

Bulletin No. 92

Safety Series No. 36

University of Arizona Bulletin

State Safety News

OCTOBER, 1918

EDITED BY S. C. DICKINSON

SAFETY ENGINEER, ARIZONA STATE BUREAU OF MINES



Entered as second class matter November 23, 1915, at the postoffice at Tucson, Arizona, under the Act of August 24, 1912. Issued weekly, September to May.

PUBLISHED BY THE

University of Arizona Bureau of Mines

G. M. BUTLER, *Director*

TUCSON, ARIZONA

1918-19



State Safety News

Safety *Efficiency*

BULLETIN No. 92

OCTOBER 1, 1918

HEALTH PLUS SAFETY EQUALS EFFICIENCY

At least two of the essential conditions in the construction of a building are that it shall be so designed and equipped as to afford a given number of employees healthful and safe surroundings during the performance of their duties. Reference is made to ventilation, illumination and the installing of safeguards.

{Where the principles of sanitation have not entered into the design and construction of a building, it is imperative that we exercise every care to minimize or overcome such defects. In many respects the life of an employee is influenced by the circumstances of his surroundings and it is evident that his life is increased in value in direct proportion to the improvement in safety conditions of his immediate environments. It is self-evident that the health, strength, and endurance of an organization can be no greater than that of all its members, consequently every individual either adds to or detracts from the sum of the organization's productivity in direct proportion to his standards of health. An imperfect piece of machinery cannot turn out perfect work—neither can an employee who has neglected his work. Productive efficiency is gauged by physical well-being.

It is becoming increasingly evident that good physical condition on the part of the workers is necessary for the progress and stability of the plants in which they are employed. Industry is facing a certainty of a demand on the part of the employers that the physical condition of those who seek employment be ascertained by medical examination, and that the physical condition of those now employed be adjusted to more properly fit them to carry on their work.

The plants which have taken the lead in this movement deserve full credit for the initiative and forethought they have displayed. The fallacy has been shattered that only in large and well-developed plants it was economically possible to provide the various sources of knowledge and assistance necessary for the recovery or maintenance of health. It has been proven that much can be accomplished through

wise methods of educating employees in health and safety matters, even in small plants; but to secure maximum effect the work must be co-ordinated in the plant and in the homes. Efforts in this direction, however, must be attempted very tactfully and the methods used will necessarily vary to meet the intelligence and spirit of the employees. Community education by means of lectures, motion pictures, pamphlets, etc., has been quite successful when placed in the hands of the proper department.

In industrial institutions, as well as in social activities, leadership is necessary in developing a general outline of the system to be followed in maintaining standards of health—and such safety plans as have been adopted are gradually being improved and more nicely adjusted to actual needs. The medical department of an up-to-date company strives to perfect its organization and surround the employees of its plant with the most favorable conditions.

Unity of organization, proper teamwork, and efficiency can be secured only as each individual realizes the importance of his personal responsibility in maintaining his health and protecting the rights of others. Close and systematic co-operation between employer and employees in matters pertaining to health is of fundamental importance, since only under such conditions can an industrial organization gain the requisite efficiency.

The foreman is an important link between the employer and employee. His close relationship with the employer and his constant intercourse with the workmen give him an opportunity to exercise that knowledge of human nature which is essential to firm and tactful control of individuals as well as of groups. His influence will also have a special bearing on fellowship work, the object of which is to encourage promising men and women to help themselves, their homes, their employer, their community and their country.

There is an increasing recognition on the part of employers of the economical and social importance of health education as a plant asset, as well as its bearing on the individual happiness of the employees. Not merely is his physical condition important, as related to the job he has to do, but his education, habits, temperament, disposition and environment must be gone into, and just now, when a new sense of nationalism is being kindled in America, the timely subject of health is peculiarly significant. It is the aim of the industrial surgeon to develop health education, not merely through institutional and local agencies, but with the welfare of the whole community in view. Heretofore comparatively little consideration has been given the health of

the employee and by the employer—such matters having been left to legislative activities. The problem is neither mechanical nor legislative, but educational. It is the equation of the man, mentally and physically, to accomplish the work he is doing: in order to have a safe shop he must be taught to realize that he must be a safe man—he must be educated to the fact that an impaired physical condition constitutes an extra hazard.

