

☆

THIS pamphlet, prepared under the direction of Labor Research Association, is one of a series published by International Pamphlets, 700 Broadway, New York, from whom additional copies may be obtained at five cents each. Special rates on quantity orders.

IN THIS SERIES OF PAMPHLETS

1.	MODERN FARMING—SOVIET STYLE, by Anna Louise Strong		10¢
2.	WAR IN THE FAR EAST, by Henry Hall		10¢
3.	CHEMICAL WARFARE, by Donald Cameron		10¢
4.	WORK OR WAGES, by Grace Burnham		10¢
5.	THE STRUGGLE OF THE MARINE WORKERS, by N. Sparks .		10¢
6.	SPEEDING UP THE WORKERS, by James Barnett		10¢
7.	YANKEE COLONIES, by Harry Gannes		то¢
8.	THE FRAME-UP SYSTEM, by Vern Smith	•	10¢
9.	STEVE KATOVIS, by Joseph North and A. B. Magil		ıо¢
10.	THE HERITAGE OF GENE DEBS, by Alexander Trachtenberg		10¢
11.	SOCIAL INSURANCE, by Grace Burnham	•	10¢
12.	THE PARIS COMMUNE—A STORY IN PICTURES, by Wm . Siegel	•	10¢
13.	YOUTH IN INDUSTRY, by Grace Hutchins	•	10¢
14.	THE HISTORY OF MAY DAY, by Alexander Trachtenberg .	•	10¢
15.	THE CHURCH AND THE WORKERS, by Bennett Stevens	•	10¢
16.	PROFITS AND WAGES, by Anna Rochester	•	10¢
17.	SPYING ON WORKERS, by Robert W. Dunn	•	10¢
18.	THE AMERICAN NEGRO, by James S. Allen	•	10¢
19.	WAR IN CHINA, by Ray Stewart	•	10¢
20.	SOVIET CHINA, by M. James and R. Doonping	•	10¢
21.	THE YELLOW DOG CONTRACT, by Elliot E. Cohen	•	5¢
22.	THE INJUNCTION MENACE, by Charlotte Todes	•	5¢
23.	THE AMERICAN FARMER, by George Anstrom	•	10¢
24.	THE END OF THE FORD MYTH, by Robert L. Cruden	•	5¢
25.	LYNCHING, by Harry Haywood and Milton Howard .	·	5¢
26.	CAN YOU HEAR THEIR VOICES? by Whittaker Chambers .	•	10¢
27.	WOMEN WHO WORK, by Grace Hutchins	·	100
28.	TO AMERICAN INTELLECTUALS, by Maxim Gorky	•	10¢
29.	NEGRO LIBERATION, by James S. Allen	·	10¢
30.	WALL STREET, by Anna Rochester	·	5¢
31.	THE BONUS MARCH, by Felix Morrow	•	10¢
32.	ON THE CHAIN GANG, by John L. Spivak	·	5°
33.	CHILDREN UNDER CAPITALISM, by Grace Hutchins	·	5¢
34.	DANGEROUS TOBS, by Grace Burnham		5¢

Printed in the U. S. A. (1933) Cover from a painting by REGINALD MARSH COMPOSED AND PRINTED BY UNION LABOR

DANGEROUS JOBS By Grace M. Burnham

The Industrial Battlefield

"It was a man whom I saw sitting huddled up in his chair looking like a broken man of 80, ready to fall into his grave. He couldn't feed himself; he couldn't dress himself; he had to be tended like a baby; his tongue was so paralyzed that he could hardly speak understandably, and yet he was only 42 years old.

"He was a painter. He had been a painter for twenty years. He had done interior work. He had sandpapered lead paint and breathed the dust and then had a stroke of apoplexy which had left him paralyzed and in the condition I have described, looking like a man of 80, when he was only 42." (From the speech of Dr. Alice Hamilton, Professor of Industrial Hygiene, Harvard University, at a mass meeting in support of the Five Day Week for Painters, New York City, Feb. 17, 1933, auspices Painters District Council No. 9.)

Industry, under capitalism, is a battlefield. Millions of fresh workers' bodies are needlessly maimed and diseased, tortured and destroyed each year in the United States, as in every capitalist country. It takes quick muscles, steady nerves and alert minds to escape the deadly levers, cranes, knives and saws of the relentless power-driven machine. The hand that is not drawn away in time, is cut off. The body which hesitates a second too long in the jump to safety, is sucked into the machine or crushed to a mangled mass.

Poisons which rob the blood cells of life, deadly fumes, which destroy the brain, horrible dusts which fill the lungs, squeezing the breath out of the workers, lie hidden in process after process.

Cheating the Victims

Workmen's compensation laws are supposed to make up in some measure for the suffering of the injured worker and give him and his family the financial equivalent of lost earning power. But workmen's compensation insurance is just like any other business under capitalism. The workers' injury is bought and sold and the insurance companies, who are in business for profit, are out to defeat as many claims as possible and where they must pay, to

cut payments to the bone. The following typical "compensation cases" show this clearly enough.

A carpenter, working on a concrete construction job, on a bridge near Buffalo, N. Y., was struck on the back and head and knocked unconscious by a wheeler which fell on him from a height of 95 feet. His spine was permanently injured. Frequent spells of dizziness and loss of memory made it impossible for him to keep his job. He is forbidden by his doctor to work in high places or to do any heavy lifting. He is frequently ill, and when he can get any work he earns about half what he did before the accident.

