

Paper and Pulp Section

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MONDAY MORNING SESSION

October 6, 1941

Presiding: D. B. CHANT, Secretary-Engineer, Ontario Pulp and Paper Makers' Safety Association, Toronto, Ontario, Canada, and General Chairman, Paper and Pulp Section, NSC.

CHAIRMAN CHANT: I am happy to see so many of you present at this Thirtieth Annual Safety Congress.

Our program this year is somewhat less full and complete than in previous years. We have felt that we have at previous Congresses perhaps tried to accomplish too much as a Section and that because of the number of sessions and the number of papers, many of our Section members were prevented from attending proceedings of other Sections or of the Council as a whole which they would have liked to attend and from which they might have obtained great benefit. So this year our program is shorter. Tomorrow afternoon we have two separate group meet-

ings. One of those is especially set up for members who are interested in paper products and paper specialties manufacturing; the other is for those interested in pulpwood logging operations. Wednesday is a completely open day. On Thursday we have our annual Section Luncheon, followed by the final session. The presentation of the trophies for the Section's safety contest will, as usual, be made on Thursday afternoon following the luncheon.

(The General Chairman then presented his "Progress Report of Section Activities," briefly reviewing the year, and mentioning the good work of the many Sectional Committees.)

CHAIRMAN CHANT: Next on our program we have the review of the accident experience in our Section during the past year.

For a number of years now this very important part of our Sectional activity has been directed and carried on by Fred Braun.

Review of Paper and Pulp Accident Experience

By F. W. BRAUN

Vice-President and Chief Engineer, Employers Mutuals, Wausau, Wis., and
Chairman, Statistics Committee

We have lost some ground since 1938, and according to the latest contest figures for 1941, frequency rates will be up slightly again, unless records improve considerably during the last part of the year. This is our longest continuous period without making improvement in either injury rate since we started collecting reports in 1926.

Working time in the industry has increased about 10 per cent in each of the last two years—1939 and 1940. New employees, the speed-up in production, and similar factors have resulted in increases of 3 per cent in frequency and 38 per cent in severity. The increase in severity occurred entirely in 1939 during the first sharp expansion in operations. We held our own in severity during 1940, but the frequency of injuries was up slightly, and contest experience indicates another small increase again this year. Operations, however, are being stabilized at higher production levels and we should be able to resume the downward trend in injury rates.

The industry has gone a long way in improving its injury experience in the past 14 years. Frequency rates for 1940 averaged 15.4—a reduction of 70 per cent since 1926. Results in severity rates have not been equally good but the improvement of 57 per cent exceeds the average for all industries. Most of these reductions were made previous to 1932.

Our rates, however, must go lower before we are even on the fringe of the safer industries. We must make a reduction of 23 per cent in frequency and a decrease of 14 per cent in severity in order to equal the average rates of all industries. The problem, of course, is how to achieve lower rates.

I have often thought that one of the principal weaknesses in our industrial safety work is insufficient use of records for pre-

vention purposes. We compute frequency and severity rates to determine whether our records are getting better or worse; however, injury rates only measure the results of our safety activities.

Rates are necessary and important information. But our records should tell us what the most important problems are and then give us facts that will help to solve them. It is only logical to put our efforts where the largest reductions in the frequency and severity of injuries can be expected.

The series of Accident Facts Memos which each of you have been receiving monthly were intended to direct attention to the most important hazards and summarize causes of accidents on these specific hazards. The series of 12 memos, each on a specific piece of equipment, summarizes the important facts about two-thirds of our accident. The remaining third were widely scattered over many kinds of equipment and materials and under widely different circumstances. The logical thing to do, therefore, is to forget temporarily about these widely scattered accidents and concentrate on eliminating the unsafe conditions and practices on equipment most frequently involved in accidents.

The memos give a cross-section of the important details of accidents in mills throughout the industry. While the nip hazard is our outstanding problem, it does not necessarily follow that this is true in all mills. Slippery, wet, rough, and other defective floor conditions were another outstanding problem in most mills and could be far and away the most important mechanical hazard in some plants. Each mill should analyze the details of its own records in order to determine the principal accident sources and thus know where most effort

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One wood-working plant had 148 doctor cases in two years. Three-fourths of these involved only 15 kinds of materials and equipment; the number of accidents on each kind varied from 3 to 18. The other 25 per cent of the accidents involved numerous kinds of equipment and resulted in only one injury in two years. Obviously, these scattered cases could be disregarded until progress has been made in eliminating the major sources of accidents.

The analysis showed that the reduction of saw accidents was the principal problem. The injuries were numerous and serious. Reports showed repeated injuries due to lack of guarding and that a much better job would have to be done in observing and correcting unsafe practices. The repetition of two unsafe practices accounted for almost one-half of the saw accidents. Furthermore, others were due to repeated violations of instructions. If this situation is not corrected, injuries on saws will continue to be a substantial proportion of the company's total cases.

I think we are apt to lose sight of the frequency with which accidents occur on certain equipment because months may elapse between accidents. But we usually act quickly and effectively when several happen in a short period from the same causes. This woodworking company had several accidents in one month due to chips flying from hammer heads and quickly corrected

the difficulty by purchasing new hammers.

The company, on the other hand, had a substantial number of back strains due to lifting a certain part of their product. These occurred at infrequent intervals and the possibility of eliminating them was completely overlooked. The analysis showed that nearly all injuries occurred in lifting pieces onto a truck in one department. This source of three or four accidents a year could be easily eliminated by requiring several men to lift the parts onto the truck.

The survey showed also how the safety work of foremen could be made easier and more effective. Reports from one department showed three or four principal sources of accidents and that they could be largely eliminated through instruction and observance of safe practices. The foreman could maintain a good record with a minimum of work by concentrating most attention on the safety of these jobs.

The recently developed Cause Code of the American Standards Association provides a good guide for analyzing the details of accidents. After years of effort to develop a satisfactory and practical method of determining the important facts in accidents as a basis for corrective action, I believe that we now have a useful method in this code. It gives the basic principles for putting your finger on the materials, tools and equipment that are giving trouble, how the injuries occur, the unsafe conditions, and the unsafe act of the employee and the reasons for it.

CHAIRMAN CHANT: After what Fred has just described as his annual job, there need be no wonder why Scott Dowd insists on Fred doing this job for us each year. Fred never fails to put his finger on at least two or three items, brought to light by his study of the accident statistics of the Section, which each of us can take back home and put to use in our own plants. The program now provides an interval for discussion.

R. W. CROUCHER (Minnesota & Ontario Paper Co., International Falls, Minn.): Mr. Braun referred to a table but I did not get the name of it nor the name of the publisher.

MR. BRAUN: Write to the National

Safety Council, Mr. W. D. Johnson, statistician.

MR. CROUCHER: What do they call it?

MR. BRAUN: The American Standard Cause Code.

F. H. ROSEBUSH (Neckoosa Edwards Paper Co., Port Edwards, Wis.): I remember that the National Safety Council in a recent pamphlet made the statement that 87 per cent of all of these accidents can be traced in some way to unsafe acts on the part of the workers. In our own mill this last year we have had an unduly large number of accidents that were not caused by machines. I think we have had six sprained ankles among the other numerous types. Fred said

that you might find your floors are slippery. We have had a large number of broken fingers, we have had a number of cases of skimmers' wrists, and a large number of other types of what we call "self-inflicted accidents."

I wonder, when we study these causes, how we are going to apply it to our own particular problem. Our own problem, it seems to me, is educational work, to make men self-conscious so that they will do a little prevention work on their own initiative.

MR. BRAUN: Well, that cause table is something that the American Standards Association has worked out. They have been working on it for a long time. It is new in print but really it is an old theory. They ask certain questions. For instance, the age of the machine. The condition of the machine. The age of the employee. His foreman. Was he properly supervised? Was he properly instructed? Had the foreman ever seen him do an unsafe act? If so, what had been done?

If you will study that cause table you will find there certain questions that may give you a lead as to why you have six sprained ankles or six broken or smashed fingers, even though your employees are old-time employees.

Now the prevention is, even though he is an old-timer, to talk to him and to explain to him just what he is doing. We get in the habit of doing things the wrong way, not because we want to do them the wrong way but just because we get into the habit of doing them that way.

J. FRED BERRY (Alton Box Board Co., Alton, Ill.): I should like to ask Mr. Rosebush just what is skimmers' wrist?

MR. ROSEBUSH: Men who take laps off of the wet machine use a stick to cut the lap off, and also we have some machines on bleach where the machine partially folds the lap and they have to tear it off. It is the continual use of the wrist, either with the stick or in folding laps, that causes a swelling of the wrist that takes the man off the job.

CHAIRMAN CHANT: It is usually synovitis, isn't it?

MR. ROSEBUSH: Yes.

J. E. CAMPBELL (Consolidated Paper Corp., Ltd., Three Rivers, Providence of Quebec, Can.): I should like to hear some discussion regarding the use of goggles in paper mills. Do any of the mills make it compulsory for the repair men and the machine shop men to wear goggles? What is the general rule?

CHAIRMAN CHANT: Mr. Campbell, would you mind writing your question out and turning it in to our Secretary, and we will bring it up on Thursday afternoon at our special question and answer session? We will have a group of men just for the purpose of trying to answer questions, and that is a dandy one to ask.

Each year, as you know, for some years past it has been the practice in this Section to have the proceedings recorded stenographically, or perhaps I should say "Stenotypically," if there is such a word, and each year we have come to you hat in hand to collect the necessary fee with which we can obtain this service. We are again in that position. Our Section Secretary tells me that he feels quite sure that a contribution, voluntary I hope, of one dollar from every Section member present will meet the necessities for this year. We might, if you agree, make use of a period of about three or four minutes now before we go on with our next speaker to have Mr. Richardson pass among you and collect your dollars.

(Collecting of contributions.)

CHAIRMAN CHANT: We are fortunate in having with us this afternoon the next speaker, Mr. Reuben Robertson, Jr. Mr. Robertson is a member of the Technical Association of the Paper and Pulp Industry, familiarly known as "Tappi." He is also a member of the American Institute of Chemical Engineers. He is a graduate of the Sheffield Scientific School of Yale University, and he has been a member of the Champion organization since 1930. He is a chemical engineer by profession, but he has been used in various capacities by his company, and has taken a particularly great and continued interest in problems of safety.

Accident Control as a Phase of Operation in the Paper and Pulp Industry

By R. B. ROBERTSON, JR.

Vice-President, Champion Paper & Fibre Company, Hamilton, Ohio

What you really want, I believe, are views on ways and means of effectively giving safety its proper share of management's attention in the daily routine of production. I am going to try to carry out that general thought, on how ways and means can be provided in these busy times to do that job.

Management in general is overwhelmed with the current daily problems. The problems of supplies, maintenance supplies, operating supplies, production, priorities, taxation and general personnel factors and elements that we have to contend with are tremendously time-consuming, and it is true that with the pressure of those activities safety has a tendency to be pushed aside to take care of itself during this emergency. However, safety must not be pushed aside. Safety should be on the "must" list, and one of our main problems now is to find out how to keep safety on that "must" list.

First of all I think management must realize that there is this problem. Second, management must formulate a plan to attack that problem. Those are just normal steps in work of that sort. Third, management must organize and delegate to execute that plan. Finally, last but not least, management must persistently follow up to see that the plan is being followed out.

First is the question of management's recognizing that a problem exists. I think we can fairly say in regard to the paper and pulp industry, which is no different from the management in 90 per cent of the other industries, that top management has not always appreciated and realized the problem. Top management has frequently taken the position, "Well, we have a safety director and he will take care of that problem." That is not as it should be.

Whom do we mean when we speak of management? We do not necessarily mean the board of directors. We include many individuals, from the president on down through the operating organization, the vice-president who is looking after operations, the general manager, the mill manager, the de-

partment manager, the superintendent and the foremen. In other words, management in that sense does not mean ownership. It means the men who are carrying out the contacts with employees and are executing the daily functions of the business. In thinking of management's realization of its responsibility in those terms, it means from the top to the bottom, all the way down the line organization. Now that also includes the staff organizations that contribute to the solving of the problem, the personnel department, the safety department, the medical department, the vocational training department, etc. They are all included in this broad scope of management.

To realize the problem, management must first have an interest in the problem, interest in the welfare of the men. That is, I would say above all, interest in the quality of the working conditions under which the men and the supervisory group are working; also, interest in the past performance of his own company, his own plants, and interest in the present trends, again of his own plants, but also of the relative position in the industry of his plants, and what equipment and working conditions in other plants are better than he has.

One of the things that impressed me with the importance of this problem was a statement that I read recently in "Modern Industry"—that in a normal year, such as last year, more than two and one-half million men were out of work ten days as the result of accidents throughout all industry. It was as if there were a strike for ten days of two and one-half million men, resulting in this great loss of man power during the course of the year. When man power is at a distinct premium, as it is now in our defense program, that is a serious problem.

Another fact that was pointed out in this article was that in the state of Michigan, the only state in which there was a direct correlation between employment gains and accident losses of a current nature, against last year's employment there was a gain of 17

per cent but against last year's accident rate there was a rise of 48 per cent. In other words, the two and one-half million men out for ten days last year is likely to be very much more serious this year. That simply illustrates that the problem is general, but at the same time it is specific and it hits close to home. It hits every individual plant in any industry, and, of course, in our industry, the record is not such that we can go without checking ourselves.

In our company we have three plants. They are widely separated, one in Ohio, one in New York and one in Texas. For purposes of reference I am going to use some of our regular charts and I will try to explain them as we go along.

(Chart.) This chart is for our Hamilton, Ohio, Division and illustrates the trend of accidents over twenty years. This is in terms of numbers. Frequency possibly would reflect it a little better, but this happens to be the one we have. Back in the earlier years there was on the average about 140 accidents per year. That was very bad, about ten accidents a month, and I would say then that management's realization became much more acute and there was a sharp drop in five years, down to a total of about ten accidents; and since that time, in the last five or six years, we have had ups and downs, but the last year is a higher figure.

MR. ROSEBUSH: Are those all lost-time accidents?

MR. ROBERTSON: These are just lost-time accidents. We will hit on minor accidents a little later, but here we have concentrated on lost-time accidents. It is true that expressed in terms of frequency it would not look so bad, because of more men and more man hours, but it is enough to bring to you a realization that there is a problem.

(Chart.) As a further illustration here is the Canton Division. This shows total lost days in the last five or six years, starting out with 1,100 man days a year, dropping down to 900, a record year at 450, then sliding back to 1,200, back down to 800, and this past year, 1,150. That emphasizes that the men are also suffering. Of course, compensation and other benefits help the men to make up that loss in dollar value, but it is not a complete replacement of loss in dollar value and income to those men. The company stands to lose very

substantial amounts of money. On this particular chart, the Canton Division in that year cost \$16,000.

I might say here, in passing, that our company carries its own insurance; but that is comparative with the rate of any company not carrying its own insurance.

Sixteen thousand dollars, \$4,000, \$2,000, \$19,000, \$6,000, \$6,000 and \$7,000. That indicates that between the good and the bad years there is a very distinct monetary difference of approximately \$12,000 a year or \$1,000 a month, which is the difference between doing a good job and a bad job in one plant.

(Chart.) This is the Hamilton Division, ranging in accident costs from \$2,000 again to \$16,000. The year we just finished was \$10,000 up to \$12,000.

Adding all those losses together for the three plants, the range runs between \$10,000 as a good year and \$40,000 as a bad year. So you can see that aside from the humanitarian angle of it, there is a very distinct monetary interest. In other words, it is very good business to carry on an effective and complete safety program. So, to sum up the first phase, management must recognize that a problem exists. It does exist and we must all help it individually by plants, by industries and the nation as a whole, and I believe that it is the responsibility of management as a group to take that leadership and carry it out with a great deal of vigor and energy.

The second phase is that management must formulate a plan of action. Improvement in accident prevention does not just happen. We must have planned action by individual managements. First in that program must be the will to improve. No improvement comes without a very strong will to gain that accomplishment. Second, it is necessary to check on the program as it is now being carried out. Almost every company at this stage of our industrial development has some form of a safety program. It is necessary to check on its effectiveness, to see if progress is being made.

If the program is going good and simply needs stimulation, that is one set of conditions. Another set would be if the program had come to a complete stall and there was a slipping back in results, which would call for another set of plans; and in developing the new plans it is essential to dovetail them as

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much as possible with existing plans for the greatest effectiveness.

What other things are needed to create a full and effective safety program? I believe that one of the most important points for every member of any organization to realize is that when management says "Safety first," they really mean safety first. Often management will adopt the slogan, "Safety first" and then production gets to lagging a little, and they will say, "You must hurry up. Go ahead. We must have this production out," and there will creep into the organization a feeling that production is first, or cost is first, rather than safety being first. It takes pretty thorough selling to have everybody realize that throughout the entire management.

The second point there is that the attack for the safety program should be from every angle. First is the mechanical equipment angle. I believe that most companies that have progressed with the progress of the paper industry have gone a great distance in the quality of their equipment, the quality of their machinery, the degree of safeguarding, overhead safety precautions, etc.; but in spite of that it is a never completed job. The shifting of machinery, new installations, the dovetailing of the old with the new, call for constant maintenance of the guards and rails, properly designed equipment going in, and a set-up within the maintenance department whereby when safety needs come up they are not shunted aside on the ground that there is a construction job or a production job that takes precedence.

