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**UNITED STATES DEPARTMENT OF AGRICULTURE**

**BULLETIN No. 414**

Contribution from Office of Public Roads and Rural Engineering  
LOGAN WALLER PAGE, Director

Washington, D. C.

PROFESSIONAL PAPER

December 15, 1916

**CONVICT LABOR FOR ROAD WORK**

By

**J. E. PENNYBACKER**, Chief, Division of Road Economics, and  
**H. S. FAIRBANK**, Highway Engineer, Office of Public  
Roads and Rural Engineering, and **DR. W. F. DRAPER**,  
Passed Assistant Surgeon, United States  
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INTRODUCTION.

Within recent years the policy of utilizing convict labor in road construction or in the preparation of road materials has received serious attention by State legislatures, and a number of the States are now actively employing convicts on road work, while other States are earnestly seeking information on the subject.

Among the many problems involved are the following:

- (1) Whether it is profitable to use convicts for road construction, and if so, under what conditions;
- (2) The systems of discipline and management productive of the best results;
- (3) The character and economy of structures and equipment best adapted to conditions in various sections of the country;
- (4) The character, preparation, and cost <sup>1</sup> of food;

<sup>1</sup> It must be borne in mind that all prices of foodstuffs, clothing, and camp equipment herein quoted are those prevailing in 1915.

NOTE.—This bulletin is intended to give State officials in charge of road work accurate and comprehensive information on the use of convict labor for building roads.

- (5) The steps necessary to secure proper sanitation and hygiene;
- (6) The most suitable system of cost keeping and record;
- (7) Detailed and comparative cost data on every phase of the subject.

As no single State can answer these varied and perplexing inquiries, an exhaustive investigation has been conducted by the Office of Public Roads and Rural Engineering in cooperation with the United States Public Health Service during a portion of the calendar years 1914 and 1915. Personal visits were made to convict camps and conferences were held with State highway and prison officials in the States of New York, New Jersey, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida, Mississippi, Louisiana, Texas, Michigan, Colorado, New Mexico, Arizona, Utah, Wyoming, California, Washington, and Oregon. On these visits the most searching inquiries and inspections were made covering administrative, engineering, economic, disciplinary, and health conditions at the camps.

These personal investigations were supplemented by correspondence with prison and highway officials in all parts of the country, and in addition many Government publications, State documents, treatises, and reference works were consulted in the preparation of this bulletin.

It is the purpose of the authors to cover as nearly as possible all questions that might arise in connection with either the adoption of a policy relating to the use of convict labor in road work or the actual working out of such a policy. To this end a presentation and discussion of the principles involved, a digest of convict road laws, and a discussion of every phase of operation are embodied in the bulletin, together with specific detailed instructions for the carrying out of all recommendations which the authors make.

In the course of the investigation much valuable and detailed information was obtained which could not be brought within the limits of a bulletin. This information, however, is filed in the Office of Public Roads and Rural Engineering, and inquiries which may not be answered with sufficient completeness in the bulletin may be covered adequately by correspondence.

#### SYSTEMS OF CONVICT LABOR.

In order to weigh the relative advantages and disadvantages of utilizing convict labor in public highway construction and other occupations, a knowledge of the systems of convict labor in operation is helpful. These systems, six in number, are known as the lease, the contract, the piece-price, the public-account, the State-use, and the public-works-and-ways systems, respectively, and are explained as follows.

**LEASE SYSTEM.**

Under this system the State disposes of its convicts to private lessees, who agree to become responsible for guarding, clothing, feeding, transporting, and giving medical attention to the convicts under rules specified by the State. The lessees provide steady employment for the convicts and pay to the State an agreed amount, the State providing for adequate inspection to insure enforcement of its rules. This system, formerly widely practiced, has been abandoned in all States except Florida, and exists there in only a modified form. It is therefore unnecessary to set forth its intrinsic defects.

**CONTRACT SYSTEM.**

Under this system the State sells the labor of the convicts, but does not relinquish its care or control. As generally practiced, the State maintains an institution and guards, feeds, clothes, and houses the convicts, and provides medical attention, while the contractor supplies the raw material, superintends the work, and pays a stipulated amount per capita for the labor. This system is now practiced in whole or in part by the following 18 States: Alabama, Connecticut, Delaware, Indiana, Iowa, Kentucky, Maryland, Missouri, Nebraska,<sup>1</sup> New Hampshire, North Carolina, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

The contract system is an advance over the lease system, as the contractor assumes the responsibility for profit and loss, the State is assured a definite income, and the interests of the prisoners are safeguarded by the prison officials. There is, however, a tendency to conflict of interests and responsibility between the representatives of the contractor and of the State. In addition, a most powerful objection to the contract system is advanced by organized labor and by manufacturers, to the effect that its product comes into direct competition with the product of free labor.