Workmen's compensation would have provided some kind of a living for him. He filed a compensation claim but it was nine months before the state called the first hearing. The case was lost because the representative of the insurance company failed to come to the hearing.

A painter fell from a scaffold in Linden, N. J. His injuries included concussion of the brain, severe bruises of the right shoulder and chest, and fracture of one rib. He died six days after the accident from pleurisy and pneumonia. Three physicians of Elizabeth, N. J., agreed that his death was the result of the accident.

His widow could not collect even the \$60 she paid to the doctors. The insurance agent, to whom the employer paid his compensation premiums, failed to turn in the money, and the insurance company claimed that the policy had lapsed. Nothing could be done about it "under the law."

A truck driver was sitting at the wheel near a building under construction when a brick wall collapsed, crushing his face against the steering gear. He was taken unconscious to the hospital where he remained for three weeks. Two cheek bones were fractured, his nose was broken, most of his teeth knocked out, and both eyes injured, one of them permanently. The accident left him with hideous scars on his face, a flattened nose, in addition to the loss of part of his sight.

The insurance company fought this case for three and a half years. During this time the injured worker had to undergo at least 15 medical examinations *at his own expense* and attend 22 hearings (each time with the loss of a day's wages). He also had

to pay a lawyer, and by the time the case was finally won most of the money had already been spent. This case was drawn out for so long because the insurance company got "next" to one of the doctors, who in turn influenced the compensation doctor to testify against the injured worker. Such buying of medical testimony is not unusual.¹

A 65-year-old painter in New York had an acute attack of lead poisoning while at work on a job sandpapering old paint. This is a dusty job. Lead is inhaled in dangerous amounts.

According to the New York law at that time notice of an accident or occupational disease must be given the employer within 30 days. The law has since been amended and one year's time is allowed, with certain exceptions. Of course it is quite possible to file such a notice in the case of an accident because a broken limb can be seen not only by the doctor but by the worker himself.

In the case of an occupational disease, however, not only is the worker unable to tell what is the matter with him, but even doctors may be unable to tell what the illness is. This painter did not know he had lead poisoning until almost five months after he had quit work. But the state, the insurer in this case, refused to pay because the claim had not been filed "within 30 days." Hundreds of claims are thrown out on such technicalities.

Another painter, living in New Jersey, aged 49, had worked at his trade for 27 years. He had an attack of lead poisoning, following which he became too ill to work. He was taken to the hospital and died in convulsions. The widow was left penniless with five dependent children, from 2 to 14 years of age. Three days before the death of this worker a claim for lead poisoning was filed. Neither the record of lead poisoning under the signature of a responsible physician nor the hospital record that the patient died from "lead poisoning," satisfied the insurance company. It required "further proof." Since the man was dead no further proof was possible.

Laws Framed Against the Workers

Workers must get over the illusion that compensation laws were made and are carried out in their interests. Here are some of the characteristics of the workmen's compensation laws in this country:

I. In no state does the injured worker receive full wages. Although the laws say that one-half or two-thirds of wages are to be paid, a maximum is set up in most laws and this often limits the benefit to less than half what a worker has been earning. This maximum ranges from 14 to 25 a week for total disability. For partial disability it is even lower.²

2. Payments are rarely made until months, sometimes years, after the injury.

3. The worker is forced to hire and pay his own lawyer.

4. The worker is forced to produce unnecessary and costly medical evidence in order to disprove the testimony of the paid medical hirelings of the insurance companies and often of the state. If the worker is lucky these medical fees may be added to his compensation award. More often they are not.

5. Wages lost through medical examinations and attending endless hearings are not repaid.

6. Private insurance companies are prohibited from handling workmen's compensation in only 7 states. Where the state operates insurance funds there is enormous saving. In November, 1930, the State Insurance Fund of New York was able to offer employers a 21% saving in insurance rates over those of private insurance companies. But note that this saving did not go to workers in increased benefits but to employers in decreased premiums.

During the first 10 years of operation of the Ohio State Fund, the employers were saved an average of five million dollars a year over what they would have had to pay private companies. For the year 1926, the saving was \$7,780,414. But the maximum an injured worker can receive is \$18.75 a week.

7. The administration of all workmen's compensation laws is in the hands of a capitalist state whose main interest lies in protecting profits. In some instances, union officials are given positions on state industrial commissions or compensation boards. These appointments are mainly for vote-getting purposes. They have the additional value to the employers of silencing workers' protests. At best, such appointments are of no use to the workers, because the union official is always in the minority and has to submit to all decisions dictated by the employers. In no state have workers ever been given a majority on any board or committee dealing with compensation matters.

8. The first state law was passed in 1911. After 25 years of agitation there are still four states with no law—Arkansas, South Carolina, Florida, Mississippi.

9. There is no national compensation law except for government employees, and longshoremen.

10. Railroad workers and seamen engaged in interstate commerce are excluded from all workmen's compensation laws. Farm laborers and domestic servants are covered only in Maine and New Jersey. This means that about 7,000,000 workers are debarred from receiving insurance when injured at work. They or their families are forced to resort to costly damage suits which drag out endlessly in the courts. Even in the rare instance where such a suit is won by a worker, a large part of the money recovered is already pledged to lawyers and doctors.

