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COMMENTS ON THE STATE ANNUAL MINE RESCUE AND FIRST AID CONTEST—PHOENIX, NOVEMBER 14, 1916

BY WALLACE MCKEEHAN

At the time these contests were held I promised myself that some time in the near future I would air my views concerning contests in general and this one in particular, but upon mature reflection I decided to wait until the smoke of battle had cleared, the wounded fully recovered and the landscape once again serene.

Do State Contests Pay? personally, I think not. These contests were originally gotten up as a publicity stunt to show the balance of the state what the mining companies were doing. Again, they were supposed to provide an incentive for the employees, so that they would be eager to take the training.

As a publicity measure the three contests held have had little value, for the reason that the average citizen considers it a corporation matter, something in which he has no interest, and from which neither he nor the state will derive any benefits.

As an incentive it is a rank failure, for the reason that the rank and file are well aware that while many are called, few are chosen, and that these few must be so far above the average in dexterity, quickness and ready wit, that the ordinary man is barred. If it were possible for all men to enter these contests, they would be of some value as furnishing an incentive, but under the best of conditions, this can never happen.

State contests are held at considerable expense to the companies sending teams. Taking everything into consideration, I would say that a conservative amount would be $1,000 for each team entered. While some companies may get off with a lesser sum, the average will not be far from this figure. One company that I have in mind must have spent considerably more. Would it not be better to use this money at home in providing something that will be of benefit to the largest number?

If state contests are to be continued, I, for one, will object to holding these in Phoenix, more especially if held at the Fair Grounds

and during fair time. I want no more contests under the auspices of the State Fair Commission, and the reason is plain: The people who attend the fair are not interested in exhibitions of this kind. The major portion come to be amused, not instructed, and will give the exhibition the once-over and then beat it. What is the use of spending a lot of money to put on a show, if you can't draw the crowd?

State contests to have any value, and this will be purely local, must be held in some mining district, the larger the better. By rights, the Globe-Miami District should have had the contest last year. In a mining camp practically all of the people are interested and have some knowledge of what the local companies are doing, consequently, when the district champions meet opposing teams, especially if from a distant part of the state, there will be a good turn-out and the spectators will understand what the boys are doing or trying to do. This statement can easily be proven by comparing the number of spectators who viewed the contests held in Bisbee in 1915, when thousands visited the ball park—this being the largest gathering that had ever been seen in the Warren District—with the meagre few who witnessed the two Phoenix contests. In Phoenix quite the contrary happens. Not one spectator in a hundred could tell the difference between a First Aid contest and a baby show—not even if they saw the triangular bandage. If we must have a state contest, by all means hold it in a mining camp!

Right here I want to go on record as objecting to the dress parade stuff pulled off at the last contest, particularly in the First Aid exhibition. First Aid men are supposed to do just what the name implies, i. e., apply emergency dressings, not put on fancy bandages, guaze pads and special splints, that would put the average doctor or hospital nurse to shame. My idea of a First Aid man is one who can take a piece of clean gauze, a gunny sack, his jumper, and a few pieces of board, and with this elaborate equipment treat a compound fracture and deliver the injured man to the doctor in good surgical condition. Contesting teams should not be allowed to use any but the simplest dressings; I will even go so far as to say, nothing but the metal First Aid package. At least I would confine them to plain gauze and triangular bandages. The use of the roller bandage should be prohibited for the reason that in applying it the First Aider is using time that should be devoted to getting the patient to a doctor. We must be sure that the First Aid treatment does not infringe upon the work of the surgeon.

Then again, I would insist upon a strict observance of the rules

for bandaging as laid down in the Miners' Edition of the Red Cross Text Book.

No team should be allowed to compete that is in a uniform of any description. While a neat, natty appearance may not affect the scoring of the judges, it is a cinch that it does not cause them to make extra discounts, and it does have a depressing effect upon the contestants not so attired. In a contest the men are supposed to be working under actual conditions. This being so, why not have all appear in jumpers and overalls, thus giving an even break, as far as appearances go, to every one?

Another thing that I believe needs correction, is that of greater uniformity in the First Aid equipment, and boxes or cabinets. Some teams have every tool, device or apparatus that can possibly be used, while others have little or none. Again, the cabinets of some teams are large enough to load down a truck, while others carry their supplies upon the field in their arms. Why not simplify these things and put these matters upon a more even basis?