Much illness can be traced to the environment of the worker after the completion of his day's work in the shop. He may not consume the proper amount of good, nourishing food; his sleeping room may be crowded or poorly ventilated, or both; or he may not dress properly for his work. A common cause for ill health lies in lack of care of his teeth. Poor digestion is a logical sequence and diseases follow which lessen efficiency. The worker may not get the proper amount of sleep because of toothache, sickness in the family or other causes, therefore that personal hygiene is the maintenance of personal health must be clearly explained to him.

Many years of observation have taught that proper recreation and improved home environments further efficiency to the mutual advantage of employer and employee. Many employees are ignorant of their conditions or are neglectful or indifferent until warned by the examining physician; possibly they are refused a position because of some physical defects. That in itself is educational to the worker and often arouses him to the extent of seeking relief through careful living.

In nearly every instance when an employee learns of his imperfect physical condition, he hastens to correct it. It becomes good, hard-headed business, based on sound economical principles with him. He has learned by the experience of others that sickness means a reduction in his earning capacity or a loss of time and labor, and that through right living only will his efficiency be increased. If he learns his lesson, he may live to enjoy the fruits of his labor, his children will have a father, his wife will not be left untimely a widow, and he will try to prevent being a broken man because of carelessness and neglect of his health.

Stick to your bench or get in a trench.

HUMAN EFFICIENCY

What is my efficiency? Am I fifty per cent efficient in my work, or am I working up to candle power and giving my employer full 100 per cent efficiency? Here is food for reflection. Many of us are prone to complain of our lack of recognition on the part of our "boss," or don't think we are receiving proper compensation for the work that we are doing.

If we reflect carefully we generally see where by a little extra effort we could have improved the quality or the quantity of our work. The old saying "Let well enough alone" is a fallacy. There is always a chance for improvement if careful thought is given to existing conditions. A little kink here and a small repair job there, if conscientiously followed up, will unquestionably add to the efficiency and operating conditions of any plant. It is the collection of little things that create the mighty whole, and if one is constantly on the alert to make any possible improvement in operating conditions, or make changes ever so slight, that will be beneficial, the efforts will be well spent and are bound to be recognized sooner or later.

The man who gets into a rut and stays there, and who for years will plod along in the same job, and who is generally bewailing his lot, will, upon investigation be found to invariably follow the paths of least resistance and let well enough alone. When through with the day's work one is tired and naturally wants rest and recreation, but a few minutes can be spared to thinking over the work of the day and trying to determine where mistakes have been made and where conditions could have been bettered. If this is done a new interest will be awakened the next morning and we will set about to correct our errors and put into effect such ideas as we think will be for the improvement of the work in hand, and thereby aid in bringing our efficiency up to the standard.—SOUTHERN ENGINEER.

Occasionally strong language is as necessary as strong medicine, so "to hell with the Kaiser."

"I see you have your arm in a sling," said the inquisitive stranger.

"Broken, isn't it?"

"Yes, sir," responded the other passenger.

"Meet with an accident?"

"No, broke it while trying to pat myself on the back."

"Great Scott! What for?"

"For minding my own business."