11. The same holds true for workers in "small establishments," who are barred from getting compensation in 23 states.

12. In other states special forms of discrimination are practiced, notably against foreign-born workers and Negroes.

13. Only five states allow compensation for all occupational diseases. Six more compensate for only a limited list of such diseases.³

No Effective Control

Every trade and every state give different rates for both the frequency and severity of accidents.* Take for instance a group of 29 manufacturing industries reported on annually by the United States Bureau of Labor Statistics. The number of accidents for each 1,000,000 hours worked (frequency rate) ranged in 1930 from 6.95 in the boot and shoe industry to 94.75 among loggers. Brickmaking, flour milling, planing and sawmilling, paper and pulp concerns, petroleum refining and slaughtering and meat packing, all registered a frequency rate of more than 30.⁴

Even rates for the same industry yield entirely different sets of figures in different states. New Jersey, for example, had an accident frequency rate for workers in the rubber tire industry of 13.09, while Ohio had a rate of 67.55 for workers in the same industry. Brickmakers in Indiana had an accident frequency rate of 80.04, in Ohio of 56.51. The rate for foundry workers in Indiana was 73.76, in New York 58.76, in Maryland 40.99.

Reports of the National Safety Council, an employers' agency, reveal the same striking indifference to accident prevention. While

^{*} The severity rate (which is a standard of measurement) is the number of days lost per 1,000 man hours worked. In the case of death or permanent injury or disability, the time lost is estimated as the number of working days by which the working life was reduced.

the average frequency rates for the 2,500 plants reporting to the Council for the years 1926, 1927 and 1928 show a substantial decrease (the rate dropped from 31.87 per one million hours' exposure in 1926 to 25.10 in 1928), the frequency rate for many industries has gone up. Thus, for instance, the rate rose 34% for packers and tanners, 3% for rubber workers, 2% in the textile industry, while the severity rate in the petroleum, rubber and textile industries increased 27%, 68% and 32% respectively.

Between 1929 and 1930 electric railroads were the only industry reporting a rise in the frequency of accidents (from 25.42 in 1929 to 26.08 in 1930). But the *severity* of accidents increased almost five times in railway car and equipment shops; in foundries it went up 21%, and in the marine industry almost 40%.

The policy of the federal government is to leave the prevention of accidents to the states. And the policy of the states is to leave it for the most part to the voluntary action of the employers. "A very few establishments," said the Commissioner of the U. S. Bureau of Labor Statistics before the New York Industrial Safety Congress, "are doing an enormous amount of safety work and making an enormous amount of noise about it, and really reducing their accident rates to a wonderful degree; on the other hand, the great majority of plants—over 90%—are doing nothing in the way of safety work and saying nothing about it, and having a rather startling progressive increase of accidents." (Italics ours.)

Staggering Increase in Construction Accidents

The construction industry offers an outstanding example of this "startling progressive increase" in accidents. Hazardous by its very nature, because men cannot work suspended in the air on scaffolds and steel girders, or tunnelling hundreds of feet in the earth, without great risk of life and limb, speed-up has of late years turned this industry, which, in normal years, employed over 2,000,000 men, into a veritable slaughterhouse.

In years of average employment about 10,000 construction workers are killed in the United States, and probably another 2,500,000 injured. In the depression year 1930, the number of construction accidents actually increased in spite of the fact that

from one-third to one-half of the workers in the trade were unemployed. Here are figures of state departments of labor:

California in 1919 reported 3,554 construction workers injured with 41 deaths. In 1926 the figure had mounted to 14,161 with 84 deaths. In 1929, 17,090 workers were injured, *five* times the figure for 1919.

In Pennsylvania fatal accidents in this trade increased from 218 to 235 a year between 1920 and 1927, with non-fatal accidents increasing from 12,702 to 19,031 a year during the same period. The number of accidents for the "good" business year 1929 was 20,493, and for the "depression" year 1930, *it was 20,709*.

Ohio in 1930 reported 31,947 construction accidents during the unemployment crisis, an increase of 2,921 over 1928. The number of accidents per \$100,000 of payroll rose from 23.60 in 1929 to 32.82 in 1931 while number of days lost per \$100,000 of payroll rose from 1,671 in 1929 to 2,377 in 1931.

Construction workers awarded compensation in New York increased from 7,540 in 1922 to 24,576 in 1930. And compensated accidents in this state, according to the Industrial Commissioner (speech of June, 1927, before the National Electric Light Assn.), represent only from $\frac{1}{5}$ to $\frac{1}{4}$ of all reported accidents. One thousand construction workers are killed in New York in a year of normal employment.

Even worse are conditions for workers in the more hazardous sections of the construction industry, as for example fabricators and erectors of structural steel.

"The building industry is less careful than others," is the conclusion of the Ohio Division of Safety and Hygiene, in commenting on the rise of construction accidents in that state. More to the point is the statement of Wm. S. Wheeler, executive secretary of the Committee on Accident Prevention of the Building Trades Employers' Association of New York City, when he says: "Material and men must be kept moving without loss of time, if a building is to be ready on the completion date; all equipment, labor and capital must be used all the time *if the maximum profits are to be counted*. The tenor of the present-day building business is in unrelenting competition, fast production, with rising pressure upon personnel and equipment. This is a fast moving era and speed is its urge. The business of today that succeeds must move fast with modern methods. . . . Successful contractors, leaders of the industry, have learned that the most important thing in the building industry is time."

A tunnel worker writes:

Imagine yourself working with a pick and shovel one thousand feet below the ground, standing in water and mud from morning till night. Cold water dripping down from overhead. Big chunks of rock and mud falling down all the time.