If that is the tendency in any organization (and from first-hand experience I know that it is likely to be the tendency), then independent, special men, safety engineers or safety maintenance men, should be set up who are available for the safety director's guidance at all times; so that if a safety problem is up today, it is solved today and not next week; because the minute that lag of time comes into the picture the men and the organization feel that safety is not first.

Thus there is the personal equipment angle. There have been tremendous developments in the availability of safety equipment for the industry—safety shoes, safety goggles, safety helmets. I should like to add that our company had special rules for the use of goggles in machine shops and where grinding equipment or welding equipment is used; this

is compulsory. Respirators and all manner of asbestos and fireproof clothing and things of that sort, especially for around pulp mills, are available.

It is true that even with that equipment there is not always a full follow-through on its use. Frequently men will go around smelters, for example, without their goggles, and I think that is the place where the sales program must come in to insure the use of those types of equipment that are available.

Another factor in the equipment angle is the men's personal apparel. Too often men will wear loose overalls that drag on the ground, or loose sleeves, or shoes that are worn out and have thin soles and if they step on anything it will go right into the bottom to their feet; the loose clothing will get into gears and machinery and pull them in. That has been too frequently a cause of our accidents.

The third phase of an effective program is the training and supervision of the men. I think I will qualify that by saying new men and transferred men. Many companies have well-established systems for training and educating or advising the new man as to unsafe conditions, giving him a background of the company's safety policies; but frequently too little attention has been given to the codifications of safety practices, so that when a man moves from one department to another, the foreman does not have to remember every single thing that is unsafe there and try to tell him in the first fifteen or twenty minutes. Many of the accidents involving the transferred man occur in the early part of his time in the department.

So the development of codes of standard safe practice, which bring out where the responsibilities lie for carrying out various jobs and how the safety work dovetails and ties into the responsibilities of those jobs, is very important. I think that a great deal of help can be gotten from the rank and file of men in the various plants. The codification of safe practices is quite a difficult task. It isn't something that just falls out of a book, because in many instances these practices have grown up over a period of twenty or thirty years and many men have encountered the experiences.

We have over a period of years developed what is known as a "Safety Code Book." It

is pocket size and it is looseleaf. It has a general section that deals with questions of basic safe practices: that is, no horseplay on the job, no loose clothing, care in the handling of ladders and the leaving of plumbing equipment on top of ladders, and general things of that sort. To that is added the question of individual, specific departmental safety. There is the question of knives, the safety elements that have to be observed, the back tender and the machine tender or the cutter operator. Each one is thoroughly studied and written up by the process of bringing the men together and letting them write down their own ideas of what constitutes safe practice in their departments. That is developed through joint meetings, in the presence of the safety director and his own supervision, aided by safety suggestions and other means of getting these ideas together. Then it is written up and put out on a trial basis and corrections are brought about. Maybe six months later it will be crystallized into the next phase for publication.

Through that medium you not only can achieve the arousing of interest, but you can also follow up to see that the fellows are learning and studying. You can use that as a basis for discussions, as a basis for examination, as a basis for giving special awards and, last but not least, as a basis for applying discipline. In other words, if 2,000 men in a plant write their own code of safe practice and agree that they want to live by it, if they deliberately repudiate that code they understand that it is a cause for discipline. Of course, discipline must be judicially applied and that is where the safety department comes in, in seeing that one department does not outdo another department in applying that discipline.

The last item on the list of things necessary for full effectiveness is the stimulation of general safety interest. This safety code is one item in that direction; but further is the question of safety suggestions with special awards for them, competitions, interdepartmental, interplant, etc., and publicity all along the line.

Now we come to the question of organizing to execute these plans. The first point there I believe is the realization that primary responsibility for the whole program lies with the operating line organization. It does not necessarily lie with the personnel department

or the safety department. I think that is where there has been a great deal of difference in the past. The operating organization takes the position, "Well, that is the safety department's baby. That is their problem." If an accident occurs, they think "Why weren't they there to anticipate it?"

I believe very firmly that there should be the realization that the responsibility lies first with the direct mill manager, that he is the fellow who must carry the load; second, that under him he has to look to his superintendents, and any superintendent who is attempting to carry the responsibility of a group of men must accept the responsibility for their safety. Both the manager and the superintendent can call on the mechanical department, the engineering department, the personnel department, and the safety and medical departments to help carry out their responsibility; but first they must realize that it is theirs.

What are these responsibilities that fall to the individual man in the operating group? First, he is responsible for knowing that he has the right quality of men in his department. The tendency is for the supervisor to say, "Well, the employment department sent these men over. I don't like them. They are not so hot, but there they are and I must use them." That is the wrong viewpoint. It being his responsibility, if he does not like the looks of those men he must send them back and say, "These men will not do, and regardless of whether or not you are having a hard time getting men, I want the right kind of men." That applies not only to new men but also to old men.

In other words, there may be an old man who has been in the department for twenty years and the superintendent may have gotten a little casual because, well, "That is poor old Joe and he has been there so long." If he takes that viewpoint he is likely to end up with a bad safety record. If he isn't the right man for the job, there are plenty of means, through study in the personnel department, to find the right place for him, whether it is in the same department or another department. But the man who must do that job is the superintendent. That superintendent or manager, as the case may be, is responsible for the quality of working conditions in his department. If electrical connections or circuits are open, if switches have water under

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them, or if railings are out, the tendency is to say, "Well, the mechanical department should have gotten around to getting that done." That is no excuse. He must get the mechanical department there, and if he fails to do it, it is primarily his responsibility and secondly the manager's responsibility. It is the manager's responsibility to see that those services and functions are available on short order.

Next he is responsible for seeing that there is full cooperation among the foremen, the men and the safety organizations, that is, the personnel, safety and medical departments, in carrying out the general program.

Last, but not least, he is responsible for the execution of all plans for safety within his area of responsibility.

Now that is a pretty stiff burden on the direct line organization, but there is no way around it.

The next point of discussion is, What are the responsibilities of the personnel and safety departments, if the main responsibility lies with the operating line organizations? Where does this other group come in? They are on the job. They have work to do. Why shouldn't they be responsible? They have their own areas and fields of responsibility. I think it is very desirable in any organization to have a clear-cut understanding of how the personnel department fits into a line organization. There is a lot of misunderstanding about it.

Personnel is a subject that has been going through a lot of transition in the last few years. Personnel in the early days got to be known pretty much as the employment department and that was all. I think that for real accomplishment of our goal, not only in safety but in our whole industrial human relations picture, we must come to a new realization of what is meant by the field of personnel.

(Chart) This chart is an effort to see where personnel can or should fit into the operating organization. First of all, the president at the top of the company. Next, the mill manager. On a level with the mill manager are the purchasing functions, the traffic functions, sales functions, treasurer, accounting, legal and so on. Depending on the size of the organization, then come the super-

visory group, pulp mill group or area superintendent, if that includes chemical works, paper mill superintendent, which would include board machines, finishing rooms, converting operations, if the line were that way. Maintenance superintendent, which probably includes construction, etc. Steam and power and personnel.

In other words, the director of personnel should be on a direct line of responsibility level in the organization with these other jobs. It is a big job and a job that should be manned by a competent person. The staff jobs, the chief chemist, the chief inspector, the scheduling supervisor, fit into their own particular place. Personnel is, in fact, a staff function but should be on an equal level with the line organization.

I think the lack of understanding that exists in most industrial organizations of what the line flow of responsibility is, has its bearing on the safety program. It is true that where you are dealing 1,000 or 1,500 or 2,000 men in a plant, and they do not fully understand the line of responsibility to which each person reports, there is a possibility of friction developing, and as friction develops so do unsafe practices. There is a tendency to let down unless there is a clean-cut line follow-through.

Let's look for a moment at where safety fits into a personnel organization. The mill manager, of course, at the top. The personnel director, assuming that the plant and company is large enough to justify one, which I believe almost every plant is today. Employment, safety, plant doctor, paymaster, standards and bonuses, vocational training, employees' activities and plant magazine. Each with its own respective function being carefully classified. Now it is true that in every organization it is not possible to have an individual man heading up each one of those functions. In large organizations that is possible, but in the small units, which are in the majority, many of those functions need to be consolidated under one individual, but that can still be done and have them function well.

Safety fits into that as one of the most important in this whole personnel group. All of them play a part of the safety phase. Under the safety group come contests, bulletins, reviews and accident records. It is the responsibility of management in each individual case

to see that his own organization understands the basic organization chart and how safety and personnel fit into that organization.

Now let's take a moment to look at what the specific responsibilities are of this safety group. What functions are they expected to fulfill and what are the relationships between those functions and other functions? First of all, it is the responsibility of the safety department to keep all accident records and statistics, and in saying "to keep them," I think we mean to keep and use them, to keep and bring out for the use of other departments those records. It does not do any good for some man to sit in an office and compile a lot of records unless those records are taken out into the mill, and what the trend is is frequently pointed out. The keeping and making use of them (use being the most important part of it) is one of their primary responsibilities.

A study of the causes, responsibilities and correction of accidents. In other words, when each major accident occurs, he needs to digest it, to go to the job and see the conditions first-hand, to help to allocate the responsibility, to see within the top group whether the foreman or this man or the pipe fitter was responsible, in order to carry out the discipline, if necessary, or future records and the follow up of the correction. If it was a mechanical condition, the safety department must establish follow-ups to see that it is cleared up before another accident occurs. The use of those records also involves a history of frequency and severity and also cost, to build up a cost picture which can be referred to management and various departments.

The next responsibility of the safety department is to recommend to the operating and engineering departments items of improvement. It is still the safety department's responsibility to bring new ideas to them to be carried out. Next, to conduct publicity campaigns. This word about safety does not spread itself. Men ordinarily are too busy with other things to bother about it unless safety is sold to them, and it takes a great deal of publicity to keep it sold. Posters, the ones that are put out on a national scale by various companies, bulletin board articles, bulletin board pictures, the use of magazines, monthly magazines, and the reporting and following up of the contest in which that par-

ticular plant may be competing, are parts of that publicity follow-up work.

The safety department has to lead in the work of developing safety codes. Safety codes just do not come about by their own momentum. They have to be pushed and followed up, and the scheduling of the meetings and all that work is done primarily through the safety department. The safety department is responsible for the original instruction of the new man and the instruction of the man being transferred. Of course, that has to be systematized so that the department man can follow that up and double check.

The safety department should be responsible for recommendations of discipline; that is, the balancing of discipline where it is needed to see that a hard-boiled department head does not give a man two weeks layoff and another department gives a man two days layoff.

The safety department is responsible for the contact between the medical department and the safety department, that is, to see that the medical factors and the man's care after he is hurt and his ability to get back to his regular job are followed through.

Now the question of aids to safety from other personnel departments, I think, are concentrated into a small group. Foremanship training can be used very extensively to help the foreman know how to develop safety as well as to help the foreman to know how to handle his own job best. Vocational training is being developed on a very large scale all over the country. I imagine that most companies are taking advantage of the federal and state programs, and into that program can be put a very effective section on safety work. Standard practices fit very much into the question of safety codes. That is, the development of the responsibilities of each individual operator should be tied together with the responsibilities from his own safety angle. Medical examinations, coming under the plant doctor, can be used very extensively on an annual or a biennial basis to check the physical condition of the individual men.

Earlier it was the practice just to examine men as they came into the organization. Too frequently trouble developed after they had been ten or fifteen years with a

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company and no double check or check-back was made to see that they were in good shape; that is, from a blood pressure standpoint, hernia, venereal disease or any of those things. That can be used very effectively and without trouble if it is sold to the men first as a means of aiding the safety program.

The employment department can be of tremendous help to the safety program in seeing that the superintendents are getting high quality men to start with. It is very difficult to educate a man in safety who has a very limited amount of intelligence, and there are plenty of men available who are intelligent enough to absorb the safety job, the safety understanding, and that responsibility is a coordinate part of the safety program.

Persistence in the follow-up of these safety items is the fourth and main point of carrying out this plan. Meetings of various types within the organization, should be carried on extensively. The supervisory group, should discuss and review the safety problem at least once a week. In our particular case each plant brings safety up its executive and supervisory groups one day, at noontime, every week and devotes probably a half hour to a discussion of that problem. At those meetings standings in contests and past week results are discussed, safety committees recommendations are followed up and there is a follow up of past safety orders. In other words, when an order is issued to correct an unsafe condition, it is again followed up at that time to see that it has been carried out and has not been lost in the shuffle.

Safety committees are a very helpful adjunct to the responsible group, the safety committees being made up not of just the supervisory group but of a well-selected representation of men from every department, under the leadership of the safety director. They meet either once a week or once a month, as the case may be, and discuss all the general aspects of the entire safety program. Departmental safety meetings, held under the jurisdiction of the superintendent safety director, are usually held once a month with the foremen and with the aid of the month; and they formulate their own safety program, looking after specific detail problems, such as mechanical conditions in any one room, or clothing or training.

The last in that group is the accident review board, a board made up of general representation throughout the plant who study, with the help of the safety director, the accidents which have occurred. They meet only when an accident occurs and digest it and allocate the responsibility for management, and come out with a definite recommendation of what future steps should be taken.

Of course, external meetings are very helpful. Community Safety Council meetings should be followed up and stimulated, and I think that in most industrial areas there are such local safety councils, with representation from the men, the supervisory group and top management attending the meetings. Those are usually monthly and frequently have competitions in connection with them which can be of real help. Inter-plant meetings, held mostly through the personnel and safety group, can be very effective in exchanging ideas and working toward a coordinated plan, so that every plant knows what is going on in the other plant and can make use of those ideas wherever possible, not having one plant going off on one set of ideas and another plant going off on another set. The correlation and the unifying of the program is helpful.

And last, but not least, the National Safety Council is a general clearing house for safety information, for personnel, safety and managerial groups and should be supported with all our energy.

Now, as a part of the persistent follow-up, I believe that competitions can be and should be used to a considerable extent. Of course, you will find competitions that have run their course and the fellows have gotten tired of them; but if they are kept on a good scale, with clean-cut rules and no chiseling between the departments or between the plants, they can be of real help. In our particular case we have interplant contests on a three years. The best frequency rate for any six-month period constituted one leg on the continuing basis. The first one lasted for cup, the cup being substantial enough to attract interest, and as it was displayed in various parts of every department during the period of ownership, it really maintained interest.

During the course of any one of those competitions, of course, every plant will go

way up or way down. Our Hamilton plant started out at five, its frequency came down to three, and it finally ended up at four and one-half. That was a good frequency for the entire time. The Canton plant was very good at the beginning, won the trophy the first time, also won it the second time; and then slid back and lost out in the last three contests. The Houston plant, very medium in one contest, was exceptionally good in another—a whole six months without a disabling accident—and then slid back for the next two. But the mere fact of keeping those records and posting them and having the award, does stimulate interest throughout each of the three plants.

One of the important things is having distinct rules for carrying out the safety contest. If there is the feeling in one plant that another plant is brushing over a disabling act, that a man gets a leg broken and comes in the next day and "sorts screws," as the old saying goes, there is a break-down of confidence. If all the plants are working to exactly the same rules, and the doctors and safety directors are defining what constitutes a disabling accident, it can be very helpful.

(Chart) This large chart happens to show the progress in a new safety contest which we have under way. One plant started out very badly, but it has recovered. Another plant started out very good, and has slipped, but is still in the lead with a frequency of six. The third plant has a frequency of eight, and the worst plant has a frequency of nine. None of those, however, are terribly bad frequency rates (I believe that the average of the industry last year was 15), but nevertheless they are worse than they should be.

General Discussion

CHAIRMAN CHANT: Mr. Robertson, I feel sure that we have never in this Paper and Pulp Section had a more interesting or instructive paper on accident control in our industry. We are very grateful to you for your splendid talk.

RUSSELL SIMPSON (Brown Co., Monroe, La.): I wonder what is the total number of men Mr. Robertson has in his three mills?

MR. ROBERTSON, JR.: Six thousand.

In these competitions the use of adequate medals, plaques and certificates for the departments is a help. The certificates and plaques from the National Safety Council are also very helpful. Another aid in the program is individual certificates for each man, with a star for every year that he goes through without a disabling injury. That is also true for departments. An adequate certificate can be given with a star for every year that the department goes without a disabling accident. Those are simply stimulants to interest.

Publicity is one of the most important factors. There are a number of ways of getting publicity. Daily sign reminders in each department help; also having each individual, as he comes on the job, sign up that he is watching himself as regards safety that day. Monthly reports from the department head to the plant manager, giving the full status of safety in the department, are reminders to them. The mill bulletin boards for posters, contest results, and the picturing of unsafe practices that have gone on in the plant, are all helpful. The use of the magazine, if the plant has a plant magazine, with a page on which to give the story of the contest or a discussion on unsafe practices, or any items of interest in the safety program should have adequate space in the plant magazine.

One new thing that one of the plants has gotten out is a "Safety Counselor," which comes out once a month, doing the job of direct safety selling, just a little four-page bulletin. It supplements in detail information that cannot get into the plant magazine.

Many companies have little weekly leaflets, and they are an excellent place to get comments.

MR. SIMPSON: You spoke of safety codes. Is that a job analysis of various jobs in the plant?

MR. ROBERTSON, JR.: It is not a job analysis. We are, however, undertaking a job analysis or job evaluation, which can be used to a considerable extent as a basis for the standard practice and safety code work.