Another thing that is of supreme importance in First Aid contest work, is that of allowing men who do office or light work of any kind to compete with men who do manual labor. Whenever this is done, the latter are put under a severe handicap and can seldom win. The men whom we wish to reach with our First Aid instruction are the ones who are doing the actual work, for they are the ones who are getting hurt. Men who labor have toil-hardened hands with stiffened fingers and should not be expected to compete with supple fingered gentry who follow lighter vocations. Men who toil in mines, mills and smelters should have equal rights with all other employees, in fact, I believe they should have a shade the best of it, and in future contests I would suggest that no one but the workers be allowed to compete, or if this is not satisfactory, that separate purses for each class be provided.

I believe that it is only a question of time until all contests will be done away with, or at least confined to inter-company or local meets. A better plan will take the place of these, and that is the paying of a fixed bonus to all men who give the injured correct First Aid treatment. This arrangement will provide the incentive so much desired in this work and will put all trained employees on an equal footing. This system need cost the companies no more than the sending of a couple of teams to a state contest and will prove far more beneficial as to results. If the Copper Queen Company's mine department had given $4.00 to each man who gave First Aid treatment to an injured employee, they would have been out less money

than they were in sending two teams to the Phoenix contests, and it is not necessary that any such sum be paid, in fact, the bonus should be a graded one.

The giving of a bonus for proper First Aid work is something that I expect to see taken up by every up-to-date company just as soon as a good working arrangement for the reporting of all cases treated, with their rating, can be secured. This will doubtless require considerable thought and effort in working out a suitable system for each company's operations, but I believe that it can and will be done.

I desire to make but few comments regarding the Mine Rescue contest. The less said about any rescue contest, the better. These were originally put on as a spectacular stunt for the benefit of the layman, and he was given to understand that men wearing oxygen apparatus could travel at will through the workings of a mine filled with dense smoke and gas, the heroic rescuers bringing entombed miners to fresh air and safety. This is far from the truth, and men trained in the fighting of mine fires look upon these contests as merely dress parade affairs and know that the contestants are simply playing to the grandstand.

The chief thing that makes a rescue contest a good deal of a farce is that actual conditions in a mine fire can not be duplicated and these conditions can not be imagined by the spectators. The problems or events submitted to the contesting teams at all contests invariably call for the rescue of live men and the bringing of them through irrespirable gases. This type of problem has little foundation in fact and is entirely misleading. I doubt very much if there is one authentic case of men, wearing apparatus, bringing out alive, through gas and smoke, a single miner. That rescue men have made such efforts is all very true, but if the man was alive at the start, he would be dead when brought to safety, and rescue crews who undertake such stunts are running desperate chances of meeting with disaster themselves. In case of fire in a metal mine, the men will get to fresh air by their own efforts, or else will soon be dead. In a coal mine, conditions are somewhat different, more especially if an explosion has occurred, but even then the value of apparatus men in saving life is problematical.

No oxygen apparatus on the market today is dependable. The parts are too many and too complicated and delicate to withstand the hardship and wear essential in any apparatus used in fire fighting. Then, the supply of oxygen is not sufficient for strenuous work or long trips. Seldom will it be found that the five sets of apparatus

worn by the rescue squad are working in unison. While the supply of oxygen is supposed to be sufficient for two hours, in ordinary fire fighting an average of about one hour is all that will be secured. The work of a crew wearing apparatus must be governed by the action of the man wearing the least efficient equipment.

To one who knows the limitations and weakness of the apparatus, the successful carrying out of problems such as were submitted at Phoenix, in which men were supposed to travel approximately 1,000 feet through smoke and gas, half of this distance carrying a man on a stretcher, was merely a matter of luck. These problems could not be carried out under actual mine fire conditions and if undertaken, would surely result in loss of life by the men in apparatus. The problems submitted should consist of fire fighting, the use of brattice in putting up stoppings and the splitting of workings to supply fresh air, and to care for smoke and gas. In fact, the contests would have more value if the events were confined to the saving of property.

Men who are experienced in the handling of mine fires place more dependence in the use of portable blowers, these generally being supplied with current from mounted storage batteries; in the use of brattice, which alone can be handled to good advantage; and in the control and direction of the ventilation, than they do in men working in apparatus. The chief value of these men is that they form an advance squad preparing the way for the real workers who follow. Apparatus men should never be allowed to go more than 500 feet from their fresh air base, and even this distance is too great. The more I have to do with oxygen apparatus, the more I realize its limitations and the danger that men run when working in it.

There has been too much brass band stuff put over on an unsuspecting public regarding the use of the appartus in saving life. Let us get down to brass tacks and say that it is of value in saving property when used in connection with other fire fighting equipment and incidentally may be of value in life saving, provided all conditions are favorable.

I wish it distinctly understood that I am not finding fault with this particular contest. It was as well staged and handled as any of its fellows, and the men who were in charge gave a great deal of time and study to perfecting the arrangements. My criticisms are aimed at contests in general, with the sole idea of having these put on a practical basis or else abandoned.

