written the cause of forestry has met with new encouragement in the appointment, as Secretary of Agriculture, of Mr. J. Sterling Morton, of Nebraska, whose connection with Arbor Day is well known.

OPEN LETTERS.

Governmental Care for Working-men.

I. OHIO'S FREE PUBLIC EMPLOYMENT OFFICES.

ON the first Monday in January of each year, simultaneously with the gathering of the State legislature, the Ohio Trades and Labor Assembly meets in annual session at Columbus.

The delegates have for their constituency the entire trades-union element of Ohio. Their deliberations, which continue throughout the week, are devoted chiefly to the discussion of labor legislation. Measures looking to the improvement of the wage-worker's condition are formulated into bills, and existing or proposed laws judged inimical to his interests are condemned. The time and place of meeting are fixed by the Assembly with the design of bringing its proceedings prominently to the notice of the law-making powers of the State. But lest the impression made should prove too transitory for any practical results, a lobbying committee is appointed, whose duty it is to remain at the capital during the session of the legislature, and urge consideration of the reforms that have been decided upon by the organization.

A number of meritorious enactments owe their places on the statute-books to this influence. These consist mostly of measures throwing safeguards about employees whose occupations endanger life and limb, improving the sanitary condition of factories, and regulating child labor.

A noteworthy departure was made, however, from the ordinary line of labor legislation in 1890, when the trades-union element secured the passage of a law creating free public employment offices, to be operated under State auspices. This experiment, being without precedent and involving great possibilities, has attracted wide-spread interest on the part of labor reformers and students of social problems. Over two years of history have now been made by these institutions—sufficient to determine their practicability.

The agitation of this question dates from 1889. During the Paris Exposition, through the liberality of the Scripps League of newspapers, a delegation of American working-men was given an opportunity

¹The "Cincinnati Post," the "Detroit News," and the "St. Louis Chronicle," published by E. W. Scripps.

of studying the wage question abroad. Among the party was Honorable W. T. Lewis, at present Commissioner of the Ohio Bureau of Labor Statistics, but at that time a national officer in the coal-miners' organization of the United States. While in Paris, Mr. Lewis became deeply interested in the Free Intelligence Office of that city, and made it the object of close observation. Upon returning to his home in Ohio, he brought the matter to the attention of the trades-unions of the State, which espoused the idea of giving the system a local application.

The Free Intelligence Office of Paris is supported jointly by the government and the municipality. It consists of a department, presided over by a secretary, for each of the principal trades, and one for unclassified trades and minor occupations, collectively. Branch offices in all the principal centers of industry throughout the country coöperate with headquarters, thus forming a complete system of labor intelligence.

To come within the most liberal provisions that could be expected of a State legislature, it was necessary to modify this plan until little but the bare principle remained. The Ohio law, as passed, was very simple. The offices were attached to the Labor Commissioner's department, and that official proceeded to appoint a superintendent and a clerk, the latter a female, for each of the five cities whose municipal grade brought them within the requirements of the statutes, namely, Cincinnati, Cleveland, Columbus, Toledo, and Dayton. The State was to defray all expenses except the salaries of the superintendents and clerks, which were to be fixed and paid by the several cities. A delay was experienced in each instance in getting the matter through the municipal board; but as soon as possible quarters were opened in the business center of each city, and the work of receiving applications began. The names, addresses, and occupations of those seeking work were registered in a book, and a separate record was made of the wants of employers. The superintendent was forbidden to accept from applicants remuneration in any form. On the other hand, though required to exercise an intelligent discrimination in the discharge of his duties, he assumed no responsibility as to the character of applicants or the payment of wages. No one was guaranteed a situation. Those registering for employment were sent merely as available persons to vacancies in their particular lines of work. This, in brief, is the manner in which the public employment system was inaugurated. Practically there has been no change in the method of operation.

A statement of the work accomplished at the outset by each office, from the date of opening in 1890 to

January 1, 1891, is herewith given:

The Toledo office, in 27 weeks, registered 7021 applications, of which 3053 were from employees, and 3968 from employers; positions were secured for 1826 persons.

The Dayton office, in 26 weeks, registered 6289 applications, of which 4027 were from employees, and 2262 from employers; positions were secured for 817

The Cleveland office, in 25 weeks, registered 8220 applications, of which 3800 were from employees, and 4420 from employers; positions were secured for

The Cincinnati office, in 23 weeks, registered 12,171 applications, of which 6581 were from employees, and 5590 from employers; positions were secured for

2956 persons.

The Columbus office, in 17 weeks, registered 4589 applications, of which 2675 were from employees, and 1914 from employers; positions were secured for 1209 persons.