CHAIRMAN CHANT: I am reminded of the National Safety Council's safety instruction cards. This Section has had Com-

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mittees on Safety Instruction Cards for a number of years, and those committees have struggled hard to produce instruction cards for this industry for publication by the National Safety Council. I have long maintained that the basic information which should go on such cards is available from the men who do the jobs, and I was delighted to hear Mr. Robertson say that when they developed their safety code, which is, after all, if I understand it, merely a set of safety instruction cards for various jobs, they got the basic material from the men who do the jobs. There is no place where that information is more completely available than from the men who daily handle the equipment and do the job in safety. Even those who occasionally get hurt usually learn how not to do it and store that up for future use.

HILARY ZIMONT (Pioneer Paper Stock Co., Chicago, Ill.): Mr. Robertson, is it your intention to give the code book to each individual employee or to the supervising foremen?

MR. ROBERTSON, JR.: It is given to every individual. That is the reason a small size is used in its development. First mimeographed copies are brought out, which every individual gets, and latterly it is refined to the point of being printed, and then every individual gets a copy of it, in the form of a loose-leaf leather book, with the idea that it can be kept up to date by adding pages. Practices do change. The individual is expected to keep the book. In some cases we resorted to the signing of cards, and later conducted tests, and found out pretty well those who were not taking enough interest to keep the safety book and study it. That is one of the values.

J. W. KUEBLER (Dixie-Vortex Co., Easton, Pa.): Do you have one man who coordinates the work in the three plants; for instance, a personnel man who heads up the safety work in the three plants?

MR. ROBERTSON, JR.: The whole field of personnel work is in the formative stages and we are just arriving at the point now of getting full interplant coordination. Mr. D. J. Thompson, who is with me here, is aiding in our safety and personnel work. It is not with the idea of authoritative distribution of the program, but more with the idea of a clearing house for knowledge and

experience and the approach to the various problems. Of course, each plant has its own responsibility for carrying it out. A means of promoting the flow of information through the plant managers and through the personnel and safety groups is very important in a uniform program.

EMIL G. WOODMAN (The Ruberoid Co., Joliet, Ill.): I am worrying about this man who has worked twenty years in the department, and how the superintendent can remove him. How would you remove him. How would you remove him when he has gone stale?

MR. ROBERTSON, JR.: That is a tough one. However, I think that it is so important that we must find the ingenuity in every case to work out some plan to solve it. We have in many instances carried them on pensions. In other cases we have carried them as watchmen. In other cases we have established them as area clean-up men where they are out of touch with moving machinery. In other cases, we have been able to give them work as mail carriers, or we have given them certain types of clerical work. In certain cases, where their mentality is all right but their physical condition is slipping, they can do many helpful jobs.

One example that I remember especially is a fellow who had very high blood pressure. The medical examination indicated that he should not be on the job at all. He had no income but he had a family; and he arranged that his nephew come in and take his job, and as they went on as a family all right after that. But there is no specific answer to the problem. It is going to cost money, but it is better to spend the money that way than have a fatality or a disabling accident, and the let down in morale that comes from having the wrong man in the job.

GENERAL CHAIRMAN CHANT: The next item is the election of Section officers for the 1941-42 term. Mr. Dowd has again kindly consented to act as Chairman of the Nominating Committee, and I would ask him now to make his report, please. (Applause.)

MR. A. SCOTT DOWD: Mr. Chairman and Members of the Section: As Chairman of the Nominating Committee I wish to express the appreciation and thanks of the other members of my committee, consisting

of George J. Adams, of the International Paper Company, and Walter Gleason, of the Hammermill Paper Company, for your co-operation in organizing this very active slate of officers for the ensuing year. We believe that an Executive Committee of this size is acceptable to you because it gives you each individually an opportunity to demonstrate the activities in your Section.

... (Mr. Dowd then read the report of the Nominating Committee, the roster of officers being printed elsewhere in this record.)

CHAIRMAN CHANT: You have heard the nominations made by the chairman of your Nominating Committee. Are there any additional names that you wish to place in nomination? There being none, I declare the nominations closed, and I instruct the Section Secretary to cast one ballot for the election of this slate as the Section officers for the ensuing year. I declare the election completed.

Since this session opened I have learned with regret of the recent death of a past General Chairman of our Section, and I am going to ask Mr. Rosebush to say just a word or two to you in that connection.

MR. ROSEBUSH: Mr. Chairman, I can see here faces of men who have worked in this Section for a long time. Kenneth Faist, Jim Hastings, Ernest Augustus, Fred Braun, Clayton Braatz, George Adams, Walter

Gleason, and perhaps others whom I do not see but should speak of if they were here. Among those who have given their efforts to the work of this Section is the late W. J. Peacock whom we all knew as Bill Peacock. He took this Section years ago and served as General Chairman for two or three years at a time when it was struggling to maintain and to increase its membership at a time when it seemed to be at a rather low ebb.

Bill, through tireless efforts, helped to re-establish the Section and to give it continued impetus and growth. Within the last two or three weeks Bill has passed away. He was sick for quite a long while. He lived at De Pere, near Green Bay, and I think it is only fitting and proper that we should remember the name of W. J. Peacock and give him due recognition for the work that he did. I suggest that the Secretary write to Mrs. Peacock and transmit to her the action that is taken here so that she may know what the members of the Paper and Pulp Section thought of her late husband.

Mr. Chairman, I move that we stand for a moment in commemoration of the work that Bill did for this Section.

(Those present arose and stood in silence.)

CHAIRMAN CHANT: Thank you, Mr. Rosebush. Your suggestion will be acted upon by our Section Secretary, who will convey to Mrs. Peacock the sympathy of the members of this Section.

TUESDAY AFTERNOON SESSION

October 7, 1941

Group Session for Paper Products Plants

Presiding: J. W. KUEBLER, Safety Chairman, Personnel Department, Dixie-Vortex Company, Easton, Pa., and Chairman, Paper Converter Products Committee, Paper and Pulp Section, NSC.

CHAIRMAN KUEBLER: This session will open our initial meeting of the paper converter group, and I sincerely hope that it is the forerunner of many such sessions.

We will first have the formal paper of Mr.

M. L. Cashman, "Safety in the Manufacture of Paper Products." Mr. Cashman certainly is qualified to talk to our group. He has been with the Liberty Mutual Insurance Company for thirteen years and is a safety engineer.

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Safety in the Manufacture of Paper Products

By M. L. CASHMAN

District Engineer, Liberty Mutual Insurance Company, Chicago

The pamphlet "1940 Accident Rates in the Paper and Pulp Industry," prepared by the National Safety Council, contains some very interesting facts. A challenge to this industry is presented in the knowledge that its accident frequency rate is 23 per cent above the average frequency rate for all industries and the accident severity rate is 14 per cent above the average severity rate for all industries. Of 30 major industries represented, the Paper and Pulp industry ranks 21st in frequency and 23rd in severity.

This report also indicates the principle mechanical causes of accidents as due to: 1. Unsafe working methods and processes; 2. Worn, broken tools and equipment; 3. Poorly designed and constructed equipment; 4. Improper guarding.

The most important personal causes of accidents are: 1. Disobedience of instruction and the improper attitude of employees; 2. Lack of knowledge, inexperience, and lack of skill.

This report, compiled after a comprehensive review of 1,000 accident reports received by the National Safety Council, notes that of these 1,000 accidents, 343 were due to the improper attitude of the employee and 407 resulted from lack of knowledge or skill. These two figures total 750 cases or 75 per cent of the number of cases considered in this report.

I believe it is an accepted fact by most companies today that mechanical and physical hazards must be corrected and protected and that management must insist on the erection and maintenance of necessary guards as well as adequate maintenance of such items as ladders, stairways, platforms, etc. It is true, however, that proper guarding and good maintenance do not effect a reduction in accidents resulting from employee failure, although the severity of the individual accident may be lessened because of a guard or safety device.

What can be done to influence the employee to do his part in protecting himself and also his fellow employees?

It has been said that employee training is the most scientific kind of accident preven-

tion work for it supplies the all-important element that has been lacking in our safety programs. Today, with the demand so apparent for skilled workmen, we find companies establishing schools for employees both old and new, the government making available courses in specific trades and various independent schools springing up everywhere to make available to the employee, knowledge that will make him a better and more efficient workman. Being a more skillful workman, the number of his mistakes is decreased and the possibility of accidents occurring also is decreased.

Properly designed safe practice codes are an excellent means by which an employee's knowledge of his work can be increased. But safe practice codes should not be confused with "rules." Many rule books have been published, but too many have been merely nice pieces of printing and usually backed with little or no enforcement.

What, then, are safe practice specifications?

Suppose your company manufactures paper boxes. Your foreman doesn't receive a memorandum from the sales department asking for 100 round boxes. On the contrary, he receives exact specifications covering the type of box the customer desires and includes such items as dimensions, quality and type of raw material, design of printing, the finish, the cost of the item. It is just as logical to lay down specifications governing the manual operations which are used in your manufacturing operations.

We know that when proper specifications are issued for the making of the box, the actual setting up of the job and the running off of the required number of boxes is a routine operation. Similarly, a properly instructed employee does his work easily and efficiently with a minimum of time and effort.

The following are good examples of safe practices for they are instructive:

"When trucks are to be unloaded, stand back when door is opened as material may have shifted in transit. Check tops of bales and report the piling of endgates, wooden blocks, etc., on top of bales."

"When pulling bales, be sure the hook is behind the wire."

"Do not drop your truck behind another employee when you go to assist him in pulling bales—he may fall over it."

Examples of poor safe practices and of the "do" and "don't" school of rules are the following:

"When moving cars with tractor do not fasten chain on steps or hand rail." (Where?)

"Do not use tip-up type of fire extinguisher or water hose on electrical equipment." (Why?)

"Flat tops and cores must be stacked properly." (How?)

Realizing that our safe practice codes must be complete, instructive and practical, it is important that care be exercised in their preparation. How should we attack our problem?

"Time and Motion Study," "Operation and Job Analysis," "Methods Engineering" are not new terms to you and most of you are familiar with the techniques of these sciences. The general purpose of motion study is to determine the easiest, least fatiguing and most efficient method of doing a piece of work. It has been found that when this method has been determined for a specific operation it also proves to be the safest method by which the job can be done. Therefore, as we prepare to set up our codes we should resolve to analyze each step of an operation or process to determine the easiest, least fatiguing and most efficient method that can be used and we will have the safe way and our safe practice specifications for that operation or process are apparent.

Now who is going to do all this work—a great deal of time and thought will be necessary to set up these codes? From an executive point of view, the foreman or supervisor of a department is responsible for accident cost control in the same manner as he is responsible for all other forms of operating cost control such as labor, heat, power, light, spoilage, etc. The costs of accidents are production costs and accidents are production waste or losses. The foreman is, therefore, definitely interested in any method which will assist in keeping his operating costs at a minimum. He also knows more about each job and operation in his department and be-

cause of his experience should be best qualified to determine the most efficient and safest method by which a job should be carried out.

It is therefore suggested that when it is decided to establish a set of safe operating codes that the idea be presented to a meeting of the foremen with the request that all operations in their respective departments be reviewed and analyzed to determine the correct and consequently the safe methods of carrying out each operation. It will undoubtedly take several meetings to review, revise, and refine the suggested specifications before final approval is given for printing; and during this period employees, lead men, and executives should be contacted and asked to add their suggestions. It must be remembered that all specifications must be practical and enforceable, otherwise they will not be carried out on the job.

Once accepted and approved, these safe working practices should be officially adopted by the company and sanctioned by the highest executive with proper authority to insure enforcement.

The next step is to determine what form will be used to distribute these safe practices to the employees. Booklets—printed, dittoed, or mimeographed—may be used containing safe practices for all departments, for one department, or for a specific operation. One plant has prepared a booklet containing not only safe practices for all departments, but also company regulations governing hours of work, vacations, insurance benefits, welfare activities, etcetera. This booklet, an employee will keep, for it contains so much pertinent information regarding his job and his company. Folders—four page with departmental, job or operation practices on front cover and general plant regulations or safe practices on the inside pages. Cards—about 3 by 5 inches with the safe practices for each job, operation or department on separate cards are used to some extent particularly on general safe practices common to several operations.

There is one drawback common to all of these methods of distribution and that is the possibility of these instruction booklets, folders and cards being lost, mislaid, or thrown away. To overcome this and to insure having all employees constantly reminded of the correct methods to be used I have had considerable success in having safe practices pertaining to an operation or department printed in

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large type for permanent posting in or around the operations to which they apply. Photostatic copies of the practices typewritten on 8½ by 11 inch paper may be "blown-up" to say 17 by 23 inches, and the negative copies framed under glass to obtain the same effect. Regardless of what methods used for distribution, sufficient copies should be obtained to distribute to all new employees and for employees shifted to new work.

CHAIRMAN KUEBLER: The second part of our program is going to be informal discussion. I feel that I do not have to introduce our discussion leader. I believe that everyone knows Fred Berry. If they haven't met him personally either at this convention

The preparation of a set of safe operating specifications is not an easy task. It takes considerable time and thought and involves a great deal of expense. No company should undertake this task unless there exists a definite intention to enforce full cooperation in carrying out the specifications decided on. I can assure you that the results will be worthwhile for the "safe way is the efficient way."

or previous conventions, certainly they have seen his name each month for the past year as Editor of our *NEWS LETTER*. We all know that he has done a swell job. I will now turn the meeting over to Mr. Berry.

Mr. Berry assumed the Chair.

General Discussion

Discussion Leader: J. FRED BERRY, Personnel Manager, Alton Box Board Company, Alton, Ill.

CHAIRMAN BERRY: I should like to start by asking a question pertaining to converting. I want one of you to answer it from the floor, although this question may be a problem to you, maybe somebody else here has had the same question come up and has actually licked it and knows just what to do. So if we proceed along that line, I am sure it will help a lot. The first question is a common one. However, a lot of accidents have been caused by it.

"How do you prevent stocks of rolls from toppling over or having the bottom roll slip out and spread the pile?"

Who wants to tackle this? George, how about you?

Rolls Topple Over

GEORGE J. ADAMS (International Paper Co., Glens Falls, N. Y.): Fred, I will be glad to try to answer the question. There are many problems in converting plants that are common to the manufacturing plant paper mills also.

We have that same hazard, particularly in cutter rooms and storage rooms where, as I understand it, you pile the rolls one on top of the other and the bottom spreads out. As a matter of fact, in one of our mills just two weeks ago a man's feet and ankles were in-

jured. Several rolls were piled on top of each other and the rolls slipped out and caught his feet and ankles.

Well, the only prevention of that hazard that I know of—and it is in use in our mills—is a positive blocking of those bottom rolls. In that particular instance it was not done, but we do try to insist that they use a triangular wooden block on each side of the tier, completely down to the floor.

H. H. ADERHOLD (Marathon Paper Mills Co., Menasha, Wis.): In our mill we have just made a check to see if they are blocking them. They have a triangular shaped block, and block the last three rolls in the pile, so that if one slips the others won't slip. However, I think that Mr. Long of Green Bay gave us last year a very good idea on that. He presented a new type of wedge and I should like to hear him tell us about it again.

J. A. LONG (Bay West Paper Company, Green Bay, Wis.): Well, we have a little development that we originated ourselves. We use it mainly on rolls that are only 40 inches long and about 34 inches in diameter. They are stacked, as Mr. Adams has explained, by what we call "nesting" the rolls. However, we insist on using a regular wooden block under each roll of the bottom tier. In other

words, we do not rely only on blocking the end roll. On the end roll we have what we call the "positive visible block." This block is shaped just like the other blocks under the rolls. It is about 4 to 6 inches long. We have a rod going through this block that comes out one end and a piece of pipe coming up the side of the roll toward the core, and we have a spring, a regular door spring device, that works inside of this pipe. It has a hand-grip and when you put the block under the end of the roll, you pull up this hand-grip and insert it into the core. The more the roll is moved or jugged by the bouncing of other rolls on top or any movement whatsoever causes this block to pull underneath the roll all the tighter.

The thing that we always worried about was the fact that these rolls would start to slip out and the fellow would be unable to hold them. Now we deck our rolls only about three high. I do not know how it would work in decking them any higher than three.

We have a safety rule in our plant that the end rolls have to have this visible block, and on a 40-inch roll only one block is necessary on one end of the pile—that is, on one side of the roll—and if at any time that block is not in place the employee is certainly taken into camp for not having the block in place.

It has a two-fold purpose. Of course, the idea of its being positive is one thing, and then the second idea is the fact that it is visible. You put a 3- or 4-inch block underneath a stack of rolls and you cannot see it, but this visible block you can see at a distance because it is just an iron device that comes up the side of the roll, and every employee knows that if this block is not in place, he is supposed to put it in place or to check the pile, and we do not have accidents from that. To release the block the employee knocks on the block and can turn the front or bottom roll out towards him. The roll immediately above goes the other way and he can almost let those rolls down at will.

We had a number of sprains and bruised feet until we put this device in about four or five years ago and we haven't had any trouble since. I have sketches of it at the plant, and if anyone is interested in them, I will be glad to send them to him if he will return them to me after they have served his purpose.

A. J. BASILE (Lawrence Paper Co.,

Lawrence, Kansas): In using that blocking device, do you block just the front row, or each individual bottom roll?

MR. LONG: We block each individual bottom roll; and it is the end bottom roll that has this visible block, because it is the key roll to the whole stock pile.

HOWARD K. SILER (Standard Register Co., Dayton, Ohio): We have about 60 carloads of paper on hand all the time. We block all rolls and we tier four high and we put a wooden platform in between each tier. In other words, we may have 15 rolls in a row. We lay boards on top of those, and they are selected boards, without knots or anything like that. Then we start all over again. Each roll is directly above the roll below it, and then we put the blocks on each side of every roll. We get the rolls down and up with electric hoists.