**PIECE-PRICE SYSTEM.**

This system differs from the contract system only in the manner of payment for and supervision of the work. The contractor, instead of paying for the labor of the convicts, pays an agreed amount for each piece or article manufactured. Usually under this system the State supervises the work, but this is sometimes done by the contractor. Under the former plan the prison officials must possess ability to manage the industrial as well as the penal features of the work. At present this system is practiced in whole or in part in Alabama, Connecticut, New Jersey,<sup>2</sup> and Rhode Island.

<sup>1</sup> The contract system is now being discarded in Nebraska in favor of the State-employment plan, and experiments are being made with road and farm work.

<sup>2</sup> The piece-price system was abolished in New Jersey by act of the legislature in 1911, but no fund was provided for any other system, hence it is still in force on a day-to-day basis.

**PUBLIC-ACCOUNT SYSTEM.**

Under this system the private contractor is eliminated entirely, as the State, in addition to maintaining its own penal institution, conducts all of the industries in which the convict labor is utilized, and maintains its own selling organization to dispose of the product. The principal difference between the piece-price system and the public-account system is that in the latter the profit derived from convict labor goes to the State instead of to the private contractor. This system is now followed in whole or in part by the following 19 States: California, Illinois, Indiana, Kansas, Maine, Massachusetts, Michigan, Minnesota, Mississippi, New Mexico, North Carolina, North Dakota, Pennsylvania, South Dakota, Tennessee, Texas, Washington, Wisconsin, and Wyoming.

**STATE-USE SYSTEM.**

The only difference between this and the public-account system lies in the disposal of the product, as under the public-account system the product is sold and under the State-use system it is limited to the use of State institutions. This system is more widely followed than any other, and is now in effect in whole or in part in the States of Arizona, Arkansas, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Montana, New Hampshire, New Jersey, New Mexico, New York, Nevada, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

A smaller measure of competition with free labor is involved in this system than under those already described, and it encroaches in a lesser degree upon the field of the private manufacturer. The serious objections to the system are that the State institutions require a great variety of articles, while the demand for each individual article may be quite limited. Obviously, the State can not equip its penal institutions to manufacture all of the articles used by State institutions, and if it devotes its efforts to the production of a few of such articles the demand may not be sufficient to furnish full-time employment for the convicts.

**PUBLIC-WORKS-AND-WAYS SYSTEM.**

This system, which has been gaining ground in recent years, involves the use of convict labor in the construction and repair of public buildings, public highways, breakwaters, levees, drainage and irrigation ditches, and similar works rather than in the production of marketable articles or merchandise, and it is under this system that the prominence of convict labor as a factor in highway improvement finds its place. It can be seen readily that under this system there is

less competition with free labor and none with manufacturers, but, on the contrary, the creation of public utilities by means of convict labor is more than likely to give greater employment to free labor and to create a greater demand for the products of the manufacturer. This system is now practiced in whole or in part by the following 27 States: Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Illinois, Kentucky, Louisiana, Montana, New Jersey, New Mexico, New York, Nevada, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

The above list includes only those States in which prisoners of the State penitentiary are being employed under the public-works-and-ways system and not those, such as Alabama, Maryland, Michigan, and others, in which county convicts or prisoners of State institutions other than the penitentiary are so used.

TREND OF THE WORK SYSTEMS, 1885-1915.

In order to indicate the trend of convict labor under the systems above described, Table 1 has been prepared, in which the statistics for 1885 and 1903-4 were compiled from annual reports of the Commissioner of Labor, and the statistics for 1914-15 were obtained by correspondence conducted by this office with 186 of the 296 institutions mentioned in the 1903-4 report of the Commissioner of Labor. The statistics in the table are based upon the daily average number of inmates engaged in productive work under the respective systems.

TABLE 1.—Convicts employed under various systems from 1885 to 1915.