In all, 20,136 applicants were registered, 18,154 calls were received from employers, and 8988 persons were

furnished employment.

During the year 1891, there were 57,579 applications filed with the five offices, 34,371 by employees, and 23,208 by employers; 15,525 persons were furnished employment. In 1892 there were 49,159 applications filed, 26,957 by employees and 22,202 by employers; 13,845 persons were furnished employment. The falling off in 1892 was confined to the fore part of the year, and was due to certain contingencies in the management of the offices for which proper provision had not been made. From the date of the opening of the first office, June 26, 1890, to January I, 1893, a total of 81,464 applicants registered for situations, 54,507 being males and 26,957 females; 63,564 calls for help were made by employers, 29,395 being for males, and 34,169 for females; 38,358 persons were placed in positions, 18,529 being males, and 19,829 females. Of the total number of applicants for situations 47 per cent. have been furnished employment, and of the total number of wants of both employees and employers 52.8 per cent. have been supplied. Eliminating from the list of applicants for work a transient class, who after registering never call again, and giving the offices credit for those who procure situations through intelligence received from these sources at second hand, a much better showing would be made. The proportion of common labor and domestic help to the total number of situations procured has steadily decreased, while the trades and other skilled occupations have shown a constant gain.

The figures given represent a vast saving of individual effort. The wants of capital and labor have been in a measure concentrated and fitted together, resulting in economy of time and energy to both industrial factors. From a practical business point of view, the

usefulness of the public employment system has been demonstrated in the extensive and continuous use made

of it by the general public.

On the humane side of the question, also, the most gratifying results are seen. According to a conservative estimate, \$100,000 are annually saved to the working people of the State by forcing the private intelligence bureaus from the field. Though always in disrepute, an investigation of this evil disclosed a state of affairs much worse than had been credited. Through systematic misrepresentation money was taken from the pockets of those who could least afford to spare it, and but little, if anything, was given in return. These institutions have entirely disappeared in three of the cities where the free offices are in operation, and must eventually go out of existence altogether. Working people have been quick to perceive in the public employment office something that has a tendency to do away with the humiliation of seeking the means of livelihood from door to door. They appreciate the independence of being able to meet the employer on common ground. The paths to industry are made more accessible. Under stress of circumstances, applicants of high education and abilities often eagerly accept some menial work which they would shrink from personally soliciting.

The employment office is a democratic institution, embracing among its patrons all classes of people. Being a public office, operated by the State, there is no atmosphere of charity surrounding it. The superintendent, whose duties consist, in part, in gathering information for the annual report of the department with which he is connected, is afforded peculiar opportunities for studying the labor question. He is in constant touch with all branches of wage-workers, and gains a knowledge of their conditions of life which could be learned in no other way. The five free public employment offices of Ohio cost less than \$10,000 a year, including the salaries of superintendents and clerks, paid by the cities. The hindrances incident to any new departure having been to a large extent overcome, much greater results for this outlay will be realized in the future.

Labor organizations all over the country have watched the progress of the Ohio experiment with deep solicitude. Much interest has also been manifested by charitable organizations in various cities. Letters of inquiry come from nearly every part of the United States and Canada, many of them bearing the signatures of prominent officials, including representa-

tives of foreign governments.

Now that the experimental stage has been passed, action is being taken to introduce the system in other States. A year ago Governor Boies, of Iowa, in his annual message to the legislature, recommended its adoption. The labor commissioners of all the principal States of the Union, assembled in national convention at Denver, Colorado, last May, passed resolutions urging the general establishing of free public employment offices. Other organizations have since then expressed themselves to the same effect. The most advanced sentiment appears in Pennsylvania and Missouri, but from present indications a number of State legislatures will be called upon to consider the question in the near future.

C. C. Johnston.

II. AN EXAMPLE FROM GERMANY.

For the care and protection of work-people in Germany, effort is being made in two different directions: by many employers of labor spontaneously, and by the government under a very thorough system of inspection.

And first, certain employers have sought to improve the condition of their working-men in a very practical way. The necessaries of life are purchased wholesale, and are sold to the employees at actual cost, sometimes even below it. From government reports for 1890, just published, the following details are taken.

In the district of Düsseldorf large quantities of bread were provided and sold at cost. Forty-two firms are named who purchased between five and six million pounds of potatoes, and fifty-nine firms who purchased over twelve thousand tons of coal, all of which was resold at cost. The great Baden Aniline and Soda Manufacturing Company has established stores for selling provisions at low rates, which are maintained at an annual loss of 30,000 marks (over seven thousand dollars). The Mansfeld Copper Works in 1890 employed 17,687 workmen, and sold to them over nine million pounds of rye-meal at a rate amounting to 107,000 marks (\$26,000) less than cost. A similar system is carried out by Krupp, who also for the better housing of his workmen has built at Essen 3677 family dwellings and five barracks, the latter with accommodation for from 2000 to 3000 workmen. The Baden company above mentioned has established a sanitarium in the country, to which those of their workmen whose health requires it are sent for a time in the summer.