Mr. McKeehan has brought up in the preceding article a question that is well worthy of discussion,

and there is probably no better time in the year to discuss it than the present, owing to the fact that the next year's contests are a considerable distance away. The State Safety News will be pleased to publish any letters regarding the same, either concurring with or opposing Mr. McKeehan's opinion, and would like to get many opinions on the subject.

Insufficient sleep endangers the health.

SAFETY FIRST

Recently, when the talk turned upon the doings of embryonic engineers, the Old Timer related the following incident: It happened at Alta not many years ago. Soon after the ore was first opened in the old Columbus Consolidated, an eastern stockholder wrote to Superintendent Jacobson asking for a place for his son, who had just left college. He was given a job—beg pardon! he accepted a position; but, instead of being put on as a mucker or trammer, where he belonged, he was assigned the place of helper to an experienced machine man. Things went fairly well the first shift, with the miner doing all the work and the engineer standing around and looking wise. That is, things went well until the round was in and the holes were loaded and ready to shoot.

The miner explained the next step carefully, assigning to his new helper the task of holding the extra candle, to supply a light in case of need. The tenderfoot who has been in the breast when a round was lighted, and who has seen the spitting, writhing fuses through the curling smoke clouds as the miners go methodically about their task of "shooting," will appreciate the feelings of the young engineer at that time. The first fuse was lighted without incident, as was the second; but the third blew out the light.

Turning quickly for another, the miner caught a glimpse of his helper fifty feet down the drift, running like a scared coyote making for home and mother.

"Here, bring back that light!" he yelled.

And the answer floated back out of the darkness: "Not on your life! Do you think I want to stay in there and be killed?"

And he continued his get-away to the open air, though the round was ruined and it was found necessary later to dig out four missed holes.—SALT LAKE MINING REVIEW.

UNDERGROUND TRANSPORTATION OF MEN AT THE INSPIRATION MINE

The men employed in some of the stopes of the Inspiration mine farthest from the main shafts, through which they enter and leave the mine, are transported to and from the stopes on passenger cars designed and used only for this purpose. These cars are remodeled timber trucks, about nine feet long, with chain couplings. The frame of each truck is covered with a 2 x12 plank floor about four feet wide, and along each side of this floor a seat has been built. Steel straps, bent to a "U" shape, are inverted over the ends and center of each car, and poultry wire is stretched over these supports from one side of the car to the other. This superstructure is high enough to allow the men to sit upright on the seats; yet prevents them from standing erect. Bumpers are provided to keep the cars a sufficient distance apart to allow the men entrance, and protecting steel plates project from the superstructure of each car above these bumpers. The arrangement is, therefore, such as to make it impossible for a man either within or about to enter or leave one of the cars, to stand erect and come in contact with the drift timbers. Each car has a seating capacity of twelve, and at present ten cars are made up into a train. One of the regular ore-hauling air locomotives is detailed at the beginning and end of each shift to pull the passenger train. A signal gong is mounted in the forward car, just behind the locomotive, and a wire cord is carried along the superstructures of the cars from the gong to the rear end of the train. Should anything go wrong, anyone at any point in the train can stop it at once by pulling the cord and ringing the gong. The cars are kept during the shift on an otherwise unused tail track. The cars are regularly cleaned, disinfected and inspected. The cleaning is done with compressed air. The disinfectant is made up in liquid form and applied with a spray.

The passenger train has right of way over all others. It is the first to leave the main shaft station at the beginning of a shift and the last to leave the stopes at its close. At the suggestion of one of the men, a red tail light has been added to its equipment to aid in distinguishing it from other trains.

It has been found that the use of this passenger train is advantageous in several ways: First, there is probably a slight saving of time in getting the men to the stopes; further, the walk to and from the main shafts is eliminated. The greatest advantage, however, lies in the great reduction of the number of men traveling on foot

through the main haulage drifts. This is a matter of safety and is in itself of sufficient importance to more than justify the use of this train.

Light promotes cleanliness.

THE NEGLECT OF TRIVIAL INJURIES

Writing on "The Neglect of Trivial Injuries," Dr. C. T. Sturgeon, of the Old Dominion medical staff, says in The Old Dominion Bulletin:

Around mines and industrial plants accidents are likely to happen. Sometimes serious ones and sometimes slight ones. The slight accidents will amount to nothing if properly cared for, but if neglected will often have dangerous results. Cuts, bruises, sprains, puncture wounds by nails or candlesticks, foreign bodies in the eye and burns are some of the trivial wounds which, if neglected, may result in serious infection. How often a man comes to the doctor's office with an infected finger or hand. One of the first things he says is that four or five days before he had a small scratch or cut, but thought that it did not amount to anything and did not want to bother the doctor. You are not bothering the doctor, for the latter would rather take care of a small injury for a few days than take care of an infection for a month.