SAFETY FIRST IN EDUCATION

DR. SAMUEL P. CAPEN*

In spite of the frequent repetitions of the motto "safety first," we are just beginning to appreciate its broader applications. It is not enough that the warning should strike the eye and fall upon the ears of only grown men and women; the motto "safety first" is valuable in equal degree for the children of the nation. What does it say to the children? It says: "Take care of your health, which is the greatest capital you have. Look out for accidents that may rob you of your earning power for life. The person who runs unnecessary risk of accident is both wicked and foolish—foolish to gamble with his best resources; wicked, because the results of his folly must often be borne by some one else." It says also, "Take care of your mind while you are still young. Every day spent in school pays. It pays in happiness, in the development of your character, in the ability to enjoy the good things of life, in the capacity to meet your fellowman on an equal footing; and it pays in dollars and cents." Indeed, every day spent in school pays a child, on the average, nine dollars. This is proved by the fact that the average annual earnings of high school graduates are one thousand dollars, as against five hundred dollars earned by uneducated laborers in an average working life of forty years. No child can afford to leave school to earn less than nine dollars a day. "Safety first" is, therefore, a slogan for the schools. It points the way, through the school, toward education, increased earning power, and health.

Of course, the schools have long been dedicated to the cultivation of the children's minds. Until recently people thought the training of the mind was the whole task of the school, but now we are beginning to realize that this is hardly more than half of what the school must do. The modern school is responsible for the physical welfare of children also. This fact should be taken to heart equally as much by the parents who maintain the schools and who have children of school age as by the teachers and school officers, for unless the parents support good schools and give encouragement to the introduction of new and improved methods for building up the bodies as well as the minds of the children, the teachers, and school officers are powerless. In the last analysis, the effectiveness of the schools depends on the parents.

If the schools of the country are given the proper encouragement

*U. S. Bureau of Education, Washington, D. C.

and support they will show the children what "safety first" really means. They will not only teach by precept and example the sacredness of health, but they will show how health may be promoted, vitality increased, disease and injury prevented. To do this completely the legislative and governing authorities, behind whom stand the parents, must take steps to provide adequate medical advice and treatment of school children, to secure perfect sanitary conditions in school houses, and to minimize the risk of fire.

Many movements looking toward the attainment of these ends are already under way. Up to the present they have dealt chiefly with the city schools, because the need was there most urgent. But they must be carried into the schools of the open country also, if the nation is to conserve its greatest natural resources—human life and the efficiency of its people.

"Safety first" may well serve as the first article of our educational creed until the new health consciousness is fully established, until our people realize that bodily soundness and mental powers are vitally related, until there arises among us a new ideal of physical fitness, like that which animated the ancient Greeks and formed the basis for the marvelous achievements of their civilization.

THE FOURTH LIBERTY LOAN

"The campaign for the fourth Liberty Loan began September 28 and will close on October 19. The result of the loan will be watched with keen interest in Europe, not only by our associates in the war against the Teutonic powers but by our enemies. It will be regarded by them as a measure of the American people's support of the war.

"The Germans know full well the tremendous weight and significance of popular support of the war, of the people at home backing up the army in the field. As the loan succeeds our enemies will sorrow; as it fails they will rejoice. Every dollar subscribed will help and encourage the American soldiers and hurt and depress the enemies of America.

"The loan will be a test of the loyalty and willingness of the people of the United States to make sacrifices compared with the willingness of our soldiers to do their part. There must be and will be no failure by the people to measure up to the courage and devotions of our men in Europe. Many of them have given up their lives; shall we at

home withhold our money? Shall we spare our dollars while they spare not their very lives?

"The first Liberty Loan began on May 15, 1917, and closed one month later. The issue was for \$2,000,000,000, the bonds bearing $3\frac{1}{2}\%$ interest and running for 15-30 years. Four and a half million subscribers from every section of the country, representing every condition, race, and class of citizens, subscribed for more than \$3,000,000,000 of the bonds. Only \$2,000,000,000 was allotted.

"The outstanding features of the loan were the promptness with which it was arranged and conducted, and the patriotism of newspapers, banks, corporations, organizations, and people generally in working for its success, and the heavy oversubscription of more than 50%. Another notable feature was that there was no interruption to the business of the country occasioned by the unprecedented demand upon its money resources.