The arrangement above mentioned for supplying work-people with the necessaries of life at wholesale cash prices much deserves to be imitated, especially in this country, where the difference between wholesale and retail prices is excessive. And when this system is compared with the companies' stores in the coal and iron regions, carried on upon the well-known "pluckme-store" system, the contrast is very striking.

This voluntary action on the part of employers in one direction has been supplemented in another by a

complete system of government inspection.

It happens unfortunately that many branches of industry are attended with more or less danger to the health and life of the work-people employed in them. Protection against such dangers cannot be safely left to the employer. All precautionary measures involve expense, and the employer who will not use them can produce his wares more cheaply and compete favorably with those who do. Consequently, the matter is one that belongs properly to government direction.

The first step taken in Germany was to appoint commissions, which investigated all the dangerous trades, and reported very fully on the evils found, and their remedies. The entire empire was then divided into fifty-one districts, for each of which a competent inspector was appointed. These inspectors have a right to examine every part of all the factories and work-shops, and to require the establishment of all such reforms as they judge necessary. They confer not only with the employer, but with the workmen. A few instances will serve to show the beneficial effects which have resulted from this system.

In the district of Alsace-Lorraine 663 factories were inspected, out of which 286 were reported as having insufficient ventilation. Out of these 286 factories 209 were for textile industries. Much improvement was being made by the adoption of the system of ventilating with warm and moist air. The introduction of electrical lighting has done much to improve the atmosphere of the work-rooms.

In the manufacture of mirrors great improvement in the health of the work-people has been brought about by the use of silver instead of mercury for coating glass. In the town of Fürth the mirror factory is reported as using silver exclusively for the mirrors sent to North America, and for about two thirds of its entire product. At this factory the number of days of illness caused by mercurial poisoning in 1885 was 4074; in 1889 it was 1003. In 1890 this was reduced to 148, and since May, 1890, there have been no cases at all. When the serious nature of mercurial poisoning is considered, the great improvement brought about, partly by the use of a less poisonous metal and partly by better methods, can be understood.

In the district of Cassel-Wiesbaden the manufacture of chrome gave rise to sickness among the workpeople. By improved methods the number of sick days was reduced in one year from 2865 to 899, so that at present the time lost by sickness by those actually engaged in the factory barely exceeds the proportion of loss among the outdoor workmen, masons, carpen-

ters, laborers, etc.

In the great lead-works at Tarnowitz in the district of Oppeln, efforts have been made to check the malignant lead-poisoning caused by the escape of lead fumes. This has been done by connecting all the different furnaces with a powerful ventilator, which draws out the fumes by exhaustion and forces them into a tall chimney. Arrangements are also made for purifying the gases from the lead which they contain. The effect of these changes on the health of the work-people has been very remarkable. The number of sick days has been reduced to one sixth of what it was formerly.

In the manufacture of phosphorus matches, the cases of constitutional injury by phosphorus poisoning have

been very greatly reduced in number.

The manufacture of mineral fertilizers is attended with danger in all cases where the phosphate rock contains fluor-spar. Such rock when treated with sulphuric acid disengages vapors of hydrofluoric acid which are very injurious to the lungs and also destructive to vegetation. At a factory in the district of Breslau-Liegnitz this danger is completely overcome, and even a profit is made, by bringing the hydrofluoric vapors into combination, and thus obtaining artificial cryolite.

The fouling of streams by the drainage of factories is in all manufacturing districts a source of much trouble. The chemicals used are for the most part injurious to the water in every way, rendering it unfit for drinking, and tending to destroy all animal life contained in it. As a single example it may be mentioned that it has been ascertained by actual trial that one part of burnt lime introduced into 100,000 parts of water in a river is sufficient to kill all the fish contained in it. Stringent measures have been taken in Germany to diminish this evil, though in some cases, and particularly in the manufacture of beet-sugar, it has proved very difficult to find effectual means. But by the use of chemicals it

can be accomplished. The Ströbnitz factory, which works up 70,000 tons of beets each season, and whose waste water amounts to over 1000 gallons per minute, purifies this so thoroughly that a specimen taken by the inspector remained three weeks in a warm room odorless. In some cases it has proved that waste waters containing organic matter which were very injurious to streams by reason of the fermentation which they set up, were found on the other hand very useful to fertilization by means of irrigation. For example, a starch factory on the river Werra caused much damage by fouling the water with the waste products of the manufacture. But when these products were carried to the neighboring farms their fertilizing qualities proved so valuable that the demand for them could hardly be met.