These infections are caused by disease germs that find lodgment in the wound from outside sources, from the clothing, or anything that comes in contact with the wound. In consequence there may be danger of blood poisoning. Even scratches or pricks, when not properly cared for, may result in infections which may disable a person for a considerable time or cause the loss of a limb or even life.

The first thing to do upon receiving a slight cut or bruise is to go immediately to the First Aid box and put a clean dressing on it. Do not attempt to clean it out yourself, as in the majority of cases you only rub the dirt deeper into the tissues. Keep the wound covered until your shift is finished; that at least will keep out more dirt. Then go to the doctor's office, where he will clean it out and dress it for you, and in a few days it will be healed. In case it is impossible to come to town to see a doctor, the next best thing is to clean it out yourself. We use benzine, in which a few crystals of iodine have been dissolved, to clean the wound, but gasoline does almost as well and is much easier to obtain. With benzine or gasoline clean out the wound; also the surrounding skin. After the skin has dried, apply tincture of iodine to the injury and surrounding skin. Let the iodine

dry and then wrap it up with a clean piece of gauze and daily apply iodine and clean dressings until healed, for it is just as important to keep out dirt after the first dressing as it is to first clean out the wound.

With reference to puncture wounds by either candlesticks or nails, it is very important that these injuries be seen immediately by a doctor. First cover the wound with a sterile piece of gauze from your First Aid box, then do not wait to finish your shift, but go at once to the hospital to have the wound dressed, for a few hours' delay in sterilizing these wounds may mean a very serious infection with a long period of disability.

Trouble is often caused by a foreign body in the eye, whether it be dust, a piece of rock or steel. Upon receiving such an injury, immediately go to the hospital or office. Do not allow a fellow employee to try to remove anything from your eye with a toothpick or match, for you run the risk of an infected eye which may mean the loss of sight. After the foreign body has been removed by the doctor, keep on reporting daily until discharged, as only in that way can the best results be obtained.

In case of a sprained wrist, ankle or muscle, do not be content to send to the office for a bottle of liniment, but report for examination. A plan of treatment will then be outlined for you, as all sprains do not respond to rubbing. Some have to be strapped, others have a splint applied for a few days in order to keep the parts absolutely quiet.

With regard to slight burns, the same general rule applies. Have the burn dressed and keep it dressed until it is healed.

In this article I have tried to make clear that trivial injuries should not be neglected. An ounce of prevention is worth a pound of cure. The proper care given immediately will result in the saving of much time and suffering. Of all the directions given, the chief and most important one is—see the doctor without delay.

Fresh air, food, rest—these three combat tuberculosis.

REMEMBER AND—

Always return for medical treatment at the time you are told to. Delays are dangerous.

Always go and see a doctor promptly when injured, no matter how trivial the injury may seem to you. Better be sure than sorry.

ONE MAN AMBULANCE

At the Raimund mine of the Republic Iron & Steel Co., in the Birmingham district, Ala., an ambulance particularly adapted to quick service has been recently put into use. It consists of four ordinary 28-inch bicycle wheels and front forks, rigidly fastened together with a 1 inch pipe frame, the front wheels being provided with a steering lever. It has a 59½-inch wheel base, 22½-inch tread, is 36 inches high and weighs only 91 pounds. A canvas stretcher of the common type is set on the top of the ambulance frame, the hand holes on the side easily slipping over the extended posts on the frame and thus preventing any movement of the stretcher after it has been once placed in position.

When a man is injured in the mine he is placed on a stretcher, which is then suspended in the 10-ton ore skip in a horizontal position by light chains hung from the front and rear of the skip. On reaching the surface the stretcher is lifted out of the skip and set on the ambulance, which one man easily steers and pushes to the emergency hospital.

Abundant fresh air will prevent more disease than will unlimited medicine.

"YOUR LITTLE WIFE"

By William F. Kirk

Who plans to make your future bright?
Your little wife.
Who cooks to tempt your appetite?
Your little wife.
Who tells her women friends that you
Are one grand husband through and through?
Who's the best girl you ever knew?
Your little wife.

Who pats your cheeks when you get home?
Your little wife.
Who smooths the thin hair on your dome?
Your little wife.
Who looks at you, her brown eyes clear,
And, snuggling to you, extra near,
Says, "This is pay-day, ain't it, dear?"
Your little wife.

—The Anode.