E. G. ADAMS (Oswego Falls-Sealright, Fulton, N. Y.): We stack our paper the same way. We don't stack as high as you do, though. Our building won't permit it.

MR. SILER: We had to build a special building with a special bay to take it four high. Each roll averages around 600 pounds.

CHAIRMAN BERRY: I imagine that in stacking that way, naturally you try to confine your rolls all to one width if possible. Do you also make a practice of stacking the butt rolls separately?

MR. SILER: Yes, we do.

CHAIRMAN BERRY: I know that a few accidents have been caused by that in box board manufacturing. They put butt rolls back in the pile with large rolls and sooner or later they get into grief.

W. G. ETTER (River Raisin Paper Co., Monroe, Mich.): I should like to ask Mr. Long if he uses electric trucks in the handling of those rolls. What is the procedure in handling them?

MR. LONG: We roll these rolls into place and then we have an electric lifter, a regular platform that goes up, and we just lift these up alongside of the pile and then put them on the platform and roll them in.

MR. ETTER: My problem comes with the electric truck, and I can't see where the major block that you describe will answer any problem like that.

MR. LONG: Well, this block is, of course, mostly for storage. We have these stacks of paper, all in rows, and then the roll hauler, as we call him, lets these rolls down and puts them on two-wheel trucks and trucks them to our converting machines. Each one of these piles has one of these positive blocks in front, on the key roll, on the bottom, so that he just lets it out and lets down three rolls at a time and brings the block back into the next one.

MR. ETTER: That is handled by hand?

MR. LONG: That is right. I would call it a hand operation.

MR. ETTER: You have no mechanical operation?

MR. LONG: No. We now have a warehouse and we would like to get enough paper to try it. We are going to try decking our rolls five feet high by the same method.

F. H. ROSEBUSH (Nekoosa-Edwards Paper Co., Port Edwards, Wis.): We handle all of our sheet rolls with electric hoists and a traveling crane. We use a triangular block. It is probably 16, 18 or 20 inches in length and 12 or 14 inches high. The high side of it is sawed out to conform to the roll. On the bottom of this block we have tacked an old piece of belting, a long strip so that the roll rests on that strip. We stack sometimes 8 and 9 feet high, 30-inch rolls of various lengths. We have never had a case where the rolls slipped or pushed out. I don't see how they can, resting on that strip of belt that is nailed to the bottom of the block and the block cut out to fit your roll. It seems to be a pretty safe practice.

H. E. NEWBURY (Ecusta Paper Corp., Pisgah Forest, N. C.): We had a good deal of trouble in our plant with stacking those rolls on top of each other and we went to a steel frame. These rolls are put into the back of the steel frame on a tramway and rolled right up to the front. The rolls, of course, are on top of each other, but do not touch, and they are put in there by an electric hoist. This steel rack is four tiers high. In that way none of the paper touches the other rolls, but it is piled up on top of each other four tiers high.

CHAIRMAN BERRY: How are the individual rolls gotten into the framework?

MR. NEWBURY: They are lifted by hoist both in and out.

CHAIRMAN BERRY: When the first roll is taken out, what control do you have over the following rolls?

MR. NEWBURY: The slant is not great enough that it will ease right on down on the front block.

H. H. ADERHOLD (Marathon Paper Mills Co., Menasha, Wis.): This one is a little complicated I think. We print rolls of bread wrappers, large rolls—they call them "Jumbo rolls"—I imagine about 6 feet long and not quite 3 feet in diameter and, of course, there is an ink drying problem there. You cannot very well set the rolls on anything, because the weight will make the paper stick. We used to use regular roll racks, just iron framework, and we could tier the rolls a couple of tiers high and take them off with a chain block. We have one section of those old racks and, believe me, it's a job to get some of those old rolls out because the tramways are not high enough over the racks. You cannot pull some of the rolls up high enough and there is slipping and straining of backs. In enlarging the plant the engineering department built a roll rack on a continuous chain. The rolls are four high, with a heavy pipe through them, the ends of which lock into a lock on the continuous chain. That is run by electricity. The operator stands off to the side of the rack. I guess there are about five racks right by the side of each other and he stands between two racks of rolls, with his finger on the control buttons, and he just pushes the button and waits until the roll that he wants comes around and then he can take it off right at the level of the lift truck, just roll it off of the rack. That is the hard way of doing it, but it was necessary in our case because of the printed paper.

Now I have one question. We make a lot of small rolls of waxed bread wrappers. They weigh about 40 pounds each and they vary in length and the diameter is about 9 inches to a foot. We have more trouble with men hauling these on skids or trays on lift trucks and having the top ones fall off going around corners than we have with large rolls slipping. If others of you have had that problem, I should like to get ideas from you on how you have handled it. We belt the top layer and

try to go around corners at a reasonable speed and that helps, but I would like some other ideas.

MR. SILER: How many rolls of paper do you handle?

M. ADERHOLD: They tier them about 4 high, about 30 on a truck.

MR. SILER: We never handle any more than 2 on an electric truck. We keep three electric trucks running day and night.

MR. ADERHOLD: These are small rolls, tiered 4 high, and handled on a tray on a hand-truck.

MR. ROSEBUSH: We always tie the top and the next to the top.

MR. ADERHOLD: Two layers?

MR. ROSEBUSH: Two layers.

GEORGE G. GIBB (Can. International Paper Co., Gatineau, P. Q.): Getting back to the original question, there is one thing I should like to mention; I know where the rolls have fallen and the primary cause was the condition of the floor. I think that is very important.

Falls From the Rolls

CHAIRMAN BERRY: We will take up this item: "What is done to eliminate the possibility of falls from the top of roll piles where it is necessary for employees to walk on these rolls to locate the particular stock item they want?"

Of course, for those of you who have the ideal building and set-up where you can mark them and you can see what you have without getting up on the rolls, that is fine; but some of us are not that fortunate, so who will attempt to answer the question?

It has been found that many of the falls have been caused by the top or the bottom lap coming loose and protruding over the end. When the groundmen or pitmen step on them they go down between the piles, if there is enough room, and they have sprained ankles. If you can see that all those loose laps are torn off and thrown away, it will help a lot.

Downstairs in the hall, there is a display of rubber soles to prevent slipping, and some companies do enforce the rule that their groundmen wear shoes with rubber soles on them when they are climbing around.

Do you have any kind of a signal warning people when your overhead cranes are approaching them, or what rules do you have to protect your men working underneath the cranes, for cooperation between your operators and your groundmen.

MR. SILER: In our case the man who operates the electric truck also operates the crane. He takes the truck up to the tier that he wants and then he selects his crane. We have several of them. We also have cross-over cranes. He walks along on the ground with that crane to the tier that he wants and elects his roll of paper and brings it back and puts it on his truck, and in that way there is never anybody in this row but himself. One man does everything and nobody can get in his road because he is the only man there.

CHAIRMAN BERRY: In your case then, your controls are all operated from the floor or by ropes evidently.

MR. SILER: That is right.

CHAIRMAN BERRY: I have in mind the cab type cranes and the operators operating directly from the crane. Some firms I know of require that they sound sirens warning whoever is underneath the crane to move out of the way. I know that I never, no matter how strong the chains are, want to walk directly underneath a roll when it is moving overhead, and I will gladly step aside when I see it coming because there is always the chance of its breaking.

This next question is in line with that for cranes having the cab type operation. "Are crane operators required to wear goggles?" The reason I asked that question is because you have the factor there that the continual rolling of your cranes over your monorails will cause a lot of wear, and steel deposits wear off from your rails and from your wheels. If the window happens to be open, it is very easy for foreign bodies to be carried into the operator's eyes.

Going over to your corrugator and paster, to get into the goggle question again, are goggles required when scraping pressure rolls or corrugator rolls? Who wants to comment on that?

MR. BASILE: We do require the wearing of goggles on our double-backer end, especially scraping pans, and on the corrugator end, as you say, scraping rolls. Our slitter

operator on the slitter attachment, on the double-backer end of the corrugator, is required to wear goggles. Any time he is scraping the shafts or scores or slitters, he is required to wear them. I have had a lot of difficulty in our plant with silicate of soda. We use it for adhesive in our combining process, and we have had trouble with that entering the man's eyes. I have had about ten cases this year, minor cases.

MR. ADERHOLD: We do not have a corrugator, but I think this is allied to it. Our cores are shipped in and cut to length on regular core-cutting machines. This is one on our safety department. The men on that machine asked for goggles and they are all wearing them, because they knew about the silicate hazard before we did.

CHAIRMAN BERRY: Getting back to the Lawrence Paper Company, if I remember correctly, you had quite a few cases of foreign bodies in the eyes due to the dry silicate on the sheets breaking up. May I hear some discussion on it, please? What type of control do you have, if any, or what do you think can be done in handling sheets?

MR. BASILE: The principal place is on the take-off ends of our machines, principally the rotary slitters and slotters. As that sheet is slitted and slotted those particles of silicate in the sheet are broken up, and as the sheet is handled from the machine onto the loads, those particles are thrown into the air and enter the men's eyes.

Problem of Chapped Hands

CHAIRMAN BERRY: "Does the condition of chapped hands on tapers come up in cold weather, and if so how is the condition of cracked hands and infections prevented?"

That is for you who have a lot of girls who do a lot of this taping either by machines or by hand. Well, the answer to that question has been given me by an individual who is not present. He stated that in their company it is the policy to ask the girls to wash their hands frequently and not to allow the glue to accumulate on their hands; and they also provide cold cream to be used after washing. They say that is a big help in preventing chapped hands, which would develop infections if the cracks were allowed to go long enough.

During the course of the past year, in editing the NEWS LETTER, several individuals in this Section have written in about guards for stitching machines to prevent finger injuries. One individual stated that it is impossible to guard a stitching machine. Another comes back and says, "It can be done and it has been done. We are using them." Can somebody give us a description or tell us what particular type of guard they have on their stitching machines? Don't any of you have any stitching machines?

MR. ETTER: They are automatic. They are guarded all over. We have had only one instance in four years of anyone having been injured through that type of operation.

Finger Injuries

CHAIRMAN BERRY: Well, whereas you have had only one case in four years, I known from reviewing the accident reports that come in from the Section that there are quite a few reportable injuries from this particular point of operation, and one reason I wanted to see if I could find out anything here is because it might be a help to some of us who do not have a guard on the stitching at the point of the stitching operation.

However, this one individual who came back at me with the particular type of guard that he has, Mr. Henry G. Lamb, Safety Engineer for the Scott Paper Company, at Chester, Pennsylvania, has a barrier type of guard, which they have found to be successful. If any of you wish to write Mr. Lamb, at the Scott Paper Company, Chester, Pennsylvania, he will furnish you with the necessary details.

The next question is, "When feeding strawboard into corrugator roll, what instructions have been issued to operators to prevent fingers from being caught?" Does somebody have an answer to that.

Well, the answer I have here is, "Paper should be held against the upper corrugator roll with the palm of the hand, with the fingers back in a concave manner, so that the hand will not follow the roll around, but will run up over the guard."

Now, I know that some of you have questions on your minds about a particular operation. I should like to ask at this time for someone to start the discussion by asking

questions on something that we haven't covered.

MR. ETTER: We have a problem that we have tried to solve for two years. It is on an old type paster; and we run into the problem only when we cut excessively long pieces of paper which necessitates an employee getting on top of the paster. He sits up there. As the rotary knife comes around to cut, the action of the knife cutting on an angle buckles this sheet and it comes back automatically over the top. We have done everything we could to find some way to stop that sheet from buckling at the cut-off. Among them was placing a half-moon piece of steel on this rotary knife that would come around and act as a hold for that sheet as it buckled, but it certainly has not been successful.

CHAIRMAN BERRY: That is buckling behind the knife?

MR. ETTER: That is right.

CHAIRMAN BERRY: Who wants to attempt to answer the question. Do any of you have the same problem? I don't know what the thickness of your paper is. We do not have a rotary knife on the end of our paster. We use it on a heavier board, we will say from $\frac{1}{4}$ to $\frac{3}{4}$ -inch thick and that helps a lot. We get a certain amount of buckling and I can see where if your paper is not as thick as that, you would have a major problem. Several years ago when we had a split sheet running through there, the helper on the back side decided that he would help it through just as the operator on the front side tripped the knife, with the result that he lost the end of his thumb. I will try to put your problem up to the Engineering Section of the Council, if you haven't already done so, and see if they can work out something that may help you.

MR. ADAMS: I should like to know something about the stock that goes through there. Is that a sheet of paper?

MR. ETTER: Solid fiber sheeting 100 or 120 point.

MR. ADAMS: It just occurred to me that possibly it was of light enough weight that compressed air might help.

CHAIRMAN BERRY: We use our rotary knife on 80 to 100 point. Do you have a set of squeeze rolls or take up rolls on the

back of your knife? At the moment that is all I can think of that you might not have.

H. J. LEMENSE (Eddy Paper Corp., Three Rivers, Wis.): Maybe I have something on the question of cracked and chapped hands that will help you. I notice that it is advertised downstairs especially for printers who get ink on their hands. We bought some of it for the boys to try out and it is so popular with them that we now buy it in large quantities. It is a very thin cream that they put on before they go to work and the ink does not cling to their hands and their hands are not chapped. You know that printers have quite a problem in the washing of their hands. It really works out swell.

CHAIRMAN BERRY: No doubt quite a few of you are using the same thing, since this gentleman brought it up. I am glad, however, that it has been brought out, because many of us must go through the process of experimenting with products until we find the right one. We don't like to do a commercial, but if we know that somebody else has used a product and found it to be good, it saves us the necessity of experimenting and going through all of the trials and tribulations.

Rubber Finger-tips or Gloves

MR. ROSEBUSH: I wonder if the gentleman who raised that question has ever tried using rubber fingertips. Our girls use them quite extensively.

CHAIRMAN BERRY: On your taping machines?

MR. ROSEBUSH: Yes, and in the handling of paper, too. Their fingers wore down through the first skin and got rough, but we have had pretty good success with rubber fingertips.

CHAIRMAN BERRY: That is a new angle to me, Mr. Rosebush. Thanks a lot.

MISS JANE NOTLEY (Allied Paper Mills, Kalamazoo, Mich.): We have had trouble with dermatitis from rubber fingertips.

CHAIRMAN BERRY: There is another angle. Have you had any of that?

MR. ROSEBUSH: No, we haven't.

CHARLES HANK (The Flintkote Co., Chicago Heights, Ill.): It is true that rubber gloves do give you dermatitis, especially

if they are of vegetable rubber. We found that we had a lot of dermatitis due to rubber gloves—our men wear long gloves—and to get away from that we got synthetic rubber and they seemed to help considerably. You haven't the sulfur that you have in the vegetation rubber.

MISS NOTLEY: I wonder if we could get just the fingertips of the synthetic rubber.

MR. HANK: I don't know why you could not.

MISS NORMA A. BORNFIELD (Marinette Paper Co., Marinette, Wis.): In our industry, where girls are using blue and materials that get into the fingers and create chapping and cracking of the fingers, we have used zinc oxide adhesive very well, wrapped around the fingers and after the hours of employment are over, they remove this adhesive with carbon tetrachloride and massage the hands and fingertips with lanolin ointment and we have no difficulty whatever resulting from that condition.

MR. ETTER: May I ask if that is a cloth-backed tape or a paper-backed tape?

MISS BORNFIELD: It is a cloth-backed tape.

MR. ETTER: Of course, when a person gets a sore finger or the outer layer of the skin is worn down, we also use tape the same as they do, but at the end of the day it is cleaned off with ether and that is all.

MR. KUEBLER: In manufacturing paper cups over 50 per cent of our products are coated with wax. I imagine that a great many of you people coat your paper with wax also. A dermatitis condition is developed which we have diagnosed as paraffin dermatitis. We have found no cure for it. The only thing we have been doing with people who are allergic to this condition is to transfer them. That is a costly process because we might get a girl broken in, in the treating department, and find out a couple of weeks later that she does have paraffin dermatitis and then we have to transfer her.

E. G. ADAMS: Do the girls touch the product when the paraffin is still hot or warm?

MR. KUEBLER: The paraffin is in a molten state and is sprayed on the cup. They get it from the spray chamber and also as

it comes out of the dispenser before it entirely cools. Of course, they do not touch all of the cups, but nevertheless they do in the course of the day come into contact with the hot paraffin and paraffin in the spray form.

MR. ADAMS: I thought I could help, but I am afraid I cannot because I cannot think of a single instance where the girl touches the product until the paraffin is cooled.

CHAIRMAN BERRY: That probably falls in the same category as, for instance, where you are pasting board with silicate of soda. You have a shaving to take away, unless you are equipped to take it away with conveyors, which a lot of us are not. In our plant a shaving boy will be on there maybe an hour and we will have to take him off of that operation altogether because, especially if it is warm weather, he will have a breaking out on his arms. We will generally try it a second time, and then if it pops up again we will have to keep him off of the operation, because we find some girls and some men who are allergic to silicate.

E. C. PETERS (Atlas-Boxmakers, Inc., Chicago, Ill.): One problem has come up that is as yet unsolved on the baler. They seem unable to get any goggles that will prevent this dust that comes from the chute from flying into the workers' eyes. The dustproof goggles that they are using are causing sweat inside which burns their eyes.

MR. ADERHOLD: Do you also use a respirator on the baler?

MR. PETERS: No.