On this particular job there are thirty working. Out of those thirty from three to five get hurt or killed every week. Nine men were killed on one day alone because of the terrible speed-up. Bosses running around like wild bulls shouting themselves hoarse: "Come on, there, you bastards, speed up or get the hell off the job." Those are the words ringing in your ears long after getting up from those ill-smelling death traps.

Iron and Steel Accidents

On the basis of a 50-hour week in steel mills in 1907, of every 20,000 workers employed 82 were injured. By 1926 the rate had dropped to 25.66. In 1931 it was 18.81. Much has been written in the employers' press in praise of the safety work of the United States Steel Corp. and its subsidiaries. The work was started on an extensive scale in 1926, following sensational exposures of the frightful conditions in the industry. It was not uncommon for men to be caught up in the molten steel and burned alive in the red hot mass. Widows coming to claim their dead found only misshapen lumps of metal. Damage suits piled up. The companies began to weigh the financial gain in preventing accidents and at the same time getting rid of costly damage suits and unwelcome publicity.⁵

So safety education, as it was called, was started by the U. S. Steel Corp. for plain business reasons. Its safety investment of \$4,000,000 during 10 years is claimed to have brought a return to stockholders of \$9,000,000. "The men who direct the policy of this corporation," states Bulletin No. 11 of the U. S. Steel Corp., "have never lost sight of the fact that the first object of any company is to make money for its stockholders." The sufferings of steel workers can never be told in cold figures: the swoop of gigantic overhead cranes, the terrific noise, the unbearable heat, the utter exhaustion of men forced to war with molten metal 12 hours a day (or night), seven days a week. But even when crushed skulls and burned bodies are reduced to statistics, the figures show that conditions for the majority of the workers are far from safe. Only about half the workers in the industry are employed in plants doing "safety work." And even within this group many plants and certain processes show rates far in excess of the average reported. In 1931 the frequency rate for a group of six selected plants was 7.8 (an increase, by the way, of 2.5 over 1927). But for fabricated products in this group the rate was 24. In 1927, when the rate for this group was only 5.3, the rate for steel foundries was 51.60, and in one foundry it was 411.61.

The rate for the industry as a whole in 1931 was 18.81, but for foundries it was 39.92, for axle works 45.27 (in 1915 it was 38.39), for car wheels 53.58 (in 1915 it was 22.28), and for puddling mills 80.97 (in 1917 it was 47.07). "Frequency rates were lower in 1931 than in 1930 in 16 departments . . . and higher in 15 departments," states a survey made by the U. S. Bureau of Labor Statistics (Monthly Labor Review, March, 1933). "Severity rates were lower in 1931 than in 1930 in 13 departments . . . and higher in 18 departments. . . ." (Author's italics.)

A survey of accidents by states reflects the same lack of control. In Iowa the frequency rate was 105.41; in Rhode Island 52.96 and in Missouri, Texas, Washington and Wisconsin over 40. When we see that certain selected plants reduced their rates to 5.3 in 1927, the showing for the country as a whole is pretty poor.*

Death and Disaster in Coal Mines⁶

From 2,100 to 2,500 coal miners were killed in the United States every year until 1931 when the crisis had sharply reduced the number of miners and the number of days on which they are

^{*} For further details on accidents and occupational diseases in this industry see *Labor and Steel*, by Horace B. Davis, International Publishers, 1933.

exposed to mine hazards. About 30,000 more were seriously injured and at least 100,000 lesser accidents disabled workers from one to 14 days. For underground workers in coal mines the fatal accident rate rose from an average of 46 deaths per 10,000 full time workers in the years 1916-20 to 52 deaths per 10,000 workers in the years 1926-30. This rate is three times that of Great Britain although British mines are older and deeper, with thinner coal seams and more difficult natural conditions.

Profits, not safety, are the main consideration. Mine owners control not only the company towns but the state legislatures and safety laws and mine inspectors. Hazards have become greater in recent years chiefly from two causes. Operators have increased the use of electricity in the mines without safeguarding the lines and without installing spark-proof apparatus. Speed-up and wage cuts have driven the miners to disregard well-known safety measures.

More men are killed by falling rock and coal than in any other type of mine accident. Conveyors and loading machines have increased this danger. To get the machines placed as rapidly as possible the workers have no time for properly timbering, that is, propping up the roof of the mine. Nor have they time for testing the safety of the roof. Such testing is absolutely necessary for safety since the noise of the cutting machines, loading machines and conveyors drowns out the cracking sounds which give warning of the fatal fall of roof and coal. Since the companies do not pay miners for timbering and testing and very few companies employ special men to do this work, such vital precautions are usually reckoned as "dead work" and the miner, underpaid and halfstarving, neglects safety in order to earn every possible penny.

Miners have had repeated wage cuts, direct and indirect. They are docked for every conceivable item at the company store and mine: safety lights, safety pants, safety masks, tools and powder to say nothing of the bills that pile up for food during the slow time. Pay checks that give the miner no cash at all are not unusual.

Non-fatal accidents add a terrible burden for the miner and his family. In one mine in Kentucky the workers say that when 12

offered compensation checks for accidents, they are given the option of cashing the checks and losing their jobs or of not cashing the checks and keeping what work there is.

Explosions are the most spectacular cause of coal mine deaths and the most preventable. Sufficient ventilation to keep the air clean of explosive gas; the use of spark-proof machinery and equipment; provision by the operator of approved electric lights or safety lamps and prohibition of all open flames; and thorough rock-dusting of haulage ways are basic preventive measures. But these essentials are ignored and preventable explosions continue.