System of work.	1885		1903-4				1914-15	
			296 institutions.		186 institutions.		186 institutions.	
	Number.	Per ct.	Number.	Per ct.	Number.	Per ct.	Number.	Per ct.
Lease .....	9,104	20.1	3,652	7.1	2,925	8.4	950	1.4
Contract .....	15,670	34.6	16,915	33.1	12,126	34.7	6,981	10.6
Piece price .....	5,676	12.5	3,886	7.6	2,000	5.7	1,193	1.8
Public account .....	14,827	32.8	8,530	16.7	6,128	17.6	11,807	18.0
State use .....	.....	.....	12,045	23.5	7,152	20.6	33,805	51.4
Public works and ways .....	.....	.....	6,144	12.0	4,542	13.0	11,063	16.8
Total .....	45,827	100.0	51,172	100.0	34,873	100.0	65,799	100.0
Total of public-account, State-use, and public-works-and-ways systems .....	14,827	32.8	26,710	52.2	17,822	51.2	56,675	86.2

In 1885 the State-use and public-works-and-ways systems were not reported separately, as all such work was then classified under the public-account system. Therefore, in order to render a comparison practicable, the table shows for each of the periods mentioned the total number of convicts employed for the benefit of the State. It should be noted that the table shows quite clearly the

decline in the number of convicts employed by private industries under the lease, contract, and piece-price systems, and the increasing tendency to adopt those systems under which the convict is employed entirely for the benefit of the State.

#### ROAD WORK FOR CONVICTS.

In much of the discussion of the proposition of road work for convicts, there is evident a popular belief that the employment of convicts in the open air, which such work entails, is a radical departure from well-established principles and a development of very recent origin. Nothing could be further from the truth. Such employment has been in practice at one time or another in all countries, and among the ancient nations no other method of employment was known. The ancient prisons were places of detention and torture only; labor formed no part of their regimen. But there are numerous references in history to the employment of prisoners of war and of criminals on the public works of the ancient kingdoms and almost invariably these works were performed necessarily in the open air. In fact, the provision of indoor labor is of comparatively modern origin and dates back no further than the development of the workhouse in the sixteenth century, while the penitentiary, as now known, is practically a product of the nineteenth century.

In America perhaps the earliest record of the employment of prisoners on public works is found in statute 29 of the Virginia Colonial Assembly, enacted in 1658.

Somewhat later in the French colony of Louisiana, it is recorded that "Bienville, reappointed governor (1718), intending to found a town on the river, set a party of convicts to clear up a swamp—the site of the present city of New Orleans."<sup>1</sup>

However, the criminal class in the majority of the colonies, with the exception of those convicts who were sent to them by the mother country as "servant criminals," was very small, and there seems to have been no general system of labor as a punishment for those convicted within their boundaries. Indeed, as all who are familiar with the colonial history of America are aware, the barbarous practices of tongue splitting, branding, burning at the stake, whipping, ducking, and exposure to the public gaze in the stocks and pillory were the methods most favored by the good colonists for the punishment of their own offenders, and the number of crimes for which the death penalty was prescribed was very large.

After the close of the Revolution, one of the earliest measures in Pennsylvania "was in the direction of reforming the Penal Code, and in 1786 an act was passed providing that certain crimes, which until

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<sup>1</sup> History of the United States, by Rich and Hildreth, vol. 2, p. 281.

then had been capitally punished, should thereafter be punished by labor 'publicly and disgracefully imposed.' Under this law the convicts were employed in cleaning streets, repairing roads, etc., their heads were shaved, and they were clothed in a coarse uniform."<sup>1</sup>

But as will be noted, the motive which inspired this early experiment in convict road building in the United States was wrong, and its effect is best described in the words of "a most respectable eye-witness," as reported by William Crawford, esq., in his report "to Lord Viscount Duncannon, His Majesty's principal secretary of state for the home department" in 1834 on "The Penitentiaries of the United States." He said:

The directions of the law of 1786 were soon found to be productive of the greatest evils, and had a very opposite effect from what was contemplated by the framers of the law. The disorder in society, the robberies, the burglaries, breaches of prison, alarms in town and country, the drunkenness, profanity, and indecencies of the prisoners in the streets, must be in the memory of most. With these disorders the number of criminals increased to such a degree as to alarm the community with fears that it would be impossible to find a place either large or strong enough to hold them. The severity of the law and the disgraceful manner of executing it led to a proportionate degree of depravity and insensibility and every spark of morality appeared to be destroyed.

For these reasons the law of 1786 was repealed and in 1790 the first penitentiary in the United States was constructed in Philadelphia. All convict labor in the State of Pennsylvania was thereafter performed within its walls.