R. F. WOLF (Bird & Son, Inc., Shreveport, La.): There is a certain type of goggle inside of which they put water, and all you have to do is to shake the goggle up and down and it washes the lenses clear.

MR. PETERS: Does that just eliminate the dust that prevents them from seeing?

MR. WOLF: No, it eliminates the perspiration that takes place in there, and the goggle is also dustproof.

CHAIRMAN BERRY: It eliminates fogging. I believe that is what they call their "Nod-and-Shake" goggle.

MR. RICHARDSON: We have had trouble in getting our men to handle flats

properly. I wonder if anybody has a solution as to the stacking and unstacking of flats and also getting the men not to stand them on end.

CHAIRMAN BERRY: We probably all have the same trouble, but I should like to hear somebody tell what they do in their particular plant, what instructions they have for piling flats. Mr. Cashman, do you have an answer for that?

MR. CASHMAN: That is where we come back to the safe operation specifications. It is a problem not only in the paper industry, but in every industry that has flats; it is usually just lack of supervision and lack of care on the part of the employee. Proper instruction and constant follow through on

the part of supervision should control your condition as well as anything that I know of.

CHAIRMAN BERRY: When you get back to this proper supervision, you can really get yourself into hot water. Naturally the foremen and supervisors are responsible for carrying out these orders. In some plants more or less all you can do is suggest and it really gets to be a difficult problem sometimes.

(Mr. Kuebler resumed the Chair.)

CHAIRMAN QUEBLER: Thank you very much, Fred. I am sure that we all enjoyed these discussions and you did your usual good job.

TUESDAY AFTERNOON SESSION

October 7, 1941

Group Session for Pulpwood Loggers

Presiding—J. E. CANTIN, Safety Director, Quebec North Shore Paper Company, Baie Comeau, Quebec, Canada.

CHAIRMAN CANTIN: I am pinch-hitting this year. Unfortunately, the chairman of the Permanent Committee on Pulpwood Logging Operations, which was formed last year, was unable to attend this meeting, due to the defense program in the United States. At the last minute we decided that we would try to do something, nevertheless, see how many were interested in pulpwood logging operations, and decide if we would go ahead in the coming years.

The program this afternoon is to be an open discussion on safety in pulpwood logging operations. Mr. Chant is here, who is well versed in the various problems, and I would like Mr. Chant to get the discussion started.

D. B. CHANT (Ontario Pulp & Paper Makers Safety Association, Toronto, Canada): As Mr. Cantin has told you, this meeting is more or less in the nature of an experiment. Up until last year there had been very little activity in the Paper and Pulp Section in connection with the pulpwood logging operations of member firms. I don't know exactly who was responsible for raising the point that some activities of this sort

should be instituted in the Section with a view to providing some additional service for those engaged in pulpwood logging; but whoever it may have been, the discussion resulted in the presentation at last year's Congress of a report to the Paper and Pulp Section by a temporary Committee on Pulpwood Logging Operations. That report, which was based mainly upon answers received to a rather simple questionnaire submitted to companies in the Section recommended that the Section institute some form of permanent representation for that branch of the industry.

Your Executive Committee was instructed at one of the sessions last year to appoint a standing committee on Pulpwood Logging Operations, and that committee was appointed. The personnel of the committee selected was C. E. Wilds, of the Brown Paper Mill Company, Monroe, Louisiana, as chairman; J. E. Cantin, of the Quebec North Shore Paper Company, Baie Comeau, Quebec; and B. E. Claridge, of the Hammermill Paper Company, Erie, Pennsylvania.

As Mr. Cantin has also told you, Mr. Wilds has been seriously hampered in the

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carrying out of his desire to make that committee function, through unexpected and quite heavy demands upon his time arising out of the defense program in that particular part of the country.

Now, while naturally I am somewhat disappointed at the attendance at this meeting, I frankly admit that I am not surprised, because it has not been the practice of many of our member firms to send their people connected directly with woods operations to these Congresses in the past, for the very simple reason that the Congress as a rule has had very little to offer to that particular field of the industry. It was exactly with the thought of attempting to remedy in some measure that lack that this meeting was called. It is a beginning, however, and if the need exists and the desire exists for an expansion of this small beginning into something more useful and of greater magnitude in later years, I feel sure that development can and will come about.

Of course, it would hardly be right to assume that the only people interested in a meeting of this sort and in the general problem of accident control in the pulpwood logging field would be those whose principal job it is to cut and deliver the wood to the plants. The cost of pulpwood enters into the cost of pulp and hence into the cost of the finished paper; it is such an important element in that cost that no firm either producing pulp or paper or using the end product of the industry in remanufacturing paper products, can afford to be entirely neglectful of the cost of pulpwood, whether they are doing their own logging, whether they are contracting their logging, whether they are buying wood in the open market, or whether they are merely buying and remanufacturing the products of the wood.

The cost of accidents in the production of pulpwood is a very definite factor, as you know. The assessment rates or the insurance rates in the various jurisdictions are usually considered to be quite excessive, far beyond the rates applying to the mill operations, and their reduction represents a very serious problem to the industry.

It was hoped that a general discussion could be had here of the important and pressing problems in that particular field, with a view toward the development in the

coming year of a more detailed and specific program to deal with some of these.

I do not personally feel competent to suggest what items might be discussed. But I have a direct interest in the reduction of accidents and their cost in pulpwood logging operations, for the reason that the association by which I am employed consists of all of the pulp and paper firms in the Province of Ontario, many of whom do their own logging on their own forest areas and pay substantial compensation assessments to cover the cost of their accidents. It is one of my major problems to try by every means that I can discover to assist those firms to control their accidents and the cost of their accidents, with a view to keeping the assessment rate down to the lowest possible point.

At present, in the Province of Ontario, the assessment rate on pulpwood logging is exactly three times the rate per hundred dollars of payroll in the pulp or paper mills. The total amount in dollars and cents per year is not a true measure of the problem, inasmuch as the actual rate per hundred dollars is three times in the woods what it is in the mill.

I would suggest, Mr. Chairman, as a beginning for our discussion, that you find out, if possible, individually from those present, first of all, what their personal connection and interest is in the pulpwood logging field; and secondly, what the present assessment rate or premium rate applying to those operation is—just to get some idea of what the magnitude of the problem is as represented in this room.

CHAIRMAN CANTIN: Thank you very much.

Of course, there are a few of you from Canada, and the Province of Quebec, and we know what rate we are paying, and I know what interest you have in pulpwood logging.

I would like to hear from this gentleman in the corner.

W. A. GLEASON (Hammermill Paper Company, Erie, Pa.): The compensation rate at Erie is approximately 35 cents for the handling of pulpwood off of the boats. But I don't think that is a fair comparison in computing the cost of your logging operations. That is a shipping proposition, the

wood being brought into Erie aboard the boat.

CHAIRMAN CANTIN: Mr. Gleason, do you cut pulpwood? Have you any actual cutting operations?

MR. GLEASON: No. That is done by contract.

CHAIRMAN CANTIN: Are the contractors cutting on your own limits?

MR. GLEASON: They are cutting on our own limits.

CHAIRMAN CANTIN: Do you know what the rate is for compensation insurance on cutting operations?

MR. GLEASON: I can't answer that. I didn't check before I left.

CHAIRMAN CANTIN: You have fairly extensive operations, I imagine.

MR. GLEASON: Not too extensive, no. We buy, of course, in the open market—a lot of our pulpwood—and we do cut some on our own timber limits in Matane.

CHAIRMAN CANTIN: Then you have a Quebec operation?

MR. GLEASON: Yes.

CHAIRMAN CANTIN: Well, the rate there this year, provisionally, is \$6 per \$100 of payroll. This rate will be finally adjusted at the end of the year on a basis of merit rating. The rate which was found to have carried the class as a whole at the end of 1940 was \$5, and in view of our merit rating system, this rate was increased one dollar, bringing it up to \$6 provisionally. The reason, I imagine, was to collect from those employers whose experience might be bad this year the maximum rate which is applicable for 1941; and anyone having an experience below \$6 will benefit by a reduction in the rate, which will not be any lower than the average rate which will be required to carry the experience of the class as a whole for 1941.

JULIUS A. DRAPER (Consolidated Paper Corporation Limited, Grand Mere, Quebec): The benefit of this merit rating, as I understand it, will come in the form of a refund check from the commission, won't it? I mean those whose experience has been high will pay at the maximum rate of \$6; those whose experience has been good, although

they have been paying the \$6 rate all through the year, will get a refund check, or a credit, down to a certain base figure.

CHAIRMAN CANTIN: To the average rate for the class. The average rate might be \$3.00; it might be \$4.00; \$4.50. There will be no one who will pay below this average rate. In other words, if your accident cost is only \$3 a hundred and the average rate is \$4, you would pay the \$4 rate.

MR. DRAPER: I brought up the question for the benefit of others who perhaps haven't gone that far in compensation legislation. I think it is a very interesting scheme.

CHAIRMAN CANTIN: Is there anyone here who has logging operations in the States proper?

L. R. SIMPSON (Brown Paper Mill Company, Monroe, Louisiana): We are not cutting on our own territory right now, but we are going to very shortly. It is being handled now on contract basis, and I don't know what it costs. But Mr. Wilds made a statement at his meeting here a year ago that Southern pine logging people are paying 25 cents a cord compensation to get it out of the woods.

CHAIRMAN CANTIN: That's a pretty stiff rate.

MR. SIMPSON: Of course, we are not particularly interested in it because the contractor is paying the bill.

CHAIRMAN CANTIN: The contractors are cutting this wood for you and are paying directly to the state fund—state insurance, if it exists in your part of the country, or to an insurance company. But you are indirectly interested in it because, one way or the other, it comes into the cost of your wood. If your contractor has to pay a seven or eight or nine dollar rate per \$100 of payroll, it stands to reason that he is going to take into account this insurance cost when he accepts a contract to cut wood for you at so much per cord.

MR. SIMPSON: Well, I am very much interested in this problem. We know it is a great problem getting the thing down to the farmer who actually does the work, with his help on the farm, maybe the boys. There

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have been some bad accidents. The only way we are going to improve it down in our section is to improve the accident record all around. It wouldn't do any good for my concern to improve the accident record and none of the rest of them do anything about it. The only way we can bring the rate down is for all the Southern mills to get together and do something about the accident record in the woods.

MR. DRAPER: Merit rating is the answer.

MR. SIMPSON: Of course, I can't do anything about it, because my hands are tied in the mill, unless we get another man on the job.

CHAIRMAN CANTIN: It is undoubtedly a full time job, especially if your operations are extensive.

MR. CHANT: I would like to ask, Mr. Simpson, if in the state of Louisiana you have a state compensation act?

MR. SIMPSON: Yes.

MR. CHANT: When you refer to contracts, do you mean that you contract for the cutting of wood from limits or areas on which you hold cutting rights or own the timber, or do these contractors cut wood on their own areas, in which case it would be practically a purchase of wood on your part?

MR. SIMPSON: It is on the smaller areas.

MR. CHANT: Not owned by your company? In other words, your contract with them is really a purchase contract?

MR. SIMPSON: That's right.

S. H. TYRE (Hercules Power Company, Hattiesburg, Mississippi): My company is not interested in the pulp business, but I came here to learn something about logging because we do have a stump operation. We use the old long-leaf pine stumps and make resin, turpentine, and pine oil from them, and the wood pulp angle of this convention was the only one that is easily associated with the removal of forest products.

I am afraid I can't contribute anything to your insurance problem or rates. Our raw material is contracted for, and we have no compensation law in the state, and I don't

believe many of our contractors carry insurance. They leave the case open. When anything happens, the lawyer usually puts in an appearance and they take it to court and do the best they can.

MR. CHANT: That is another phase of the logging industry that we only have in a very limited way—the removal of stumps from camp sites and road clearance. We are not interested, as a rule, as paper companies, in the removal of stumps. We just remove the tree and leave the stumps.

MR. TYRE: We use about 650 tons of those a day.

CHAIRMAN CANTIN: And it is more or less, I suppose, in the nature of a blasting operation.

MR. TYRE: We get them out with our B8 tractors now.

MR. CHANT: In any effort that this Section may make to assist pulpwood loggers, one of our difficulties, I think, is going to be the great difference in the types of logging, in various parts of the country; and secondly, the difference in logging practices. Some companies cut wood mainly in four-foot lengths in the woods and it is handled in that form from the stump to the mill. Others cut almost all of their wood in sixteen-foot logs, which makes it very nearly parallel to a lumbering operation. Others cut almost entirely eight-foot wood. Others, again, cut a mixture of all three. So the problem varies not only from province to province and state to state, but even from one company's operation to another's, and there is a wide difference in the problem so far as accident prevention is concerned.

The four-foot logging operation, of course, involves a great deal more manual handling of the wood. The sticks are piled by hand after they are cut, into piles of one cord or multiples of a cord. They are loaded by hand on the sleighs or trucks to be moved either to the point where they are dumped into the river to be floated on the way to the mill, or to the point where they are loaded on railroad cars—almost every operation a manual operation.

Against that you have the sixteen-foot logging operation, where the logs are skidded by either horses or small tractors from the point where the tree falls to the skidway, and are loaded onto the sleighs by mechan-

ical means—derricks, cables—and they are unloaded again mechanically and handled as logs right to the mills with very little manual handling.

The two operations are very different, and yet we have both operations and variations of both of them throughout the paper industry, and combinations of them often in the same camp. It is a little hard to generalize as a section on the hazards or the means of correction of the accident risks, unless we all clearly understand that we are dealing with very complex operating methods.

I think there is a great deal more difference in the methods used in pulpwood logging than in the methods used in the manufacture of paper proper. There are variations in types of paper machines, and so on, but the general principles of operation are almost identical in the paper mills, so that one paper mill's problems are largely those of any other paper mill, from an accident point of view. That is not altogether true of pulpwood logging.

JOHN McCLOSKEY (Bituminous Casualty Company, Rock Island, Ill.): I came in here on logging and didn't mean to get into the pulpwood business. But we write considerable logging operations in North Carolina, South Carolina, Georgia, and Florida. In the classifying of risks, we look at the condition of the field, the swamp or the dryness of the particular timber area, and above all else, the labor involved. Up in this part of the country we try to get men to wear safety shoes. In some of that logging and timber area down there we try to get them to wear shoes. That is one of the problems we run into. We run into a subcontractor and a subcontractor and a subcontractor, all down the line, and it is a big problem to control your logging operations because you are not dealing really with the man that holds the contract. It is a matter of going way back to somebody who really isn't interested in the compensation end of it, but he is legally a subcontractor and therefore liable under the compensation law.

CHAIR CANTIN: May I ask the rate that you charge?

MR. McCLOSKEY: I am not familiar with the rates in the various states down there. But as to the rate of \$6 that you quoted, I can say that in those states it will

vary from \$5 to \$10, depending on how we write it, whether we write it under what we call a retrospective basis, a merit rating plan, or just a straight policy.

CHAIRMAN CANTIN: So the operators down South should certainly be interested in the problems of safety in pulpwood logging operations, because at that rate, if they are paying between \$5 and 10, there is certainly a good deal of money to save if they do go after accident prevention in their operations.

MR. McCLOSKEY: It is considered a very hazardous industry, due to a few operators that have caused considerable trouble in that particular line, and our bureau depends on an overall record in order to determine its classification.

CHAIRMAN CANTIN: You haven't very much of a spread there?

MR. McCLOSKEY: Not in that particular field.

CHAIRMAN CANTIN: That is about the same problem we have in Quebec with the small sawmill. There are a great many of them, but they are small operators.

J. W. ESTES (Homestake Mining Company, Spearfish, South Dakota): While we are primarily a mining company, in order to supply the mine with the required amount of timber, we operate a fairly sizable logging unit continuously. We have a 60,000 capacity mill, and at this time we do practically all of our own logging. It is not too different from your pulp logging, because our timber is small out in the Black Hills. Trees range approximately sixty to ninety feet in height, occasionally one somewhat taller—a yellow pine or Ponderosa pine—and our logs in sixteen foot lengths would run perhaps from twelve to sixteen to the thousand.

CHAIRMAN CANTIN: That is small wood.

MR. ESTES: Yes. A few years ago we produced lots of cordwood for fuel, burned it on our own line, but at the present time we log about eighteen million a year. We are trucking these logs an average distance of twenty-five to twenty-eight miles. We do this with tandem trucks, tandem dual trailers or semi-trailers, and while we do have quite a little manual work in regard to felling these trees, lopping the tops and cutting the brush,

we don't have nearly as much, perhaps, as you have in your pulp operation. Nevertheless, we do get accidents. We have fellows cut their toes off and hack their shins, or they get hit on the head with a hanglimb or a throwback, which in past years in the woods has been the cause of our largest percentage of accidents.

We do all of our skidding at this time with D6 caterpillars in full tree lengths. We bunch them in the caterpillars and then we hook onto them with a D-8 tractor, pick them up with a speed loader, and put them on the trucks.

CHAIRMAN CANTIN: Then you cut them in sixteen foot lengths, I suppose.

MR. ESTES: No, we have to cut these down to a maximum length of forty-five feet now. We haul too much weight to get on the state highway, so we have to keep off it. But when we get them to the mill, we dump them into the canal and they are carried to a buck. We have a 96-inch power bucksaw, and there we cut them into proper lengths for mill uses. That ranges from six feet to eighteen feet.