These facts, all derived from official sources (the reports of the inspectors epitomized in the "Chemiker Zeitung"), serve to show what valuable reforms can be effected through the agency of intelligent inspection. The need for such reforms is fully as great here as it was in Germany. The work that meets the eye of the general public is for the most part very healthy. Masons, bricklayers, and carpenters, and generally all mechanics connected with the building trades, have nothing to complain of. Laboring work in cities and in the country is healthy. Where there is unhealthy work and dangerous, it generally goes on in factories and buildings of which the public know little, and to which visitors would not be welcome. In this country, as well as in Germany, there are more persons wanting work than there is work to be done, and consequently there are always people willing and ready to accept any employment, however dangerous. Nor can the humanity of employers always be trusted to supply safeguards, however simple. One or two instances that have come under my observation may serve to illustrate this. There is a factory at which farmers' forks are made in large quantity. These forks require to be ground: this grinding fills the air with small particles of iron, which are inhaled by the workmen, and cause what is known as grinder's consumption. Several of the workmen have died in consequence, leaving families to be cared for by charitable neighbors. The neighbors have urged the owner to introduce a simple and inexpensive contrivance for arresting the particles of iron by means of a magnet, a device in successful use elsewherefor example, at the Yale Lock Works. The owner refused, although it was shown to him that at the establishment just named the iron saved very nearly paid for the very small cost of the arrangement, and he continues to expose his work-people to this danger.

Some time ago I had occasion to visit a factory at which a chemical is made, the production of which is accompanied by the escape of very poisonous vapors. The work was too dangerous to be carried on in any closed space. It was therefore done out of doors, but no chimney had been built to carry the vapors into the upper air, and they were allowed to spread freely through the inhabited neighborhood. Various accidents had happened; a man who attended to the machine for a short time found his lungs destroyed. The foreman said to me that he had not been able to get anybody to take his place, and was running the machine himself. A few days previous some one venturing into its neighborhood at night did not come back. Search was made for him, and he was found on the ground insensible.

Besides this, from what I noticed respecting other poisonous exhalations, I was surprised that any one could work there and survive.

In many textile factories ventilation is purposely excluded, because the work is found to be more perfect when executed in a hot and damp atmosphere. In this way the air becomes so tainted and oppressive that a person not accustomed to it is soon overcome. In some factories the system of introducing a constant supply of air which is warm and damp, but at least fresh and pure, has been adopted. It should be general.

In all these cases those who entirely refuse to adopt precautionary measures can, as already remarked, of course, work a little more cheaply than those who do, thus obtaining a most undeserved advantage. This is one of the many reasons which make the intervention of government a necessity.

It is unfortunately true that in our country the difficulties are exceptionally great. The matter does not fall within the province of the National Government, but must be dealt with by a great number of separate States. Uniformity as it exists in Germany is hardly obtainable. Moreover, manufacturers can always make themselves heard, and are likely to declare that if strict rules are made in any one State, they will establish themselves in some other State where the system is more lax. The working people, whose voice should be heard in this matter emphatically, are often prevented from accomplishing anything by the incapacity of those whom they have selected as leaders.

It is therefore the intelligent people throughout the country who must be made, if possible, to see the importance of this matter, and the injustice of a system under which a workman is tempted, through the stress of necessity, to accept, more or less ignorantly, work which endangers his health and may destroy his ability for self-support. The hope for better things lies in an enlightened public opinion, such as will constrain our State governments to adopt a general system of inspection.

M. Carey Lea.

American Artists Series.

GEORGE INNESS.

WHILE it is doubtless true that we have not yet a distinctive national art,—that is, an art which is spontaneous and indigenous,—it is also true that we have among our artists several who, though not without having profited by the world's best art, are American in the fact that their art is peculiarly their own, and uninfluenced by special schools and fads of Europe.

The man among American painters who is preëminent in this respect is George Inness. His art is entirely his own, and does not contain a hint of the succession of landscape-painters. It is reminiscent of nothing but nature, of which it represents every mood, every season, and every time of day. So rich is his treasury of nature's secrets, so poetic and fertile his brain, so great his power of execution, that although his output is probably as large as that of any other living artist, he never repeats himself, never paints twice just the same mood of nature, the same atmosphere or envelop. Surely, if Alfred Stevens is correct that "art is nature seen through the prism of emotion," then Inness can properly claim to be ranked