Following this example penitentiaries were established in rapid succession in Connecticut, New York, Virginia, Massachusetts, Vermont, Maryland, New Hampshire, Ohio, New Jersey, Tennessee, Kentucky, Maine, District of Columbia, Indiana, Georgia, and Illinois. In 1834 when William Crawford, esq., made his report to Lord Viscount Duncannon, the following were still without them: The States of Rhode Island, Delaware, North Carolina, South Carolina, Alabama, Mississippi, Louisiana, and Missouri, and the Territories of Florida, Michigan, and Arkansas.

From the above classification it will appear that, in general, the Northern and Eastern States were provided early with penitentiaries, whereas the Southern and Western States had no such institutions. The same classification may be made in respect to the system of labor provided for the employment of the convicts. Whereas the Northern and Eastern States adopted the contract and State-account systems and employed their prisoners in indoor workshops, the practice of leasing convicts to private persons for outdoor work was followed in the South and West practically from the foundation of the Republic.

The reasons for these early differences are readily seen in the different conditions and environment of the two sections—North and

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<sup>1</sup> Report of the Commissioners on Penal Code of Pennsylvania, p. 13.

South. In the North the severity of the winter climate rendered much outdoor work during that season impracticable. If the convicts were to be employed the year round—and it was recognized that they should be—it was necessary to provide the means of such employment indoors during the winter season; and the institution once established with provision for indoor work, the easy and obvious thing to do was to make use of it winter and summer. In the South, on the other hand, it was thought by many persons that the hot, summer climate would be unfavorable to the employment of prisoners indoors during that season, while the mild climate permitted outdoor work at all seasons. Conditions were the reverse of those existing in the North and the pursuit of the same logic in the two sections resulted in the two opposing methods.

In addition to the effect of the difference in climate upon the employment of convicts in the North and South, respectively, industrial conditions caused by the development of large ports and manufacturing centers in the North, as contrasted with the extension of the plantation system of agriculture in the South, further accentuated the tendency to indoor employment in the North and outdoor in the South. In the North it followed logically that the convicts should be employed in manufacturing, which was the prevailing occupation of the community. The industries were the manufacture of boots and shoes, hollow ware, cooperage, harness, shirts, overalls, and other articles of trade. The same logic of conditions caused the working of the convicts in the South at outdoor tasks, such as in the mines, in the lumber and turpentine industries, in the construction of railroads, and, to some extent, in farming. As has been shown from the early experience of Pennsylvania, the attempt to employ convicts outdoors in the midst of a comparatively dense population brought about such intimate contact of convicts and public as to degrade the former and seriously to affect the order and well-being of the latter. This objection could not be raised in the South, where the population was comparatively sparse and widely distributed on plantations and manors, and where the convict, working out of doors, would fall under the observation of only occasional travelers on the lightly traveled highways.

After the failure in Pennsylvania, convicts had been rarely used in the United States on public works until nearly 1880. In England, the various attempts to abolish the system of convict transportation led somewhat earlier to the extensive and profitable use of convicts in this way, notably in the construction of the Portland breakwater, which was begun in 1848, and upon which an average of 1,000 convicts were employed for almost 25 years. In the United States the first of the modern laws permitting the regular employment of

convicts on public works appears to have been passed by the legislature of North Carolina in 1867. This law provided for the employment of county convicts on county roads in case any county should desire to use them. Subsequently similar laws were passed in North Carolina in 1873, 1875, 1877, 1879, and 1889. But the first work attempted on a practical scale under these laws was conducted by Mecklenburg County, in 1885.

Previous to this work had been begun by a few counties in the States of Georgia and Tennessee; but, though there developed immediately a considerable sentiment in favor of such employment, the use of convicts on the roads in the South did not become general until about 1890. Even then the convicts so employed were county convicts, and in practically all of the Southern States the State prisoners still were employed in other ways under the lease system.

About this time interest in the improvement of the roads of the country having been stimulated largely by the advent of the bicycle, the plan of using State convicts to accomplish the necessary work was widely agitated, and this led to the settled policy in the South of employing the convicts in that manner. For a time the Northern and Western States rejected the idea upon the ground that such labor would entail the degrading exposure of the convict to the public gaze, the same reason that had caused the abolition of the plan in Pennsylvania in 1790. In 1893 the new road law in Delaware provided for the purchase of a stone quarry and the preparation by the prisoners of stone for road work, and shortly afterward a more elaborate plant of this character was established at Folsom prison in California. New Jersey and New York also were among the first of the Northern States to enter into work of this sort. But the employment of prisoners in the actual construction of highways in the North and West is a development of the last ten years; and the reason which ultimately prompted the action in these sections were not economic considerations as in the South, but the desire to relieve the overcrowded condition of the penitentiaries, to furnish employment that would conflict as little as possible with the interests of free labor and to provide a particular form of employment for certain prisoners of the better sort.