"The second Liberty Loan campaign opened on October 1, 1917, and closed on October 27. These bear 4% interest and run for 10-25 years. Both the first and second issues carry the conversion privilege. Nine million subscribers subscribed to \$4,617,532,000 of the bonds, an oversubscription of 54%. Only \$3,808,766,150 of the bonds was allotted.

"This campaign was marked with the same enthusiastic support of the public as its predecessor. The labor and fraternal organizations were especially active in this campaign, and the women of the country did efficient work which greatly contributed to the success of the loan.

"The third Liberty Loan campaign opened on April 6, 1918, one year exactly after our entrance into the war, and closed on May 4. The bonds of this issue bear $4\frac{1}{4}\%$ interest and run for ten years and are not subject to redemption prior to maturity, and carry no conversion privilege. The loan was announced for \$3,000,000,000, but the right was reserved to accept all additional subscriptions. Seventeen million subscribers subscribed for \$4,170,019,650 of the bonds, all of which was allotted.

"A great feature of this loan was its very wide distribution among the people and throughout the Union and the fact that the country districts promptly and heavily subscribed to the loan, in a great measure making up their quotas earlier than the cities.

"A little over a year ago there were some 300,000 U. S. bond holders; there are now somewhere between twenty and twenty-five

million. Awakened patriotism has made the American people a saving people, a bond-buying people. The effect of the Liberty Loan on the national character, on our national life, on the individual citizen and our home life is immeasurable—of incalculable benefit. Not less incalculable is their effect on the destiny of the world as our ships plow the seas and our men and material in Europe beat back the Hun.

“The fourth Liberty Loan campaign began Saturday, September 28. No American doubts its success; no good American should fail to contribute to its success. The blood of our men fallen in Europe calls to us; our answer must be and will be worthy of them and our country.”

“Old Glory” is our emblem; our motto—“In God We Trust.”

Here is an idea that ought to interest every young man who works for a living.

The worker gets the biggest profit out of any job that is well done.

This profit is entirely aside from the money that changes hands in the transaction.

It is the profit of increased ability, the capacity, to do more and better work.

Under the old-time apprenticeship, a boy not only worked for a period of years without wages, but his father paid a certain sum to insure him the opportunity to work.

The apprentice is practically extinct, and, at times, it appears that the idea back of the apprenticeship has also disappeared.

This idea is that the opportunity to work means an opportunity to learn.

A living business is the best business laboratory ever devised.

Our best knowledge is that which we absorb as a result of action, work. This is the knowledge that is a part of us, just like our hands and feet. We do not forget it, as with book learning. It is always ours to command.

I firmly believe that if any young man will get this thought deeply rooted in his mind, he will increase his chances for promotion one hundred per cent.

Of all jobs a “soft snap” gives the lowest return to the worker, and regardless of the salary it carries, for it develops habits of idle-

ness, and robs the holder of his most valuable asset—the ability to think hard and work hard.

No one can escape this truth, for it is the most obvious thing in life.—THROUGH THE MESHES.

There must now be settled, once for all, what was settled for America.

TEN RULES FOR FOREMEN

(Reprinted from the Efficiency Magazine)

1. *Be Fair.* Have no favorites and no scapegoats. A foreman has to act as judge many times every day; therefore, he must be just.
2. *Make Few Promises and Keep Them.* A foreman must be the exact opposite of a politician. Politics is the art of making promises; and sometimes a foreman forgets that his job requires a far higher standard of truth and honor than prevails in politics.
3. *Don't Waste Anger, Use It.* Your anger is the most valuable thing you have; but you should not use it carelessly. Keep your most forceful language for special occasions. Before a foreman can control other people successfully he must learn to control himself.
4. *Always Hear the Other Side.* Never blame a worker until he has been given a chance to give his point of view.
5. *Don't Hold Spite—Forgive.* When you have had to scold a worker, be sure that you go to him the next day in a friendly way and show him how to do something. There should always be blue sky and sunshine after a storm.
6. *Never Show Discouragement.* Never let yourself be beaten. A foreman must have perseverance, and “never say die.”
7. *Notice Good Work as Well as Bad.* Mingle praise and blame. Let the workers see that you can appreciate as well as condemn.
8. *Watch for Aptitudes.* Take a keen human interest in your workers. Notice them. Study them. Put each one where he can do best.
9. *Be an Optimist.* Don't let your worries and trouble deform you into a pessimist. Inspire confidence. Put the “righto” spirit into the works. Say “Come along men, all together.”
10. *Take Your Full Share of the Blame.* This is the most diffi-