But it is the unnoticed deaths which make up the bulk of the yearly total, and most of these deaths are also preventable. That the crisis has been increasing still further the hazards in the mines is clear from a recent study by the U. S. Bureau of Mines. The 1931 and 1932 records of 482 identical bituminous mines employing about 90,000 workers showed an increase of 19.7% in the fatality rate during the latter year. These were the large mines with high productivity. In both years their death rates were above the averages for all bituminous mines in the country.

Occupational Diseases

Every occupation may be hazardous. Particularly is this true if hours are too long, speed-up too intense, work rooms too hot or too cold or filled with steam, machinery unguarded, stairways unlighted, elevator openings and excavations unprotected, sanitary precautions neglected.

"One of the most important predisposing causes of disease is overwork or fatigue," writes Dr. George Kober, one of the leading industrial physicians of this country. "A typical succession of events is first fatigue, then colds, then tuberculosis, then death," according to Prof. Irving Fisher.

The combined effect of long hours and heat on workers exposed to poisons is proven in the experience of one of the shell loading plants using TNT during the World War. Cases of poisoning in this plant increased 300% with a 50% increase in hours. In June there were 23 workers poisoned under an 8-hour day. In August, under a 12-hour day 69 workers were poisoned.⁷ In the Soviet Union workers in hazardous occupations work only six hours a day. In the United States the government allows no such protection.

Scientists record 620 separate occupational hazards in addition to accidents. Lead is still the most serious industrial poison, since it is a hazard in no less than 150 occupations, notably painting and potteries. Yet not one state prohibits the use of lead. Benzol, a coal tar product widely introduced into industry since the World War, was responsible for 22 deaths and 83 cases of poisoning in 24 separate plants during a period of two years and nine months. Of 81 workers exposed to benzol fumes, one worker out of every three was poisoned. This powerful poison, used as a solvent for rubber, fabrikoids, paints and lacquers, has been found in use, according to recent investigations, in more than 50 industries. Young women are particularly susceptible to benzol poisoning. Benzol poisoning means death. The fumes cannot be controlled. Effective substitutes are on the market. But the employing class is allowed to continue its use.

Effects of occupational poisons vary from acute attacks, resulting in almost immediate death, asphyxiation from carbon monoxide gassing, "hot cramps" in steel mills, death from aniline, TNT, and kindred substances in the chemical industries, to those chronic forms of poisoning which gradually destroy the vital organs.

Tuberculosis, although infectious in character, is admitted to be an occupational disease among stone cutters, sand blasters, rock drillers, grinders and buffers. Recent studies of rock drillers, blasters and excavators in New York disclosed 57% suffering from a probably fatal lung disease resulting from breathing rock dust.⁸ The life of an axe grinder who keeps at his trade is admitted to be no longer than five years. Workers in the granite stone industry have a death rate from tuberculosis five times that of the population at large.⁹

The tuberculosis rate is also exceptionally high in the textile industry, due not so much to the dust, which is non-metallic, as to the moisture, heat, unhygienic workrooms, long hours, intense speed-up and low wages. Six out of every 100 textile workers examined in Passaic, N. J., during the strike of 1926, were found to have tuberculosis, the rate being about 15 times higher than in industry generally as represented by Metropolitan Life Insurance Co. policy holders.¹⁰

Industrial tuberculosis need not exist. Prevention is possible through proper ventilation, removal of steam and heat and exhausts to draw off the dust at the point of operation. Shorter hours and wages high enough to guarantee sufficient food are equally essential in preventing tuberculosis.

The Hazards of House Painting

Painters on the average die 16 years before their time—sacrificed to the dangers of the trade. Over 60% of 267 painters examined in 1923 were suffering from lead and other poisons, 30% more had diseases, mainly due to the trade. One out of six painters examined at the Vanderbilt Clinic, New York City, had lead poisoning.

Lead causes painters' colic, apoplexy and "wrist drop." It hardens the blood vessels, injures the blood-making powers of the body, affects the heart and kidneys. In its final stage it causes paralysis of the body and brain.

The use of white lead in painting was stopped in France in 1921 and in the Soviet Union in 1930. Other European countries have passed laws reducing the amount of lead dust in the air, requiring wet or damp rubbing down, substituting lead in paste form for dry mixing of lead paints, and enforcing strict sanitary provisions. There are no such laws in the United States.

Benzol, because it is cheap, a powerful solvent, and a "quick dryer," has been used in increasing quantities in paint materials since the World War. In painting a room the surface covered with benzol is so big that no artificial exhaust can be so placed as to catch all the fumes. Moreover, benzol passes through the skin as well as through the nose and throat. Benzol should be prohibited and replaced by xylol or tuluol, which are much less harmful solvents.

The importation and manufacture of cheap methanol, or wood alcohol, found willing purchasers among paint manufacturers, chiefly for use in shellacs and varnishes. "So dangerous is this poison that in some cases death occurs when persons are exposed to its fumes for no more than one or two days. When used externally, wood alcohol, although not quite as disastrous, has its serious consequences." Blindness frequently results from wood alcohol poisoning.¹¹ Yet employers, with no restrictions placed on its use, continue to expose thousands of workers to this unnecessary hazard.

The spray gun, a speed-up device, is being widely used to replace hand brush painting. Ordinary ventilation will not protect house painters against the increased amount of poisonous fumes and dust produced by the spray gun. Effective exhausts are impractical. Although open spraying is a serious health menace, every effort to limit its use is fought by employers, paint manufacturers and spray manufacturing concerns.