But in getting back to the compensation, as that seems to be quite the main topic here, we operate both in Wyoming and South Dakota. While our mill is in South Dakota, we are not very far from the Wyoming line, and we are now pulling our timber from Wyoming. Well, the crew that we have operating in Wyoming, of course, must come under the Wyoming state compensation law, and we pay direct to the compensation department of the state of Wyoming an unfixed amount that is properly corrected, I believe, quarterly. I haven't gone into that in much detail, but I do know that the rates are very reasonable. Our average rate of compensation paid in the state of Wyoming has not exceeded \$1.50 per \$100.

CHAIRMAN CANTIN: You are acting as self-insurers.

MR. ESTES: We are self-insurers, yes.

CHAIRMAN CANTIN: If I understand you correctly, while in Wyoming you have a state workmen's compensation law, you are paying a deposit to the state commission out of which claims are paid.

MR. ESTES: Yes. We pay into that fund.

CHAIRMAN CANTIN: So that you would be what we call a Schedule 2 employer in Quebec.

MR. CHANT: That would depend on whether the fund was segregated by industries, or whether it was one common fund for all industries.

MR. ESTES: I imagine it is segregated by industries. They have quite a little coal mining, and some metal mining and lumbering.

CHAIRMAN CANTIN: It looks very much as if you are paying according to your own experience there. That is what it amounts to.

MR. ESTES: Yes. This rate will change now, from one quarter to another. They may find that their fund is running a little low along that line, and they will increase the assessment. They want to keep that fund somewhat in balance, and not get a lot of money in there that they don't need; neither do they want to run short.

CHAIRMAN CANTIN: Your bunching operation and skidding operation is something which we have been going into now for the last two or three years in Ontario and in Quebec. We are actually experimenting with this kind of work by tractor, so that we are meeting the same problems now that you are probably faced with.

MR. ESTES: For a number of years, or up until the last three years, we worked horses. We bucked our logs into twelve to eighteen foot lengths in the woods and skidded them with horses. But we have gotten away from horses. We used to work sixty head of horses, and now we don't own a horse. It's all tractors.

We have some difficulty in getting up to some of these trees with tractors. It's rough country. In fact, last winter we did turn a tractor over. It rolled down the hill and rolled over eight times with the driver in it, covered by a little canopy, it struck a tree and stopped—and he crawled out!

CHAIRMAN CANTIN: Have you any idea what your accident experience is? The number of accidents per thousand man days, or per thousand man hours?

MR. ESTES: I do not have those figures

with me, but I would say that in our woods we have perhaps one accident to four thousand man hours. I am basing that on a record that we used to keep during a contest with the other departments. There was a premium set up for the different departments that could run to ten thousand hours without an accident. I think four to seven thousand was as high as we ever got.

MR. DRAPER: I wonder if I may make a suggestion.

This being the first meeting on this subject at these Congresses, it is to be expected that it is more or less of an exploration. We are going to look around and see how the problem might be tackled. I don't think any of us doubt but that a very grave problem exists, and by and large it is a common problem.

My idea is to make a suggestion to the Permanent Committee that they write the woods managers or comparable men in different organizations, cutting pulpwood, explaining that we had this meeting in Chicago in connection with the National Safety Congress; that the attendance was small; and that they should be prepared, first, to join the National Safety Council, (which, after all, only requires a nominal fee), and secondly, that next year they arrange to send a representative to this Congress to attend one or two sessions for pulpwood logging. This same letter could explain that there are many general sessions in connection with these Congresses which a man who is interested in safety could find very beneficial. The general sessions in the mornings at this Congress, I think, are remarkably fine experiences for anybody that is interested in safety, regardless of what phase it is.

Further, I would suggest that this letter be followed up—say a letter every quarter—to exactly the same men on exactly the same subject, until a month or so before the next Congress.

I believe if we did that, we would perhaps fill a room like this, and we would also have the men who would be in a position to organize here. They would know what they want. Most of us, I think, are mill men, or we are not very intimately connected with the woods, and we are hardly competent, or we are not a large enough body to organize and say what we want from the sessions. I believe that if we could do that, there would

be something very, very interesting come from it.

CHAIRMAN CANTIN: Thank you very much, Mr. Draper. You are quite right.

I think Mr. Chant will bear me out that last year it was our idea originally to contact the different pulpwood loggers in the United States and in Canada, who might be interested in joining the National Safety Council. This would have permitted us to go ahead, and if not have a section of our own, at least have a session or two at each Congress to discuss the particular problem with which we are confronted in pulpwood logging operations.

MR. SIMPSON: What percent of the mills belong to the National Safety Council?

MR. CHANT: It is approximately 24 per cent, I believe, of the mills listed in Lockwood's directory as a part of the pulp and paper industry. However, you must remember that while it is a relatively small percentage of the number of companies listed in the industry, it is a very much greater percentage of the tonnage of production. Something more, I think considerably more, than fifty per cent of the production of pulp and paper in North America is represented in Council membership, while perhaps only a quarter of the individual firms. The larger companies as a rule are members of the Council; and the relatively small units are not members.

CHAIRMAN CANTIN: I would add to this, Mr. Chant, that amongst these members in the pulp and paper mills, a large majority of them, the larger companies especially, are doing their own pulpwood logging operations.

MR. CHANT: I think that is true.

CHAIRMAN CANTIN: And one thing I have noted, because it applies to my company particularly, is that while our mills are members of the National Safety Council, the woods end of the business has never been interested in it, because the National Safety Council has had nothing to offer to pulpwood loggers. That was our main intention last year—to try and get the pulp and paper mills interested in logging, to join up and pool our efforts in order to find solutions to the very many problems with which we are faced.

I believe that is very important, because,

generally speaking, the rate that we pay either for insurance or compensation in any mill for pulpwood logging operation is, as Mr. Chant said a moment ago, if not three times, sometimes six or eight times the mill rate. They should be interested because, whatever their pulpwood cost, their raw material, which takes into account the insurance cost, or the compensation cost, affects the final cost of the products which they make out of this wood. If the workmen's compensation rate is too high, it may add a cent or a half cent to a ton of paper which is produced, so that they have a direct financial interest in the problem.

MR. CHANT: Well, from that point of view, in Ontario, roughly speaking, with present labor rates in the woods and present average production per man day, each one dollar of assessment on pulpwood logging represents about six cents per ton of paper of the finished product. That's a rough figure; it may be eight cents. The last figure I had on it, which was just about a year ago, worked out at about six cents. A saving of one dollar in the assessment rate per hundred dollars of woods labor represents six cents saving in the production cost of a ton of newsprint paper. That would vary, again, from grade to grade of paper. I am speaking of newsprint, which is our main paper production. Fine paper, containing a higher percentage of sulphite and hence a greater quantity of wood per ton, would show a greater cost figure per ton of paper. In other words, a four dollar rate is about twenty-five cents per ton of paper for that particular item of cost. So it is relatively an important item.

D. T. MEANY (International Paper Company, Dalhousie, New Brunswick): I think the rest of us here would appreciate it if you would review the pulpwood operations of your company, so we could get a picture of how you handle your business. I know it is different than ours.

Our pulp and paper mills in New Brunswick are grouped under "forest products," and there has been a surplus in our workmen's compensation fund which has reduced the total deficit in the forest products group; so the picture as a group doesn't look quite as bad as it really is.

Now, I understand that your company does its own cutting operations in the woods.

In our company, most of the operations are done by contractors.

CHAIRMAN CANTIN: Our company does not cut all of its wood by company camps, as we call them. We have in the past three or four years increased the number of company camps, thereby reducing the number of contractors that we formerly employed.

Eventually it is hoped that possibly 35 to 40 per cent of our cutting operations will be done by company camps.

We employ a good many contractors. They cut, naturally, on our own limits; and under our system of handling the contractors, we do not allow them to report their operations directly to the compensation board. We report ourselves all operations in the woods department, whether for a contractor or directly for the company. The main reason behind it was that by so doing we would have better control over the contractors' experience. We have had a merit rating system of our own with the contractors since 1931. We charge the insurance to the contractor. That is part of his contract. We charge him at the beginning of the season on a fixed rate of so much per cord. The amount which he will actually pay under our merit system depends on his accident experience. That is why he is interested.

Now, in the end, we pay for this insurance, because while we charge insurance to the contractor, it has already been included in the contract price which we have given him. In other words, if we figure that twenty-five cents per cord would be the price that we will charge the contractor for insurance, his contract price, instead of being five dollars a cord, with insurance, might have been only \$4.75 without insurance. So we pay for this insurance.

But here is what we get. We believe that if we make him a partner with us and show him where he may save ten cents or fifteen cents a cord on top of the profit, it would be an inducement for him to work hard for a good accident experience, because that would be so much more gravy for him, so much more profit for the execution of his contract, which will vary from year to year.

We have operated this system since 1931, and these last two years we have added a demerit system, because of the attitude of certain contractors. If they had a bad acci-

dent at the start of the season, it would lead them to believe, "Well, what's the use. I am not going to save anything on my insurance. I have got a death case on my hands and it is going to cost five or six or seven thousand dollars, so why should I worry the rest of the season?" That was in the days when we were using as a basis for figuring the merit rating, the cost of the accidents. We changed that. We use the basis of frequency instead, so that we can tell a contractor, if he has the misfortune of killing a man at the start of the season, "Well, don't let that discourage you. This is only one accident. Go ahead and don't have any more, and you are still going to get in on the merit rating system." It has had a good effect, as the record shows.

On the other hand, we have also told the contractors, "If your accident experience is bad, we reserve the right to charge you, and you agree to pay up to thirty-five cents a cord, although we have only included twenty-five cents in this contract price, for this insurance," therefore penalizing him ten cents. So if he doesn't look after this accident prevention, he is going to be the loser—and whenever you hit these guys in their pockets, boy, don't worry, they start doing something. If, due to a bad season, bad weather and poor wood and so on, instead of making the profit which they would have normally made, they find themselves at the end of the season with only twenty or thirty cents per cord profit, and if on top of that we come along and take ten cents out of that because of their bad accident experience—you only do it once, generally.

We found that the contractors are very much interested in this. They feel that they are partners with us on this question of insurance, and they know that they are getting a fair deal.

MR. MEANY: Could you tell me the comparative experience between your contractors and your own men that you put out in the woods? I mean your actual experience—how does that compare?

CHAIRMAN CANTIN: Well, the company experience is generally better for one reason; in a company camp, the foreman is a direct employee of the company, and so are the employees in that camp, whereas with the contractor we are dealing with an individual, and his employees are not directly ours. I

mean I can't go to a contractor's employee and tell him, "Listen here, that saw of yours is not working right. You have a bad ax. Your pulp hook is no good." Why, he would say, "Are you my boss? Who am I working for, you or John Batiste So-and-so?" I can go to John Batiste So-and-so because he is a contractor of mine and call his attention to the fact that such and such a workman is taking unnecessary chances which might bring about an accident to himself or some of his companions, and if the contractor is interested enough in accident prevention, he may rectify the situation. But if he is one of these fellows that has a certain *laissez-faire* and doesn't care one way or the other, where am I? And I also am faced with this situation: If he has three or four thousand cords already cut on the contract, I can't fire him and get rid of him. I will next year; but I have to stand him for the duration of the contract.

MR. ESTES: Mr. Chairman, do your contractors have a safety first man, a man who has made causes of these accidents a study, and through his efforts with the employees has removed these hazards or in any way trained the operators to avoid accidents? Do you do anything like that?

CHAIRMAN CANTIN: Well, this is how we do it. The safety department, which I head up in our company, has charge of this. No individual camp has a safety man, properly speaking, although we have been striving for the past four years to have such a man in the employ of a contractor directly interested in accident prevention, and we are getting to the point, I believe, where we will have that. We already have such men in over fifty per cent of our camps, although they are not called safety inspectors, or any title relating to accident prevention. Each contractor has to have a clerk in his camp to keep proper records for the company, and we have gone to the trouble of training this clerk in first aid, and that is how we hope to have, eventually, safety-minded persons in each camp.

I am a great believer in the first aid course to make a man safety conscious. We have gone quite extensively into this first aid question. In Baie Comeau, which is where I have my office, we have in the woods department now 78 certified first-aiders. Of these 78 men, 25 have passed two courses, two

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have taken a third course. In the other two divisions we have an average of 25 men per division who are certified first-aiders, about half of whom have taken their second course and the other half their first course. In one of these divisions there are four men with the third course. The results have been such that we feel that the money it has cost us to train these men in first aid has been well repaid. Of course, we have extensive operations, and you know that a dollar reduction in the rates with us means plenty of dollars at the end of the year. So this saving, when we have it in the reduction of the rate, as compared to what we spend for accident prevention, although that runs into a few thousand dollars every year, really amounts to considerable money, so we are well repaid.

I brought with me, just to show you how far we go into this first aid business, a framed certificate—the first certificate and the second certificate.

MR. DRAPER: You mentioned that you have 78 St. John's Ambulance Men in your woods organization. Are most of these clerks in the camps?

CHAIRMAN CANTIN: No, not all of them.

MR. DRAPER: Most of them, though?

CHAIRMAN CANTIN: No, because when we started this, we first took the foremen, the higher-ups, somebody to give the example. Safety starts from the top, not from the bottom. We started with the foremen, the key men in our departments, from the manager of the plant down, because these fellows look at it this way: They say, "Well, if it's good enough for the manager, it ought to be good for me." If we would go directly to the worker or to the clerk in the camp and say, "You are going to take a first aid course. For two solid weeks you are going to have this every day," we would have some kickbacks.

MR. DRAPER: In other words, your woods superintendents. You have such officers, I suppose.

CHAIRMAN CANTIN: Yes.

MR. DRAPER: It is safe to say, then, that all of your supervisors in your woods operations are St. John's Ambulance Men?

CHAIRMAN CANTIN: Yes. We started with these first, and ran down the line.

As far as the clerks in the bush are concerned, we have this year 17 contractors in Baie Comeau, and in 12 of those camps there is a certified first-aid.

MEMBER: As clerk?

CHAIRMAN CANTIN: As clerk. We have gotten them to the point where we have interested the contractor enough to pay the fare of his clerk to come to Baie Comeau or keep him in Baie Comeau at the end of the season for the course, which lasts two weeks, and then to go back home. We see to it that this man gets good lodging and good food for the period that he is there. That is at our own expense.

Now that the contractors have gotten interested to this point, that they have a clerk who is a first aid man, this clerk generally gets a few dollars more per month than if he were not a first aid man, because we have shown them, and they have realized that they are saving money by having such a man in their camp. Look at the number of cases of small cuts and nips that would normally go to the doctor three or four or five days afterward because of lack of proper attention, because a hand or a foot had become infected. Well, there is a man in that camp who is a certified first-aid, and he has taken a good course—you can believe that—because our doctors have been very stiff. We don't want to give any certificate to a man who doesn't earn it. He's got to know his stuff.

MR. DRAPER: You have a doctor in each depot?

CHAIRMAN CANTIN: No, we have no depots.

MR. CHANT: Do you have any infirmaries in the woods?

CHAIRMAN CANTIN: No, because our operations are not far enough out. We may get to that within the next couple of years.

MR. DRAPER: But you have a doctor, haven't you, that looks after, say, your Franquelin district?

CHAIRMAN CANTIN: Oh, there is a doctor in each plant—a company doctor in each division. We have three divisions on the north shore. There are three doctors in Baie Comeau—company doctors, paid on a salary basis of so much per month. We have a doctor in Franquelin, who is also a com-

pany employee. We have a doctor in Shelter Bay, who is also a company employee.

MR. CHANT: Do you find that your clerks who are St. John's Ambulance Men are inclined to take the responsibility of keeping the men in the camps under treatment for, say, three or four days, rather than letting them go out, or do you have trouble with that?

CHAIRMAN CANTIN: No, that has not been a problem, because that is one point which we particularly impress upon the man who takes the first aid course, that he is not a doctor. What we are teaching him is to take care of an accident the way it should be taken care of, not to take chances, to send them right down.

MR. CHANT: Every case? Every injury case?

CHAIRMAN CANTIN: Not every injury case. If a fellow has a little cut in his hand through handling a stick of wood, and has a puncture wound, well, this man knows how to treat that. He is not just going to put iodine on this puncture wound. He is going to go inside, because it will close soon, and if there is any dirt there, after two or three days it will fester. The doctors showed him how to treat that puncture wound. He has to go inside and clean it out. If it is a bad puncture wound, he will put a bandage on it, give him good first aid, and ship him right down to see the doctor. The doctor may keep him for two or three days.

MR. CHANT: But they do keep some cases in the woods?

CHAIRMAN CANTIN: Oh, sure. We don't want them to send down every little case of accident that comes up. But we have taught them to differentiate between a case which they can easily handle, and a case which they should not handle.

MR. CHANT: It is sometimes difficult. The reason I ask is that I know the St. John's Ambulance Association's first aid course is very definite on that point. They are very insistent that first aid is first aid, and not treatment. I wondered if these men trained in that course absorbed that teaching so that they would do nothing but first aid and send the man to the doctor for treatment, or use their judgment to keep some cases in the camps.

CHAIRMAN CANTIN: In the four years that we have been in this, that has not yet become a problem, so I think it is safe to say that it is not something that we will have to worry about very much.

MR. CHANT: In most of the pulpwood logging operations in Ontario, I think in nearly all of them, the company doctor is located right in the woods all of the time, and he visits each camp at least once a week, in some cases twice a week. There, of course, with the clerk trained in first aid, it is only a matter of three or four days until the doctor will be at that camp, and you can allow a clerk more leeway to keep a man in the camp and try to persuade him not to go out to town, but treat him for two or three days until the doctor arrives. I can understand where your arrangement is different, if the doctor gets in perhaps only once a season. If there is no definite date that he is going to call, the clerk would not want to take quite the same amount of responsibility.