Table 2 shows the number of prisoners and the percentages of the total prison population employed in indoor and outdoor work, and on road construction only, in the years 1885, 1903-4, and 1914-15, in a number of representative institutions in the United States. The figures for 1885 and 1903-4 were taken from the reports of the Bureau of Labor and those for 1914-15 were obtained by correspondence. In this table, as in Table 1, the figures for the latest

period represent only 186 of the 296 institutions included in the full report for 1903-4; but a comparison on the basis of identical institutions is made possible by the inclusion of the third and fourth columns of 1903-4.

This table shows that, though the proportions of convicts employed in indoor and outdoor work have not changed greatly since 1885, the numbers and percentages of convicts employed in road work have steadily increased from 584, or 1.3 per cent of the total convict population represented in 1885, to 8,341, or 12.7 per cent of the convict population represented in 1914-15. That the percentage of prisoners engaged in outdoor work has not increased correspondingly may be due to the partial substitution of road work for railroad building, lumbering, the turpentine industry, farming, and other forms of outdoor work.

TABLE 2.—Convicts employed in indoor and outdoor work and in road work in 1885, 1903-4, and 1914-15.

Employment.	1885		1903-4				1914-15 186 institutions.	
			296 institutions.		186 institutions.			
	Number.	Per ct.	Number.	Per ct.	Number.	Per ct.	Number.	Per ct.
Indoor work.....	28,280	62.5	28,479	55.7	19,967	57.3	36,036	55.8
Outdoor work.....	16,997	37.5	22,693	44.3	14,906	42.7	28,593	44.2
Total.....	45,277	100	51,172	100	34,873	100	64,629	100
Road work.....	584	1.3	3,508	6.8	2,497	7.1	8,341	12.7

A number of the States are now using convict labor in the construction of roads largely because present conditions have forced a change in the old methods of employing the prisoners, and it is probable that other States, sooner or later, will find themselves in the same position. In the South the sentiment against the leasing of convicts has reached the point where it was imperative to evolve some other system. At the same time most of these States were inadequately equipped for the housing of the entire convict population, and in a few there were no State penal institutions at all. Under these circumstances it was impossible to provide indoor work of any character for all the convicts, and, as in those States there is a pressing need for the improvement of highways, the employment of the convicts in highway construction has seemed to offer the best solution of both problems.

Throughout the country the opposition by skilled free labor to the direct competition of convict labor in the manufacture of trade articles has become so pronounced as to make the abandonment of such competitive work almost necessary, and the adoption of either, or both, the State-use system and the public-works-and-ways system

has seemed the only alternative. Experiment with the State-use system in a number of the States has revealed the fact that large prison populations can not be employed conveniently at full time under the system alone by reason of the limited demand of the State institutions and departments for such articles as the prisons can be equipped to manufacture. Hence prison officials have been forced to look to road work, farm work, or similar outdoor labor to find a medium for the employment of their charges.

In a number of States the large increase in the criminal population has resulted in the overcrowding of the old penitentiaries; while, in the light of modern knowledge of sanitation, some institutions have been found to be a menace to the health of their inmates. Road work or other outdoor employment seems to offer the best solution of these problems of sanitation and health.

Finally, the general impression is that convict road labor is cheaper than the same class of free labor, and there is a consequent demand for such labor on the part of counties and smaller political units with limited funds for necessary road work at command.

In all of the States one or more of these conditions exist, and in a number the resort to the employment of the convicts on road work has proved satisfactory, both from the economic and from the humanitarian standpoint. The scheme has both valuable and objectionable features, the most important of which are detailed below, but a full consideration of its advantages and drawbacks seems to show that such employment for at least a part of the prisoners of all the States might be provided with good results.

Of all the advantages that are urged in favor of road work as an occupation, that which carries the greatest force is that such work undoubtedly is more healthful than any form of employment which may be provided in a prison shop. Hard manual labor, in close touch with nature and its fresh air and sunshine, is universally recognized as most beneficial, while continuous dwelling within doors, with only such periods of exercise in the open as it is convenient to allow, is a most unnatural life for all but a small proportion of the State's prisoners, and is observed to have a depressing effect upon the vitality of most of the convicts, with no marked good effect upon any of them.