cult of all. It is heroic, but the foreman who can share both blame and praise with his workers will have discovered the secret of managing men.

America's Greatest and Safest. Sounds pretty good, doesn't it?

HERNIA

Practically all hernias affecting industrial workers are confined to one variety, known as indirect inguinal hernia, or as it is often and erroneously called, rupture.

An indirect inguinal hernia is a passing through the inguinal canal of some of the contents of the abdomen. It is made up of a sac, its contents and coverings. All of these are present in an inguinal hernia.

The inguinal canal, or passageway, is always present in a normal man, and extends from the abdomen to the scrotum. The inguinal canal is a weak place in the belly-wall caused by the descent of the testicle.

The sac of a hernia is a part of the peritoneum, which, in some men, is found in the inguinal canal, but which should not be there.

The sac of a hernia exists (1) as an embryonal remnant, or (2) arises slowly owing to (a) weak muscular walls surrounding the inguinal canal, or (b) increased pressure within the abdomen.

The sac is thus the essential part of the hernia. When the pre-formed sac becomes filled with a loop of intestine, or other mass, the patient observes the mass. The mass within the sac is thus derived from the contents of the abdomen.

Hernia is not really caused by strains, but is the result of an anatomical defect or malformation in the individual.

The only violence or accident which can cause a hernia must be directed against the structures of the groin and lacerate them, and this is always accompanied by marked symptoms.

For the relief of hernia and the prevention of what is known as strangulated hernia, a surgical operation should always be performed. Such an operation is as safe as any operation well can be. A fatal result is almost unknown.

Return of the hernia after surgical operation occurs in less than one per cent of the cases.—N. S. C.

FEATS OF LAZINESS

A hobo was lying on a stretch of grass at a place where three roads met.

A weary cyclist stopped and asked the way to his destination. The lazy one jerked the toe of his boot in the proper direction.

"If you can do a lazier thing than that I will give you a quarter," said the cyclist.

The hobo inclined his head toward his left hand trouser pocket.

"Put it in there," he murmured peacefully.

THE SUB-FOREMAN

What are you doing for your sub-foremen?

If you have the right kind of men filling these positions and give them proper encouragement you will find them the most loyal, conscientious and important set of workers the company has in its employ.

The average gang entrusted to the care of the sub-foreman will number about ten men and their combined wages will amount to approximately \$8000 a year.

These are the men who make or break plant efficiency. If they are taken in hand by the plant management and encouraged to do their best, and are given careful instruction as to their work and the work of the men under them, a decided improvement will be shown in plant earnings. One member of the National Safety Council reports 25 per cent increased efficiency on the part of the men in one gang--that is, in one year it was possible to trace a saving of \$2000 back to the careful and painstaking efforts of one sub-foreman.

This sub-foreman did not confine his activities to production alone. He instructed his gang in safe methods of handling their work—for this he was indebted to his foreman. He had a pleasant way with him and few of his men left him to seek higher wages elsewhere. He urged his men to join the shop mutual relief, and this in turn encouraged the men to take an interest in the welfare of their fellow employees.

In the average plant a dozen or more men fill the positions of sub-foremen—"straw bosses" they are sometimes called. Very often they are men with families, steady fellows, who can be relied on in an emergency. They are taken as a matter of course and, while recog-

nizing their worth as valuable men in the plant, the possibilities of their acting as teachers, friends and counselors in their gang is overlooked.