CHAIRMAN CANTIN: With us there is no need at present to have a doctor in the woods, to keep him in the woods. Practically every camp is along a main road of some kind. Within an hour and a half or two hour from any of our camps or operations you can get a man down to the base.

MR. CHANT: Have you telephones?

CHAIRMAN CANTIN: A telephone in practically every camp—which is another feature.

A. E. MINOR (Ontario-Minnesota Pulp & Paper Company Limited, Kenora, Ontario, Canada): Our conditions in Ontario are somewhat similar to those in Quebec. We have a 250-ton mill and we do practically all our own logging. We do buy some wood from contractors.

You stated you had first-aiders in the camps. Well, we have the same in our camps. At the present time we haven't as many as we would like to have doing this, but we hope to increase the number. We have one of our logging superintendents interested in it, and he has taken out his certificate.

As far as the doctor is concerned, we have that service, too. Visits are made regularly, and they also look after the sanitation problem.

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CHAIRMAN CANTIN: What is your experience in accident prevention?

MR. MINOR: Our experience in the logging division is not so pleasant. However, we hope to make some improvement. I haven't any figures with me, because I didn't know there would be a meeting of the logging end of it.

CHAIRMAN CANTIN: Is this the first year that you have had this first aid course?

MR. MINOR: Oh no. As far as the logging division is concerned, we have just gotten started on it; but we have been conducting first aid training in the mills for a number of years. We use the St. John's course.

CHAIRMAN CANTIN: I am sure you will find that in your woods operations, good, certified first-aiders in your camps are going to improve your accident experience.

MR. MINOR: There is no doubt about it. We have found that it has shown a definite improvement in our safety record in the mill, and it is only natural that the same would apply to our logging division. Where you have a good first-aiders, it is bound to show some improvement in your safety record.

MR. ESTES: We, too, have first aid men in our camps, right in the woods. Five years ago 75 per cent of our employees in the lumber and timber department were first aid men. They had their certificates from our Bureau of Mines in the States. We have found that we have prevented minor accidents from becoming major accidents by proper first aid.

Not very long ago we had a very serious fracture in the woods. It so happened that two of the men right there with the injured man were first aid men, and they put splints on it. We also have an ambulance at the headquarters camp, and we keep a stretcher right in the woods. We got this man to the doctor, and the doctor commented on the fact that it was a very good job of first aid, one of the best he had ever seen.

Here is one reason for good first aid work in the woods. A man may be hurt when he is up on the hillside, in a bad place. He has to be carried out and maybe put into a car or some means of conveyance, before the ambulance can get there. If he has a bad fracture, he may get to the doctor without appli-

cation of proper first aid in a very much worse condition than he was when he got hurt.

Without a doubt, proper first aid distributed through the working portion of the woods by your men is a wonderful stride toward reducing your accident rate. There is one thing sure—you never can get too many first aid men in the woods. It costs very little to train them, and it is really making a great stride toward the prevention of serious accidents.

CHAIRMAN CANTIN: I am beginning to understand a little bit why you have such a low rate—\$1.30 or \$1.35 for your woods. Undoubtedly you are doing a lot of good work there.

MR. CHANT: I was think of that a moment or two ago, and I was going to point out that to make comparisons between rates is an extremely difficult thing to do. I have been trying in my own job, for about eight years now, to get an accurate comparison between assessment rates as between different jurisdictions, different compensation setups. I haven't been able to do it, and I have enlisted the help of the actuary of our compensation commission in Ontario; he is a very bright boy, but he hasn't been able to get an accurate basis of comparison. We can get the actual rates. But when you try to make comparisons, you have to go into the entire background of what the rate provides, what the benefits are, and lots of other things that may enter into the picture. I would like to point out that when we in Ontario and Quebec speak of assessment rates for woods operations, they include river driving operations which are quite hazardous. In your particular case you bring your wood from the scene of cutting to the point of use without a driving operation intervening. You load it on trucks and in hauling it you have just the ordinary highway hazards. But we find that the operation of getting the wood out of the woods to the mill in some instances involves quite long distances and quite a hazardous operation. There are not so many accidents on the drive. The frequency rate is low, relatively speaking, as compared with cutting, for example. But the severity rate and the cost rate is very much higher. In the last ten years, 58 per cent of all the fatalities in pulpwood logging have been drowning, and nearly all of them on the

drives. Our rate is all-inclusive, and governs the whole operation the year round, and those hazards are in it.

I would like to ask one question: In the areas represented here, has it been found that strains of various kinds make up an important part of the total number of accident cases? I mean by strains the whole field of sprains, strains, and so on where there is no external mark of injury. We have found in Ontario that the importance of that particular group of injuries is increasing from year to year. About 18 per cent of all the lost time cases now are strain cases—strained back, strained wrist, strained arms, strained shoulder—mainly from lifting, presumably. It presents quite a distinct problem, because there is no actual accident in a great many of those cases. It is almost impossible to put your finger on what happened to cause the injury. The man merely reports that he has a very sore back, and he assumes that he must have slipped when he was lifting a log, or he must have lifted it in a cramped position, or something of that sort. It is very hard to distinguish between lumbago, which may have arisen due to overeating and underworking or something of that kind, and an actual injury. The percentage is increasing, and it is becoming quite a worry to us.

MR. ESTES: About five or six years ago we had that very same thing continually coming up. A man would report to the doctor (by the way, we, of course, have our own company doctor and our own hospitals) with a strain—a strained back, usually—and it was a problem for the doctor. They didn't know whether to classify it as lumbago, rheumatism, or working accident, and they almost had to take the man's word for it, because after all, they didn't want to get into any trouble. While they may have actually thought it was a result of rheumatic trouble, or something other than lifting, nevertheless, during that period when we were having a lot of those, they would rather give way to the men, and we paid them compensation.

But strange as it may seem, in the last five years I don't recall a man in our operation having a strain, and I don't know why.

MR. CHANT: I would like to know the answer. It's a very peculiar thing. I don't like to give the impression that I consider these back strain cases all phony—they are not. A good many of them are legitimate ac-

cidents, no question about it. But there are some phony ones.

We had one peculiar situation that the records brought out, in one particular company's operations. They had, I think, six camps of their own, most of them located pretty well back from the settlement, from the railroad track, and it was an all-day trip to get out. But there was one camp located two miles from the main railroad, and most of the men in that camp were recruited from a district perhaps thirty miles or so in length, right along the railroad. We found that the percentage of strains in that camp was about four times what it was in the other camps of the same company, in the same area, handling the same kind of wood, cut the same length, handled by the same method, presumably of the same density and weight per cubic foot. Peculiarly, Friday afternoon seemed to be the time when most strains occurred. The boys wanted to go out for the week-end—that was the assumption. We couldn't prove that, of course. So their backs would be sore and they would catch the train and go home until Wednesday or Thursday of the following week.

That was met in the following year fairly well, simply by staffing that particular camp with men who were brought in from a long distance, not sending any of the local residents to that camp, but sending them to the camps further back. It solved the problem pretty well.

MR. MEANY: Could you tell us what all those charts you have on the wall are about?

CHAIRMAN CANTIN: This is simply a record of our accident situation, to know where we are going.

These (indicating) are merely for our own information and for that of the superintendents, the plant managers, and the woods managers. Some of the information which is shown here is given out either in a circular letter every month, or in a little magazine which we publish for the woodsmen. There is a lot of education that you must give the woodsmen, but it can be done if you plug at it long enough. You will eventually get them to understand all about frequency and severity and so on. There are different ways of doing it.

We have in each of our plants, for instance, very large billboards, outdoors. There

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is a picture of a man somewhat like this one (indicating) pointing at you. There is a question asked on top there—"What are you doing for the prevention of accidents?" Underneath this we have a graph. This is fairly large, so that it can be easily read, and each month we show by this graph the frequency for the month, as compared with the same month of the previous year.

It took us two years to get the men to understand it, but they know what it is now, and we have impressed upon them the fact that we want to keep down the current year, below the previous year, so that this lower line is 1941 and the upper curve is the 1940 curve for frequency, month by month. So far this year at no time has it gone above last year's monthly frequency. This chart is for Baie Comeau.

These billboards, twelve by ten, I think, cost a few dollars, but they interest the men. They are located so that as the man goes to his job, goes to a camp, he can't do otherwise but see them. They have asked a lot of questions about these. That is how we found out they were interested. They wanted to know what it meant. As I said, every month we keep them informed on what the accident record is, so they understand it now.

This graph here shows the experience for the company as a whole—I mean the three divisions. It contains very interesting data for the foremen, for the managers, for anyone interested in accident prevention, because we know from month to month whether we are going ahead or going backwards.

I believe you have to do that if you want to keep up the interest. We have in Quebec and Ontario local safety associations, and they publish every month the experience of the companies. This year we made a stencil of the experience for distribution in the woods. It is a condensed report, but it shows the standing of the individual companies in each class.

MR. CHANT: As compared with competing companies?

CHAIRMAN CANTIN: Yes, and the reason for it was, that a lot of our men have at one time or another worked for the Consolidated, or for New Brunswick International, or for Price Brothers, or what have you, and then they have come to work for us. Now, there is no question that they have

heard of accident prevention at these other companies. When they come to work for us, if we were to drop the whole subject and never talk accident prevention to them, it would be lost. But they already know what it's all about, and they are interested to see where that company stands. "Oh, I used to work for Price Brothers—look! he's tenth on the list, or he's third on the list." It has created interest amongst the men.

Mr. Draper, could you tell us anything about contests?

MR. DRAPER: No, I haven't been in touch with it enough to be really familiar with it. I must say I am not very proud of the way we run our contests. I mean they are contests without prizes and so forth.

MR. CHANT: One or two of the Ontario firms, members of the association for which I work, have tried the contest idea with varying degrees of success; perhaps, depending upon the amount of time and thought that was put, first, into organizing the contest, and then into the explanation of it to the people concerned, and finally into the follow-up.

In one particular group of camps they instituted the contest idea about three seasons back. They based it on the well-known sweepstakes plan. It wasn't a contest between camps. It was merely a scheme whereby each camp that succeeded in going through a certain period of time without a lost-time accident would have a sweepstake in which a drawing would be made from a box or a hat in which the names of all the men would be placed, and the winner would get a prize. That particular sweepstake started with a first prize in each camp—a credit of five dollars good in trade at the camp van which he could spend for tobacco or a windbreaker or rubber footwear or whatever he wanted. He couldn't get it in cash. I think there was a second prize of \$2.50.

The period through which the camp had to go without an accident varied from camp to camp. A large camp of 75 or 100 men might have ten days to go without a lost-time accident, and a small camp might have to go three weeks or a whole month before they would have a sweepstake. They tried to equalize it between the camps fairly well on that basis.

In other camps a very successful prize has been a barrel of apples, although that is not

an individual prize. There is no drawing for that. The company concerned merely announced that whenever the camp had succeeded in going a stated period of time with a clean sheet, no lost-time accidents, a barrel of apples would be provided for the men. Everybody could have some if he was quick enough.

Of course, it is quite a trick to get a barrel of apples in good eatable condition to a camp thirty-five or forty miles back into the woods in subzero temperatures. But it was done, and the men, perhaps because of that very fact, appreciated the prize of apples more, I think, than they would have a cash prize.

CHAIRMAN CANTIN: We started contests three years ago. It was felt that inasmuch as we had a merit rating system for the contractors, the men might say, "Well, it's all right. We are going to have a good accident experience, but who gets anything out of it? The contractor is saving ten or fifteen cents a cord, and we are the guys that give him that experience, and we get nothing for it." So we put in contests. We have a monthly contest. It is very simple. We have stuck to this one contest, and we have kept it for three years now.

MR. DRAPER: The chocolate bars?

CHAIRMAN CANTIN: Yes, first, because every man gets something—every man in the camp—and they all have an equal chance of getting a prize. There are three prizes. For the first camp, the camp having the most man-days without an accident, the prize is valued at \$2.50; for the second, \$2.00, and for the third, \$1.50, in merchandise. All other camps without accidents have two prizes, a \$2.00 prize and a \$1.00 prize.

Now that is the regular contest, every month, during the operation. In a camp which has no accident, every man is sure to get a good bar of chocolate and has the chance of winning \$2.00 or \$2.50 in merchandise, or \$1.00 or \$1.50. In addition, we run contests for the same camps for any particular month. I remember last year when I was checking the accident record since 1937, I noticed that October was the worst month. We had more accidents in October than in any other month in the year. True enough, the operations were in full swing and probably we had more men in the woods then, but nevertheless, October was a bad month and

it sometimes was the cause of breaking the accident record that was good up to then. So I suggested that we do something special for that month of October, over and above the regular contest—and naturally, barrels of apples came up.

So we advertised it—and when I say "advertised it," I mean it.

I will give you some figures here which are interesting. In Shelter Bay, for instance, in 1938, in October, there had been 35 accidents; in 1939, the same number; in 1940, 12. And look at the difference in man days. In 1940 they worked 23,910 man days that month, whereas in 1939, with 35 accidents, they had only worked 19,000 man days. See the difference?

Well, out of 16 camps that he had there, I think they gave out twelve or thirteen barrels of apples—good, first-class eating apples—and they were fresh. Some camps were forty miles back, but they got their apples, and got them in time.

In the Franquelin division, in 1938, in October, they had 20 accidents; in 1939, 33 accidents; in 1940, 7.

In Baie Comeau there was nothing to be proud of. In 1938, 98 accidents in the month of October; in 1939, 71 accidents; in 1940, 18.

We gave out last year 23 barrels of apples that month in Baie Comeau alone. So that gave me quite an encouragement.

Well, November wasn't such a bad month, but we decided that if any camps would have no accidents from the first of September to the twentieth of December, they would get a good Christmas dinner—a turkey dinner—and we ended up the year with a very good experience. But it cost the company 738 pounds of turkey in Baie Comeau; for Shelter Bay I forget just how many pounds. The turkey was in the cooks' hands two days before Christmas time. We saw to it that it got there, snow or no snow, and by dog-team or afoot. There is no use doing anything if you are going to do it long afterward. It's while it's hot that you've got to do it.

Now, in September, this year, when we got to the fifteenth of September, the accident record didn't look very good. We had only four or five or six accidents in Baie Comeau, but I still thought we could cut it down. We have had bad weather, rain all the time—four

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inches of rain in September in Baie Comeau—and you know what that does for a lot of accidents. So we decided to do something again over and above the regular contest, which runs month in and month out. So I said, "Well, between the twentieth of September and the end of the month, every camp without an accident is going to get a big hamper of apples, good eating apples." And for the month of October this year they are also getting apples.

But if you go into contests, you must follow it right through. Don't start anything that you are not going to finish, and don't do it in a half-hearted way. And you must advertise.

MR. CHANT: Do you remember what your basic figure for turkey was, per man?

CHAIRMAN CANTIN: We base it on one pound per man. If you have twenty men, it means twenty pounds of turkey. Well, the chances are you are not going to find a twenty pound turkey—it will be eighteen or sixteen or fifteen—so you give them two turkeys. Give them a little more rather than a little less.

It's the same with the apples. A barrel of apples is supposed to have so many apples in it, depending on the size of the apples. Well, we saw to it that a man followed this barrel of apples to the camp so it wouldn't break open and half the apples be lost before it got to the camp. That's another thing you have to watch. When we got to the camps, the men agreed that we would divide the apples as equally as we could. There were so many apples in a barrel, and so many men in the camps, and it gave each man ten or fifteen apples, and he did what he liked with them.

The same with the chocolate bars. You will find at the end of the month that there are 55 men in the camp, and you say, well, 55 chocolate bars. Well, for good measure, put in four or five more, because by the time these chocolate bars get to the camp, there may have been two or three more men that came in that you don't know anything about it. It's better that there be a little more than a little less. If it happens that some are left over, they fix it amongst themselves. They took a piece of paper and wrote numbers on it from one to so much, and then they drew. There was no discussion. We have seen to it that the distribution is done correctly.

But it certainly helps to prevent accidents, because it creates interest and the man feels that you are doing something, that if they do work and try to prevent accidents, they will get a reward of some kind—even though it isn't a large reward.

It has this effect also. When a camp has had a good accident experience one month and has won prizes, in the following month I have noted time and time again that the men watch out for the next fellow. If they find that one fellow is taking undue risks, they go to him and tell him, "Listen here, we want to have some chocolate bars this month. We want to have some apples this month. You just watch out there."

MR. MEANY: You just run that for your company camps?

CHAIRMAN CANTIN: For all camps, contractors' included. You can't make any distinction or discrimination. If you are going into contests, they must apply to every man without exception, whether he is working in a company camp or a contractor's camp or on the drives. It applies to all of them.

MR. CHANT: Well, I don't know how the rest of the audience feels about it. It's my personal feeling that for the first attempt at a meeting of the people interested in pulpwood logging in this section, we have had a good discussion. I for one certainly feel that I am going to take away some ideas that will be useful to me. I hope that applies to everyone. I feel more or less hopeful that in another year, carrying out perhaps the suggestion made by Mr. Draper, a little more advance publicity being given, if possible, we may be able to get a better attendance and have a better meeting. Things have to begin in a small way.

Perhaps we have made a start now and we can expect to see the thing grow reasonably in the next few years. I certainly hope so, because I am thoroughly convinced that one of the major problems, if not the greatest problem, in the paper and pulp industry is accident prevention work in the woods. While the problem isn't licked in the mills—we are still having mill accidents, and too many of them—I think it is pretty generally recognized that the woods is the bad end, and our efforts should be rather concentrated on that end to make some improvement there, without neglecting the mills.