TABLE 3.—*Classification of convicts in 22 representative States according to employment prior to arrest.*

Name of State.	Percentage of total population by occupations.				
	Profession- al.	Mer- chants and trades- men.	Outdoor laborers, skilled and un- skilled.	Shop workers and in- door laborers.	Unem- ployed.
New England group:					
Connecticut.....	5	5	49	41	
New Hampshire.....	10	2	56	31	1
Middle Atlantic group:					
New York.....	12	9	48	30	1
Pennsylvania.....	5	4	64	27	
Maryland.....	5	2	67	26	
Southeastern group:					
South Carolina.....	4		77	19	
Georgia.....	1	1	92	6	
Louisiana.....	4	1	83	12	
Middle Western group:					
Illinois.....	14	7	48	31	
Indiana.....	6	8	61	25	
Iowa.....	7	5	67	21	
Minnesota.....	7	6	65	21	1
Western group:					
Montana.....	7	6	63	23	1
Idaho.....	11	1	73	15	
Wyoming.....	8	2	70	20	
Utah.....	6	1	62	31	
Oregon.....	9	4	63	24	
Colorado.....	11	6	56	27	
New Mexico.....	3	1	80	16	
Arizona.....	8	1	79	12	
California.....	13	5	50	31	1
South Dakota.....	8	5	68	19	
Average by States.....	7.43	3.75	65.50	23.09	0.23

The desirability of providing open-air work, as on roads, is enhanced by the fact, shown by the prison statistics of practically all States, that a majority of the prison inmates are of the laboring class or of those classes whose habits of life prior to conviction kept them much of the time out of doors, engaged in occupations similar to those afforded by the various phases of road work. As an indication of the strength of this argument, Table 3 has been prepared, based upon the latest reports of the penitentiaries in the 22 States which were selected as typical of conditions in the various sections of the country. All convicts in these States have been grouped into five classes according to their occupation prior to conviction, namely: Professional; merchants and tradesmen; outdoor laborers, skilled and unskilled; shopworkers and indoor laborers; and unemployed. The table shows that an average of practically two-thirds of the inmates of the institutions represented were engaged in outdoor occupations, that about one-tenth belonged to the professional and mercantile classes, and that only about one-fourth of all the convicts were fitted to endure the confinement of life in penitentiary shops. Upon members of all but the fourth class, then, such confinement has an undoubted physically degenerating effect, and particu-

larly leaves the outdoor laborers unfitted to resume their former work after discharge.

Aside from its deleterious physical effect, the monotony of prison-shop labor has a tendency to reduce the mental activity of the inmate unused to such life, and upon release many of the members of the professional and mercantile classes find themselves no longer able to keep pace with their more alert competitors. Work on the roads offering, as it does, a variety of employment has no such degenerative mental effect, and for this reason is better than shopwork as an occupation for about three-fourths of the prison population.

But leaving entirely out of the question the superior mental and physical advantages of road work or similar outdoor work, a majority of prison officials favor such work for the reason that it removes the convict as far as possible from competition with free labor. It is true that no matter what form of employment be adopted for prisoners, unless it be entirely unproductive, the interests of free laborers will be affected to a greater or less extent; but, by reason of the fact that it is performed in the interests of the public only, that it enriches no private employers of labor to the injury of the free laborer, and that its product is not placed on competitive sale with that of free labor, road work is certainly no more injurious to the interests of the latter than such work as is performed under the State-use system. What is more, in many localities the convict is not depriving the free laborer of work, since much of the road work performed by convicts could not be undertaken at all, for financial reasons, if it were necessary to employ free labor.

Another very important consideration in regard to road work is that it is extremely productive to the public. No field can be selected in which the expenditure of prison labor can be applied with greater benefit to the States, for the reason that, as a whole, there is no greater public need than the improvement of the highways. It is true that the value of such labor can not be measured so readily in dollars and cents as the industrial labor within the penitentiaries, but there is every reason to believe that, properly conducted, the road work may be carried on with as much efficiency as the penitentiary industries, while the former has the additional advantage of requiring no sale or transfer to place it in public use. At this point let it be noted that, although the convict's labor, so applied, may be of very great benefit to the State, it also is of benefit to the convict himself in that it brings to him the realization he can not grasp in the prison-shop grind, that he may be of real importance in life as a producing agent. Through the promotion of his self-esteem in the useful works of the construction camp, there is created the desire to merit the good opinion of his fellows, without which reformation is impossible.