The Tragedy of the Hat Shops

Mercury poisoning, tuberculosis and pneumonia are the outstanding diseases in the manufacture of felt hats. Several large insurance companies will not insure "makers," "starters," "sizers" or "fur cutters" at any premium. Workers in other departments are charged an extra heavy premium on ordinary policies. Death records of the hatters' union show a rate of tuberculosis 46%above that for the general population, a rate for pneumonia 182%above, and a suicide rate 450% above. This suicide rate is due to the effect of mercury on the brain.

Felt hats are made from rabbit and similar furs which are treated with nitrate of mercury (carrotted), so that the fine fur hairs, after they are cut from the skin, will knit together under steam and pressure and form a "felt." Fumes from nitrate of mercury used in carrotting the fur are the most serious hazard in the industry. A study of the medical records of 100 Danbury hatters made by the Harvard Medical School in 1922 showed 43% of the workers had mercury poisoning.¹²

"Hatter's shakes" (mercury poisoning) is no respecter of age. Boys of 20 and 21 years old raised trembling hands in union meetings to show the writer how the "shakes" had already done its deadly work. Hundreds of older men, no longer able to keep 16 their jobs, were shifting as best they could, some unable even to feed themselves. Others, more fortunate, were eking out a pathetic livelihood as watchmen or furnace men.

The high percentage of sickness among American hatters is largely preventable. It is due to the strong solution of mercury used to felt the cheap odds and ends of fur, to poisonous dyes, to the failure to rid workshops of dust and steam, to filthy washrooms and toilets, to the practical absence of anything approximating adequate ventilation, and to increasing speed-up.

In 1902, Levitsky, a scientist in Russia, found and introduced a harmless substitute for mercury. In 1924 the Soviet government made the use of this method compulsory.

The Fight Against Industrial Accidents and Diseases

In a year of normal employment some 25,000 workers in the United States are killed from industrial accidents alone. Another 100,000 are permanently disabled, at least one quarter of these crippled for life. Over three million accidents of a less serious kind occur every year, according to estimates of employers' organizations (National Safety Council, July, 1929). To this mass of human wreckage must be added the uncounted thousands who die or waste away because of industrial poisons, tuberculosis or other occupational hazards which are neither recorded nor compensated for. Scientists admit that 75% to 98% of all industrial accidents can be prevented.

It is plain that the greed of the employing class, its complete control of the government, and the criminal coöperation of labor officials in this system of exploitation, are responsible for this slaughter. Such a record of occupational deaths and injuries is exceeded only in China, India and other colonial "spheres of influence," where so-called civilized nations wring their enormous profits out of the very flesh and blood of the natives.

In the Soviet Union today, where workers make their own laws, and industry is run for service, not for profit, there is already a measure of protection impossible under a government controlled by the corporations and their political tools.¹³ Miners and workers in other hazardous trades work only six hours a day;

lead and mercury are prohibited for the entire country; huge scientific laboratories are studying the effect of chemicals and machinery on the human body. The results of their investigations are translated into protective regulations in coöperation with trade union committees organized for this purpose. Committees of workers on the job help in enforcing these regulations. Sick workers are sent to rest homes and sanatoria and paid until they are cured and can return to work. The best medical care in the country is given the worker. A complete system of social insurance, including sickness, accident, maternal care, old age, unemployment and death, protects the worker and his family. The trade unions themselves elect those who run the social insurance bodies. They also control the safety boards and factory inspectors.

National laws giving some protection to labor stand on the books of every important country in the world, with the exception of the United States. Only here the national government refuses to interfere with the use of poisons, is not concerned with unguarded machinery. It investigates and reports, perhaps, but takes no measures against the owners of industry when explosions wipe out the lives of hundreds of wage-earners and leave widowed mothers and fatherless children to starve.

The government—that is the capitalist owners of the United States—tries to justify its neglect of the health and safety of the working population by passing responsibility to the 48 states. It is not that the federal government is without power in these matters. It continuously protects the profits of the employing class through tariffs, credit advances, tax rebates and other means. Within the last few years more and more power is being concentrated in the national government, power which is being used against the workers. The National Industrial Recovery Act, under which questions of wages, hours, production and prices are to be controlled for every industry and strike action curtailed, puts the working class directly under the control of the national government, but of course for purposes of greater exploitation, to "stabilize" the profits of the millionaire owners of the country.

In connection with the codes proposed for each industry on a national scale, the question of health and safety becomes an im-

mediate national issue. Without such safeguards we can expect serious increases in industrial deaths, accidents and illness. In demanding the controlling voice in matters of health and safety. it must be pointed out that, heretofore, even standards of safety have been left to private committees controlled by the employers. A case in point is the Safety Code proposed for the construction industry. Such a code was first drawn up by the National Safety Council in 1920, but in spite of a death rate which during the building boom jumped with each completed skyscraper, this code has been held up for over 20 years by the Associated General Contractors of America, who were powerful enough to prevent the Secretary of Labor from holding a national safety conference for this industry. It should be noted that the Building Trades Department of the American Federation of Labor took no steps to force this conference over the opposition of the employers. Nor did they get behind the safety construction code compiled by the Workers' Health Bureau and the American Institute of Architects. Nevertheless this code was adopted in full by the states of Arizona and New Jersey and the city of Quebec, Canada. Whether it is being enforced is another matter.*

As far as the states go, it is hopeless to expect a uniform national standard of health and safety. In a survey made in 1926, only three states had laws in conformity with national safety codes. Twelve more had laws "similar" to such codes, while the remaining 33 had no regulations whatever. The laws of Georgia and Virginia do not permit the adoption of safety codes.