Use of the bulletin boards in giving credit to the sub-foreman and his gang will be found one of the most popular methods of rewarding merit in the shop. This means is more personal than credit by departments and more nearly reaches a friendly relationship between management and man. It puts the "punch" in shop discipline and co-operation follows both in efficiency and safety.

The superintendent who will take an active interest in his sub-foremen will, aside from every other consideration, become a better executive because of his experience in teaching a wider humanity to men who are fundamentally honest and conscientious, and who will gratefully appreciate his efforts to help them in their work.—N. S. C.

*Washington and his associates spoke and acted,
not for a class, but for a people.*

ROCK DUST

Dust is not a disease, but it is the cause of disease. Any hard, sharp rock dust when breathed into the lungs, irritates and cuts them, making many small scars. These scars make the lungs less able to perform their proper duty. Besides, because of the constant irritation, the lungs become inflamed, and consumption is liable to develop. Men who breathe hard rock dust constantly often get consumption. The constant irritation of the lungs weakens them and at the same time gives the seeds of consumption a good chance to grow. The dust breather is also more liable to fall a victim to the careless spitter than the man whose lungs are sound. If he gets pneumonia, his chance of recovery is not so good. The dust breather has to fight not only the effects of any lung disease he may get, but also the harmful effects of the hard rock dust, which is constantly adding to the ravages of the disease.

Working in dust, like exposure, is at times unavoidable, but a great deal, if not most of the dust breathing is due to carelessness on the part of the miner himself who does not realize the danger of so doing, or if he does is indifferent to it. It is another example of failing to keep up the bars around an open place. In dust breathing, however, cause and effect are not so plain—at least they do not seem so to the miner. But the relation is there just the same. The number of

deaths from lung diseases among metal miners is much greater than among coal miners and is probably ten times greater than it ought to be.

What can the miner do to avoid breathing dust? Water drills are being used more and more. In dry drilling with machines it is possible to lay the dust by water lines or by using a squirt gun and water from a bucket, but often men drill with the hole dry rather than turn on the water, because it spatters on them, or makes the place sloppy. If you are drilling overhead, and the water has to come back on you, wear a rubber hat and boots, and if necessary a rubber coat. This is a bother, but it is also a bother to observe all the rules of "safety first."—which save lives. A man working anywhere where there is much dust should wear a respirator if possible, and see that the respirator is in good condition. Respirators are clumsy and more or less of a nuisance, but it is better to wear one than to have consumption. Do not breathe hard-rock dust day after day, because if you do it will disable you in time. Men who can "eat rock dust"—like the men who can "breathe gas"—die young.

A patriotic shouter is good, but a patriotic shooter is better.

ILLUMINATION

With the approach of the winter months the proper illumination of surface plants becomes of increasing importance in our safety work. Different authorities estimate that from 10 to 25 per cent of all industrial accidents are caused, at least indirectly, by the lack of proper illumination; but generally the other circumstances connected with the occurrence of such accidents tend to obscure recognition of this cause. For instance, a man is found at night time, injured through having been caught in belts or gears; the immediate necessity is to see that he is properly cared for, and full investigation of the accident may not take place until the next day. When this occurs the lighting conditions will naturally not be the same as when the accident occurred, and the fact that the man was not able to see what he was doing because of a shadow cast by a post or some piece of machinery will not be evident; indeed the injured man himself may never have recognized the circumstance.

All working places should be properly lighted, but in many cases it would seem that men go on working under poor lighting condi-

tions because they fail to recognize the difficulty under which they are laboring, and the possibility of improving them. The following more common instances of poor lighting are, therefore, cited in the hope that foremen and men will recognize such defects, where they exist, and have them improved.