When, as practiced in a number of States, assignment to the road camp is reserved as a reward for those prisoners who have proved in close confinement their merit and good intention, the reformatory value of the road labor is further enhanced by the progression from the restriction of bars and locks to the freer regulation of the camp. By doing away with all marks of degradation, such as stripes and chains and shaven heads, by permitting the exercise of more and more initiative, and the granting of an increasing degree of freedom as the ability to use it properly is manifested, the very publicity of the convict's position on the roads is transformed from a mark of disgrace to an acknowledgment of the confidence of his keepers; and by practice in self-restraint and proper living under guidance in the camp he is fitted to live a life of similar circumspection after discharge. That such is the actual effect of the employment of convicts on the roads is the testimony of all prison officials who have employed such a system and who point out that the number of recidivists in their populations is markedly reduced.

Finally, as implied above, it is possible to make the road work, when carried on in conjunction with other industries inside the walls, a very useful factor in the discipline of the penal institution. All prisoners appreciate the opportunity of working in the open under conditions which are not disgraceful. Therefore the assignment to the road camp may be regarded as a reward, while withdrawal from it and return to the walls is regarded by all prisoners as a severe punishment. By the proper granting and withdrawing of this and other rewards which will be discussed in a succeeding chapter, and only by so doing, can corporal and severe punishment of all descriptions be eliminated.

Against the advantages outlined above, the opponents of road labor urge the following objections:

It exposes the convict to the public gaze and not only advertises his shame, but has a tendency to harden the public feeling by permitting it to grow accustomed to spectacles which constantly suggest crime. This objection is advanced not by sentimentalists only, but by men among the most thoughtful and experienced of prison officials and students of penology in all civilized countries. At the International Prison Congress at Budapest in 1905, where the question of open-air occupation of prisoners was discussed by experts from all nations, the conclusions were summarized in brief form as follows:<sup>1</sup>

It will be noticed that the Congress has committed itself in favor of working prisoners in the open air as far as possible, but under very rigid conditions and with careful restrictions. It is very dangerous, in introducing a reform, to carry it too far and to break it down by wrong methods. All the best authorities, for example, insist that prisoners working outside the prison ought never to be brought in contact with free

<sup>1</sup> "Notes on Outdoor Labor for Convicts." Chas. R. Henderson.

laborers and with the general public. They give reasons for this position. If prisoners are set to work on public roads or streets of cities where people are constantly passing, they must be chained and guarded by men armed with deadly weapons. If the weapons are used in places where citizens pass, there is danger of killing the wrong person. Nothing can be more degrading to a prisoner, nothing more hardening to the public feeling, than the public punishment of convicts.

These conclusions carry the weight of the highest authority; but it should be noted that they are directed only against the employment on the roads of that class of prisoners which can be so employed only when secured by chains and armed guards. It is generally conceded that any successful employment of prisoners depends upon their proper classification and the adapting of the labor imposed to the needs and ability of the individual convict; and for those prisoners who can be employed in public under proper conditions road work offers a convenient, productive, and beneficial occupation. It is believed, however, that the foregoing objection is valid when applied to the indiscriminate employment of convicts in public.

The second objection, which also carries force when applied to any system of outdoor labor which does not include a classification or grading of prisoners according to character, habits, and ability, is that the congregate life of the road camp exposes the better convicts to the physical, mental, and moral contamination of their more depraved associates. However, this objection, like the first, is not directed solely against road labor and can not apply to such labor when conducted under proper conditions.

A third objection is to the effect that road labor is not suited to the ability or physical strength of all prisoners, and that there is a class of prisoners, such as physicians, lawyers, merchants, clerks, whose previous habits of life entirely unfit them for such work, who will never apply such manual experience after release and who may receive actual physical injury through such employment. Table 3 shows that this class does not form more than 20 per cent of the entire prison population of any State listed, that in many the proportion is far below that, and that the average for all States included in the table is only about 10 per cent. Therefore, this objection also can apply only to the indiscriminate employment of all prisoners on road work, and can not be held against any system which provides for the careful classification of prisoners and the subjection to road labor of only those who are found to be fitted for such work.