Even where laws have been won by the workers they are rarely enforced. Inspectors are usually untrained and get their jobs through political pull. Where labor officials are appointed, they soon find it to their interest to work on the side of the employers since they are not directly responsible to workers' organizations or committees. Even the Chief Engineer of the Bureau of Mines had to admit this. "State mine inspectors are usually biased and show bias in their inspections," said this engineer. "In most states

* See A Safety Code for Workers in the Construction Industry, Prepared under the Supervision of the Committee on Public Health and Safety of American Institute of Architects, 44 pp. Printed by the Labor Research Assn., 80 East 11th Street, New York City. they owe their position to politics, being appointed by the governor upon recommendations of politicians and operators."

New York State, up to 1928, employed only 12 inspectors to supervise the safety of 400,000 construction workers. The Connecticut law, providing for adequate ventilation and removal of dust and fumes, is simply a dead letter, as can be seen from the frightful conditions in Danbury hat shops. "The inspector never gets beyond the office, at least we never see him in the shop," is the way one of the Danbury hatters puts it. This situation will only be remedied when the enforcement of labor laws is put directly into the hands of workers chosen by, and responsible to, workers' organizations and committees.

Speed-up, Death and Accidents During the Crisis

From seven to 17 million unemployed have been living on starvation rations in the United States during the crisis years 1929-1933. Such of these workers as go back to jobs, return with health undermined and resistance at a dangerously low point. The younger recruits, 17 to 21 years of age, have completed their adolescent years, underfed and in no condition to cope with high-powered pace-setting machines, deadly poisons, fumes and dusts.

Total wages of the working class have been cut 66.6% in dollars and 53.7% in purchasing power since 1929, according to the National Industrial Conference Board, the leading research agency of the employers. Girl sweat-shop workers in many states were found in 1933 to be receiving as little as $5\frac{1}{2}\phi$ an hour, even $3\frac{1}{2}\phi$ an hour. The Health Commissioner of New York officially admitted that the number of cases of malnutrition in the city schools increased 33% from 1929 to 1932. In the mining districts of West Virginia and Kentucky investigators found 91% of the children seriously undernourished. These are the future workers.¹⁴

During these same years speed-up has been geared to higher points in order to increase profits. And under the National Industrial Recovery Act production per man hour is slated for a still further jump. "Efficiency of workers has increased during the depression by about 20% in manufacturing plants," according to Frederick Mills of Columbia University.

In the General Electric Plant at Lynn, a girl employee fainted when she saw the speed experts setting up their motion picture camera in front of her machine. "The belt system at the refrigerator plant of this concern at West Lynn is absolutely inhuman," said an eye witness. "There is a deadly speed and monotony about such work that is killing. A girl has 14 seconds to finish a job before another moves in front of her. Many girls faint on the job. Others have nervous breakdowns. Four were made permanent wrecks." (Budd L. McKillips, *Labor*, April 21, 1931.)

In the process of saving capitalist industry from the crisis, all expenditures considered non-essential have been cut down. Expenditures and regulations for health and safety (in the face of the laxness of government supervision and regulation cited above), are part of the "non-essentials." In private manufacturing plants medical research departments are among the first to go and doctors and even nurses are being dropped. The employers "take chances" to make profits. The workers take chances to keep their jobs. A dredge worker of the U.S. Engineering Fleet (S.S. Clinton) recently lost his life in one such case. The "gravevard watch" after midnight is a time when no one on the ship can see at all. The men were told by the captain that if "they cannot walk the pipe line let them look for jobs somewhere else." The pipe line is 20 inches in diameter and the government provides no life line for those walking it. This is an "economy" measure, according to workers on this ship. One of the crew, following instructions, walked the pipe line once too often. He slipped off during the "graveyard watch" and was drowned before anyone could get to him.

The actual number of workers killed in industry during the crisis is, of course, much less than for pre-depression years. With 17 million unemployed at the peak, and a large percentage of those employed working part-time, however, the number should be about half what it is. The 4,000 delegates to the annual congress and exposition of the National Safety Council were told in Washington in October, 1932, that 17,000 workers were killed in industry in 1931. With 25,000 killed in a year of full employment, this is surely no cause for rejoicing. Had the figure

been 12,000 we could at least have said that the rate had not gone up, in proportion to the number of men actually at work.

"Undernourishment, lowered morale, worry and uncertainty make the worker an increased accident risk, even when the demand for production is missing," said the President of the Conference in opening the meetings.

And Dr. Alice Hamilton, in an interview in the New York *Herald-Tribune*, (January 29, 1933), foresees an increase in the hazards of industrial diseases as one of the results of the crisis. This, coupled with the breakdown in wage scales, the scrapping of regulations for the protection of women and children in industry and the return of the sweat shop, create a condition which she describes as "going back fifty years" and "losing our standards frightfully." As an example she cites the death of a girl from fumes, because when the plant where this girl worked reopened, *with a rush*, it was too expensive for the company to connect the exhaust system *for this one department*. She warns against the poisons especially in the new lacquers and enamels in bathtub making, gas ranges, and automobile bodies.

Workers! Organize for Health and Safety!