Everyone is aware of the difficulty of seeing when passing from a brilliantly lighted place into one which is comparatively dark, but a similar condition on a poorly lighted stairway leading from a well lighted platform often escapes the attention it should be given. Where such dark places exist under daylight conditions, a coating of white-wash on the walls, or framing, will often do much to lighten up the surroundings and make it possible for a man to see things that otherwise he could not. Entrances to buildings, or tunnels under flues and dust chambers, particularly where tracks are in use, are instances of such places where good light is greatly needed.

Most places that are used by numbers of men are well lighted, but those that are less frequently visited, such as those into which an oiler has to go, are generally not so well lighted, and yet these are just the places where the most serious accidents occur. The necessity for plenty of light on the operating floor of a large department is always apparent, but the necessity for the same amount of light under roasting furnaces, or in similar places where gears are situated, is not so well recognized, although the necessity is the same in both places.

In the lighting of machines, or other places where men have to go to operate apparatus, reliance is often placed upon a strong light coming from one direction only. This serves to throw one side of the machine into strong relief but leaves the other in a dark shadow, and it may be that the side which is so shadowed should be just as well lighted as the other. In such cases the operator coming from the well lighted side into the shadow may be so affected by the stronger light that he is unable to see clearly, and may make some mistake in his work. To rectify both the casting of strong shadows and the trying glare of unduly strong light, the light should be diffused, as much as possible, from a number of lamps, well distributed.

In the plants, yards and around tracks, deep shadows at night time are a constant source of danger. Obstacles, holes, or depressions in the ground, which ordinarily would cause little risk of accident, when hidden by shadows, cause men to stumble and fall. Insufficient light or shadows around tracks may make conditions obscure to the drivers of locomotives on the industrial haulage system, and cause accidents.

Dust and fume, settling on lamp globes will often accumulate to

such an extent that the light of the lamp becomes quite dim and ineffective, but yet nobody takes the trouble to remove it until some other adjustment to the lamp is needed and then, perhaps, some of the accumulation is shaken off.

“Swiping” lamps from one place for use in another is a practice that all men should discontinue and discourage. There are always supplies of new lamps available, and the only reason why any man should remove a lamp bulb already in use in one socket to replace one that may have been burned out in another place, is that he is too lazy to ask for it. The absence of a light to which he has been accustomed may easily be the cause of an accident to any man, and recognition of the fact should be sufficient reason to all men not to remove lights.—
ANODE.

After all, saving is not sacrificing.

BE CAREFUL

“Production is the only thing that counts now. It comes first, everything else must come after, and all this talk about safety at this time is rather overdone.” The only deduction to be drawn from this overheard remark is that safety must be sacrificed that production may be increased, in other words, while production is increasing, disabilities and deaths are to be kept increasing.

Production properly understood must come first, but if the producing power of men is menaced and interfered with by accidents that disable, how can the much-needed output be kept up? How can the ever-increasing demand be met by an inadequate supply?

A glance at the staggering number of days lost through disability should convince even the most obtuse, that man power, all important for production, must be guarded. To say “Discard all this talk about safety and *do* something” is like advising the death of the goose that laid the golden eggs.

Necessary chances, though fraught with the greatest dangers, must be taken. They are taken every day on the battle front, but unnecessary foolish chances are forbidden. Why stick your head above the trench to provoke a German shot, when a cap will do?

A PRAYER FOR THE SOLDIER IN FRANCE

BY HENRY VAN DYKE, D.D.

Most Holy, Righteous and Mighty Lord God, we submit our Country's cause to Thee and we commend this, our soldier, to Thy guidance and keeping in this war.

Protect him amid the perils of the sea and the dangers of battle in a far land; keep him sound in body, pure in heart, brave in spirit, ever loyal to Thee and to our country

Enable him to do valiant service for justice and freedom; strengthen him while he fights for the right; comfort and succor him if he is wounded, and if he must fall, receive him into Eternal Rest.

But, O most merciful Father, we beseech Thee bring this, our son, back to us, with victory on his banner, with peace and love in his heart, accept and bless his sacrifice and ours, O Lord, our strength and our Redeemer. Amen.

—THE DELINEATOR.