The fourth, a more serious objection to road work than any of the foregoing, is that such work, in common with other forms of outdoor employment, affords much greater opportunity for escape than does any form of indoor employment. To offer this greater opportunity to prisoners weak in self-control is to place before them a temptation they can not well resist; and to subject them to the possibility of

being shot if they yield to their uncontrollable impulses, is unfairly to place their lives in jeopardy. However, the seriousness of this objection is minimized by a proper selection of the convicts who are to be detailed to the road work. Under the present generally prevailing system, judges are compelled to impose definite sentences and when such a sentence has been served the prisoner is released regardless of his fitness again to take his place in society. It would seem therefore that the escape of a prisoner thus arbitrarily sentenced may not be much more dangerous than his premature release at the expiration of an irrationally determined period of imprisonment. It must be understood that this is not a criticism of the trial judge, but of the system which requires the imposition of the definite sentence rather than an indeterminate sentence.

A fifth objection is that road work can not prove to be a solution of the prison-labor problem because it is impracticable to provide such employment during the winter. This objection does not apply at all to the employment of prisoners in most of the Southern States, for in those States the climate is sufficiently mild to make road work possible at all times. In the North and West the climate may present a serious obstacle, for it would not be good economy to maintain the additional equipment necessary for the indoor employment of large bodies of men to be used only a few months in the year. But to road work as it can best be used in the Northern States—that is, as an employment for a small number of picked men who are assigned to it as a reward—there can be no greater objection than to farm work or other forms of outdoor industry, and for such small numbers of men work allied to road construction, such as rock crushing and the manufacture of concrete culvert pipe, which can be performed during the winter, may be provided conveniently and at small expense.

The sixth and seventh objections are closely allied with each other. The former is that outdoor employment, particularly on road work involving frequent moving of the men and their camp equipment, entails a larger expense for the maintenance of the prisoners than work conducted within the penitentiary. This objection is frequently pointed out by penitentiary officials upon whom falls the responsibility for the expenditure of prison funds.

The seventh is usually suggested by the highway commissioner or supervisor, who is responsible for the road labor of the convict, and it is that such use of convicts is economically bad, because the same work frequently can be done at less expense by free labor, on account of the comparative inefficiency of the convict labor. Both these objections lose much of their force when it is considered that in some States it is a question not whether the convicts shall be employed on road work or any remunerative work, but rather whether the convicts shall be maintained in idleness or placed upon the roads; while

in other States the work done under the State-use system, the only other system which does not conflict directly with the interest of free laborers, is found to be even less efficiently performed than is the road work. Furthermore, except in those sections where the wages of free laborers are exceptionally low or the efficiency of such labor exceptionally high, there seems to be no good reason why road work can not be accomplished by convict labor at considerably less expense than by free labor.

#### EFFICIENCY AND ECONOMY OF CONVICT LABOR.

The relative efficiency of convicts and free men as road laborers is a phase of the convict problem of particular interest. Unfortunately, it is also a phase upon which it is practically impossible to develop precise information. Manifestly, an entirely fair comparison can be made only where both classes are employed in like localities under exactly similar conditions. This is rarely possible, because convicts and free men are seldom employed together, even on different sections of the same road where conditions might be assumed to be roughly identical, but by making proper allowance for differing conditions it is sometimes possible to form reasonably accurate estimates of the comparative value of the two classes of labor. Estimates of this sort are not wanting, but in their bearing on the general question of the efficiency of convict labor they serve to confuse rather than to illuminate, for they rate the relative efficiency of the convict at from 50 to 150 per cent of that of free labor.

By assembling a number of such estimates from different localities and under different conditions it is possible to arrive at a composite figure which will represent the average relative efficiency of convict labor throughout the localities represented. An estimate of this sort was made by the United States Bureau of Labor and published in the Twentieth Annual Report of the Commissioner of Labor in 1905. The data for that estimate were secured by agents of the Bureau of Labor from prison officials, foremen, contractors, lessees, and from employers of free labor in the localities in which convicts were employed. As a result of this survey, it was found from a total number of 111 estimates in regard to highway construction in the States of California, Connecticut, Florida, Georgia, Kansas, Michigan, Minnesota, Missouri, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, Virginia, Washington, and the District of Columbia, that the labor of 3,522 convicts was equivalent to that of 3,481 free laborers of average skill, working the same number of hours per day. But that such general estimates are of little value in the consideration of particular cases is well illustrated by the fact that if the estimates for the States of Cali-