The workers of the United States, as in all other capitalist countries, are experiencing at the present time the most brutal assaults yet levelled against wages and working conditions. Questions of wages, speed-up, hours of work, unemployment relief, are inseparably bound up with the question of health and of safety. The right to work in safe surroundings—health demands shop sanitation, guarding of dangerous machinery, prohibition of poisons or proper devices for removing them from the air of the factory—these are vital issues for the working class. They are issues which spell continued earning power or further pauperization, if not death. They are issues which cannot be left to the government, to the employers, to the scientists.

Too long have the employing class been allowed free rein in the maining and killing of workers. Just as the fight against starvation wages is the fight of every worker, organized or unorganized, so the fight against deadly machines, fumes, gases and

dusts must be the fight of every worker. We must defend our right to safe jobs with the same determination with which we defend our right to a living wage.

The vast majority of industrial accidents and diseases can be prevented. Therefore the workers must propose health and safety codes for every industry to stop accidents, disease and death at their source. These codes must not only be prepared by committees chosen by the workers themselves, with the aid of medical and engineering science. They must be enforced by health and safety committees of workers *on the job*. The time taken from work by these committees should be paid for by the employers.

At the same time every victim of an industrial hazard has a right to the best medical care and a regular weekly allowance to free him and his family from want. This means a complete system of social insurance to include health and accident insurance as well as insurance against unemployment and jobless old age. Such demands are being made upon the government and the employing class by the more militant sections of the working class as part of their basic fight against capitalist exploitation and rule.

REFERENCES

¹ For corrupt medical practices see Report of Committee to Review Medical and Hospital Problems of Workmen's Compensation, New York, Adrian S. Lambert, Chairman, Medical Sub-Committee, mimeographed, 106 pp., 1933. ² See Social Insurance, by Grace M. Burnham, International Pamphlets, No. 11. ³ All: California, Connecticut, Massachusetts, North Dakota and Wisconsin. Limited: Illinois, Minnesota, New Jersey, New York, Ohio and Kentucky. Also District of Columbia, Porto Rico (limited), Philippines. The federal government makes provisions for federal employees and longshoremen. ⁴ Monthly Labor Review, May, 1932. ⁵ See "Making Steel and Killing Men," William Hard, in Everybody's Magazine, November, 1907. ⁶ For a full description of the industry and the hazards of mines, see Labor and Coal, by Anna Rochester. 7 Alice Hamilton, Industrial Poisons. 8 Dr. A. E. Smith, "Silicosis Among Rock Drillers, Blasters and Excavators in New York City," Journal of Industrial Hygiene, February, 1929. ⁹ Frederick L. Hoffman, The Problem of Dust Phthisis in the Granite-Stone Industry, U. S. Bureau of Labor Statistics, Bulletin 293. 10 Robert W. Dunn and Jack Hardy, Labor and Textiles, p. 145. ¹¹ Dangers in the Manufacture and Industrial Uses of Wood Alcohol, N. Y. State Department of Labor, Special Bulletin, No. 86, p. 3 (December, 1917). ¹² Monograph on Felt Hat Manufacture in the United States and Europe, reprinted from Journal of Industrial Hygiene, November, 1922. ¹³ See Labor Protection in Soviet Russia, by George M. Price, M.D. ¹⁴ See Youth in Industry and Children Under Capitalism, by Grace Hutchins, International Pamphlets, Nos. 13 and 33.

RECOMMENDED BOOKS

☆

THE LABOR AND INDUSTRY SERIES already includes five volumes. In these books the chief American industries are for the first time treated from the viewpoint of the workers. Prepared in collaboration with the Labor Research Association.

LABOR	AND	COAL, by	Anna	Rochest	er				 \$1.00
LABOR	AND	LUMBER,	by Cl	harlotte	Todes.				 \$1.00
LABOR	AND	TEXTILES,	by Ro	bert W.	Dunn	and .	Jack	Hardy	 \$1.00
LABOR	AND	AUTOMOBI	les, by	Robert	W. D	unn.			 \$1.00
LABOR	AND	silk, by	Grace	Hutchi	ns		• • • • •		 \$1.00

OTHER BOOKS

LABOR FACT BOOK, by Labor Research Association	\$.85
THE MOLLY MAGUIRES, by Anthony Bimba	\$1.00
FORCED LABOR IN THE UNITED STATES, by Walter Wilson	\$1.00
BILL HAYWOOD'S BOOK, An Autobiography	\$2.00
TEN DAYS THAT SHOOK THE WORLD, by John Reed	\$1.50
LABOR PROTECTION IN SOVIET RUSSIA, by Dr. G. M. Price	\$.50
THE AMERICANIZATION OF LABOR, by Robert W. Dunn	\$1.00
HISTORY OF THE AMERICAN WORKING CLASS, by Anthony Bimba,	\$2.25
FROM PEASANT TO COLLECTIVE FARMER, by N. Buchwald and R.	
Bishop	\$.25
THE SOVIET WORKER, by Joseph Freeman	\$1.50
TOWARD SOVIET AMERICA, by Wm. Z. Foster	\$1.25
STATE AND REVOLUTION, by V. I. Lenin	\$.30
ON GUARD FOR THE SOVIET UNION, by Maxim Gorky	\$.75
DAYS WITH LENIN, by Maxim Gorky	\$.25
BARRICADES IN BERLIN, by Klaus Neukranz (a Novel)	.\$.75

The publishers of these books will be glad to send a complete list of titles on request.

INTERNATIONAL PUBLISHERS

381 Fourth Avenue

New York