MR. DRAPER: I think before we adjourn we should congratulate Mr. Cantin on the very able manner in which he has pinch-hit in taking the chair this afternoon. Mr. Cantin took on this job at short notice, and I think we should go on record as agreeing that he has done a splendid job.

CHAIRMAN CANTIN: I am certainly pleased to hear that you found it all right. Let's hope that next year we have a greater

attendance. I think your suggestion, Mr. Draper, of going to the individual companies and letting them know what we intend to do is the best that can be made. If they don't know about it, how can we expect to see them here?

MR. DRAPER: The men who should be told about it are those right at the top—the woods managers. In many cases it will be the vice-president of the company.

THURSDAY AFTERNOON SESSION

October 9, 1941

Presiding: GENERAL CHAIRMAN D. B. CHANT, Secretary-Engineer, Ontario Pulp and Paper Makers' Safety Association, Toronto, Ontario, Canada.

GENERAL CHAIRMAN CHANT: While we have a minute or two I should like to find out something as to your ideas and wishes with respect to the program for this Section for next year. Fred Berry, who is your new Chairman of the Program Committee and Secretary of the Section, is here and your new General Chairman is also present, and for their benefit and assistance I think we might use a minute or two now to get a slant on what you would like for the next Congress.

Those who think there were sufficient sessions of the Paper and Pulp Section at this Congress, will you please hold up your hands? Those who think that we should have more sessions in this Section next year? Can you make anything of that, Fred? Does that help?

MR. BERRY: It looks to me like it is even.

CHAIRMAN CHANT: It looks like about an even split and I think one man voted both ways. (Laughter.)

I do not know how many here present attended either of the two group meetings on Tuesday afternoon. The Pulpwood Loggers' meeting was not as large as we had hoped for but it was as large as I expected. In the past we have had little of great importance or value to offer to people concerned with the reduction of accidents in pulpwood logging operations. This year for the first time we had a session particularly for a discussion

of their problems. It is not very surprising that more did not come. As time goes on, if we continue with that type of meeting in that particular field, I feel quite sure that the members of this Section will make a point of sending to the Congress men directly concerned with their logging operations who may benefit, and from whom we may benefit, in discussing their peculiar and particular problems.

I will now introduce to you J. Fred Berry, your new Section Secretary.

MR. BERRY: Those of you who attended our Monday meeting will remember that Mr. F. H. Rosebush brought out the fact that one of our past General Chairmen had passed away recently, and the Secretary was instructed to write a letter to Mr. Peacock's widow. However, going a little further, I should like to see this resolution adopted here, and put in our minutes, and a copy sent to her:

Resolution

Whereas, It has pleased the Almighty to remove from our midst so suddenly by death our esteemed friend and co-worker, W. J. Peacock, who served as General Chairman during the years 1926 and 1927 in the Paper and Pulp Section of the National Safety Council, always assisting in every problem confronting us; there be it

"Resolved, That while we deeply deplore the death of our beloved friend and companion whose fellowship it was an honor and

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a pleasure to enjoy, we rejoice in the fact that the privilege of having known him and worked with him will abide with us always.

"RESOLVED, That he was to us a beacon ever directing and a guiding light in the safety movement in which he has done so much good.

"RESOLVED, That we transmit a copy of this resolution, properly engrossed, with our deep and most sincere sympathy to the widow of our deceased friend and also a copy of this resolution be spread upon the minutes of our Section."

CHAIRMAN CHANT: Ladies and gentlemen, you have heard the reading of this resolution. What is your pleasure?

MR. BRAATZ: I move the adoption of this resolution.

(The motion was seconded and carried.)

CHAIRMAN CHANT: I think that we might at this point ask the newly-elected Editor of the Section's News Letter to make the first of his numerous appeals during the year for assistance in his publication. Russell Simpson, will you please take the floor for as long as you need it?

The Section News Letter

MR. SIMPSON: As important and as fine a thing as our News Letter is, I think you will agree that it can be a finer and a more important item in our Section. And I think that can be brought about by active participation, by each member contributing something to it. I know that the normal and natural thing for a man to do when he goes back home is to forget about it, but won't you this year, particularly you fellows who are here at this meeting, give us just one item during the year? If you will do that, with the vast number whom we have in our Section we will have material for the entire year.

I want the News Letter to be a fine letter this year, naturally. We all want it to be. I shall never forget the statement that Fred Robinson made in 1939 about the News Letter. He said that when he received it he sat down and read it, and anything in it that he could give either to the plant superintendent or foreman he cut out and passed on. I think that we can all use the News Letter to great advantage, and I know you will be

more interested in it if you contribute to it. Won't you please help us this year?

MR. ROSEBUSH: I attended the session yesterday morning which was a panel discussion on fundamental causes of accidents. Our General Chairman was a member of that panel. I suggest that our Program Committee consider such a type of session for our own Section the coming year—a discussion of accidents peculiar to the paper industry.

MR. BRAATZ: I will appreciate whatever help we can get from the sectional membership on formulating the program for next year. We will meet probably here in January, and in the spring in New York, to establish our program. Obviously our decisions will be based on what the membership wants. We would like to hear from you now.

MR. BERRY: Call on Mr. Etter of River Raisin.

MR. ETTER: I am just a neophyte. This is my first attendance at this Section. However, it might be a good idea, three or four months before your program is arranged, to write to everyone who attended the sessions this year, asking him for any problem that confronts him at that particular time. These questions to be sent to a central point, or to our Chairman, to be mimeographed and returned to every person submitting one, with the request that he give any advice he can on the questions that have been raised. Then when we come to the meeting next year, go over the questions that have been submitted and the suggestions that have been made as to how they might be answered. We will have some answers when we come to the meeting and there may be someone at the meeting who has a better idea that we can take back with us. In other words, we will have two or three things to take back with us rather than only one answer which may not be the right answer.

CHAIRMAN CHANT: Your suggestion has been heard by the Section's newly-elected officers and I have no doubt that it will be considered and something will be done about it. However, let me say to you and to all others present that the facilities for doing something of that kind, approximately that same treatment, exists through our Section News Letter and it has been insufficiently used, in my judgment. I feel that we have

not made full use of the Question Box section of our News Letter, to which any member is at liberty to send questions at any time. I am sure the News Letter Editor will always be glad to give them a prominent place in the next issue and to collect, classify and publish the answers, with or without identification as the members may wish, so that all members of the Section may benefit.

Now perhaps the two ideas could be worked together. We could handle the preliminary stages through the News Letter and at the same time pick out the more important questions or those of interest to the larger group in the Section and bring them up at the Congress for more intimate discussion.

ERNEST AUGUSTUS (The Mead Corporation, Chillicothe, Ohio): There may be

members of the Section today, who are not familiar with the fact that their membership entitles them to receive more than one copy of the News Letter, depending, of course, on the size of their plants. I think that my own particular organization gets about thirty-five copies and they go to all of the foremen. I put delivery memos on them and about three foremen get each Letter. Those foremen get quite a lot out of reading those News Letters. They are kept up-to-date on what is going on. There may be some who do not know that that service is available.

CHAIRMAN CHANT: I now call upon the Chairman of the Section's Contest Committee, A. Scott Dowd, of Fritz Publications, Inc., to present the report of the Section's safety contest for the year 1941.

Data on the 1940-41 Paper Industry Safety Contest

By A. SCOTT DOWD

Chairman, Contest Committee, Paper and Pulp Section

The Paper and Pulp Section has now completed ten of its consecutive annual 12-month safety contests. Previous to these, there were five annual contests, each of six months duration.

The historical review of these past fifteen contests exhibits a drop in frequency rate from 33.51 in the year 1927, to 14.32 in the year 1941. In the summary of accident rates for 1940, published by the National Safety Council, it is stated that since 1926 the paper industry has made cumulative reductions of 70 per cent in frequency and 57 per cent in severity, and that these improvements exceed the averages of all industries.

Participation in the Paper Industry Safety Contests has increased steadily since 1931 to the high mark in the 1940-41 Contest of 180 mills and plants, covering 92,016 employees who worked 184,039,939 man-hours during the year.

CHAIRMAN CHANT: I am sure that all of us, whether or not our respective companies and plants have been mentioned in a citation of merit, have proper cause for satisfaction and a considerable amount of pride in the accomplishments of those plants. It is no

The average frequency rate for all participants in this latest competition was 14.32. While this is a little higher than the rates of the three previous years, it is slightly lower than the average frequency rate of the past ten annual contests, which is 14.67.

Paper and pulp mills had higher frequency rates in the 1940-41 Contest, averaging 14.49, against 12.75 for paper and board re-manufacturing plants.

Frequency rates of identical contestants averaged one per cent above the average in the 1939-40 competition. Rates increased 12 per cent in re-manufacturing. Only Groups A and C of paper and pulp mills were successful in improving their rates.

Eleven contestants finished the 1940-41 Contest with perfect scores. Two of these were in Group C; six were in Group D, and three were in the Re-Manufacturing Division.

small thing for a plant to complete 400 or 500 or more consecutive working days without a single lost-time accident. While perhaps we sometimes feel that the larger plants in the industry are handicapped by their very size to some extent, I am not so sure that it

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is true or that it is proper to take that view.

We have had examples of plans that certainly cannot be considered small plants, which have gone through the complete contest year with a perfect record. We should all be encouraged to go back to our jobs and try again in the coming year to overcome a few more of the accident hazards in our plants, to stimulate interest among the workers, to the end that we may return here a year hence with an improved record for the

whole group and more individual perfect scores.

The presentation of awards to the winners of these several competitions will now be made. Each year we are honored in this, particular by the presence of a representative of the National Safety Council. I take great pleasure in again introducing to you Mr. John E. Long, a Past President of the National Safety Council.

Presentation of National Safety Council Awards in Paper and Pulp Section Safety Contest

By JOHN E. LONG

Superintendent of Safety, The Delaware & Hudson Railroad Corporation.
Albany, N. Y., and Past-President, National Safety Council, Inc.

The awards consisted of Trophies, in the form of handsome Bronze Plaques, presented to winners of first place in the contest; and Certificates of Merit, suitably engraved, which

were given to winners of second and third place in the contest. Awards were made as follows:

Trophy Winners

PAPER AND PULP DIVISION

Group A.

Consolidated Paper Corp., Ltd., Wayagamack Division. 2,199,624 man-hours with 3 disabling injuries.

Group B.

P. H. Glatfelter Co., Spring Grove, Pa. 1,122,804 man-hours with 2 disabling injuries.

Group C.

Price Brothers & Company, Ltd., Jonquiere Mill. 495,675 man-hours with no disabling injuries.

The Mead Corporation, Harriman Division. 365,390 man-hours with no disabling injuries.

Group D.

Bird & Son, Inc., Phillipsdale, R. I. 331,556 man-hours with no disabling injuries.

United States Gypsum Co., North Kansas City, Mo. 203,660 man-hours with no dis-

abling injuries.

The Mead Corporation, Nashville, Tenn. 184,474 man-hours with no disabling injuries.

Spaulding Fibre Co., Milton, N. H. 179,605 man-hours with no disabling injuries.

Central Fibre Products Co., Vincennes, Ind. 157,656 man-hours with no disabling injuries.

Spaulding Fibre Co., Inc., Hayes, N. H. 78,175 man-hours with no disabling injuries.

PAPER AND BOARD RE-MANUFACTURING DIVISION

Bird & Son, Inc., Roofing Plant, Chicago, Ill. 293,448 man-hours with no disabling injuries.

Bird & Son, Inc., Roofing Plant, Shreveport, La. 161,477 man-hours with no disabling injuries.

Bay West Paper Co., Green Bay, Wis. 109,822 man-hours with no disabling injuries.

Certificates of Merit

PAPER AND PULP DIVISION

Group A.

(2.) The Flintkote Company, Pioneer Div. 1,434,475 man-hours with 3 disabling injuries.

(3.) Price Brothers & Co., Ltd., Riverbend Paper Mills. 1,855,547 man-hours with 4 disabling injuries.

Group B.

(2.) St. Croix Paper Company, Woodland,

Maine. 872,602 man-hour with 2 disabling injuries.

(3.) Hoberg Paper Mills, Inc., Division "A," Green Bay, Wis. 1,014,424 man-hours with 3 disabling injuries.

Group C.

(3.) Strathmore Paper Co., Woronoco Mills. 533,116 man-hours with 1 disabling injury.

CHAIRMAN CHANT: We have one remaining trophy to be awarded. I will ask Mr. A. Scott Dowd to announce to you the winner of that particular competition and to make the presentation.

The Paper Industry Trophy

MR. DOWD: Again I should like to brouse a bit into the records of this year's contest which I mentioned in giving my data and to explain something of the problem that the judges have to solve in finding the winner of the major trophy, which is the Edward Benton Fritz memorial trophy, to the mill which rule 19 of the contest states "is to be donated by the Fritz Publications, Incorporated, Chicago, to the eligible unit which in their opinion has established the best record, based upon frequency, man hours worked, physical conditions and other contributing factors. Eligible units for this award shall be (a) group winners and (b) all others tied with group winners as specified in rules 6 and 7."

It is a tough job for the safety directors, comprising the most of this committee, to decide which is the safest mill in the industry or in other industries in which they have to make selections. It isn't always just a matter of technical records as to the number of man hours, as to the number of employees or as to what the physical conditions of the plants are or what not. It all goes in as a whole to make up the problem for them to consider.

It has been mentioned that it is difficult for a Group A mill to win this trophy. Group A mills have won it. They haven't always made perfect scores, but for some reason known to the judges they have been selected

as the mills that have made such outstanding records that they should be awarded the trophy which designates them as those having made the most outstanding records in the contest. In the past ten years there have been three Group A mills, three Group B mills, two Group C mills and one Group D mill. So among the paper and pulp mills eligible for this prize for being the safest paper and pulp mills in the industry, you will find mills of all sizes, as to number of employees and other conditions, that are designated by our rules with which I assume you are familiar.

Now I have given you the set-up that the judges had to consider in awarding this prize this year. I think there is a thrill in holding back from you until this crucial moment the name of the winner. You all have your guesses. I am going to leave the pleasure of announcing this name to the Vice-President and Treasurer of the Fritz Publications, Incorporated, Mrs. Edward B. Fritz, the wife of our late publisher, "Dad" Fritz. So, therefore, I am privileged to call upon her to come here and present this prize on behalf of her husband, Edward B. Fritz.

Presentation of the Award

MRS. EDWARD B. FRITZ: It does give me great pleasure to come here on behalf of the Fritz Publications and on behalf of my late husband to present this trophy today; and I want to tell you in my own behalf that the Safety Congress, the safety work, is as interesting to me as it was to my husband because he made it interesting to me. It was something that was close to his heart and he talked very freely to me about it all the time. So today I should like to tell you of one of the things that he used to say about the

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Safety Congress and the men connected with it. It was that they had a "zip." You all know what that means.

There is a zip about the Safety Congress that does things. Not the Congress, but the people who belong to it, and I know what it has meant to all of you to work out some new device that would make it better, pleasanter and safer for the men who work with you.

I could pick out men in this crowd of whom my husband spoke and said, "Those men know how to do things," and that is the way I feel about it. So it is my pleasure today to present this trophy to the winner of the contest, to the Nashville, Tennessee, Division of the Mead Corporation, manufacturers of semi-chemical chestnut pulp and corrugated board. It has finished the contest with a perfect score of over 184,474 recorded man hours. This corporation has thereby completed five consecutive years without a disabling injury totaling 795,527 man hours. Now if I may call upon Mr. Winkler.

FRANK WINKLER (Mead Corporation, Nashville, Tenn.): We have two gentlemen here who have furnished a lot of "zip" and accomplished this record, and I should like to present to the group Mr. H. L. Moore, our Plant Engineer, and Mr. H. L. Jackson, one of the operators.)

(Presentation of trophy to Mr. Winkler.)

CHAIRMAN CHANT: Mrs. Fritz, I am sure that everyone here appreciates the pleasure in having you present this major trophy. We all appreciate your coming here and your continued interest in the activities of this group, and on behalf of all present, I thank you sincerely.

The remaining program for this afternoon consists of the Safety Exchange or the Question and Answer Period. But let me first say to you how very much I have appreciated the opportunity of trying to serve as your General Chairman during the past couple of years. That opportunity I appreciate as a privilege and an honor. I would be happy, indeed, to feel that by any effort of mine I had in any small degree assisted in the progress of the Paper and Pulp Section of the National Safety Council.

Again I want to thank you for your splendid cooperation with me. I have yet to ask

anything of any member of this Section that he has not been ready and willing to do, no matter how much it might mean to him in the way of additional effort during these busy days.

I want now to present to you formally your newly-elected General Chairman and to ask for him what I know he will receive from you, merely the continuation of the same sort of cooperation and support you have given me throughout his term. I take supreme pleasure in presenting your General Chairman-Elect, my good friend, Clayton Braatz.

CHAIRMAN-ELECT BRAATZ: It was with a great deal of anticipation and hesitation that I accepted this job. Anticipation because I knew that I would be working with members of the Section, men and women who are cooperative, who accept jobs gracefully and do them capably. Hesitation because of the work that has been done by past General Chairmen, men like George Adams, Ken Faist, Walter Gleason and others who are here, men who did their jobs and did them well, and I hesitated because I had to step into their shoes.

We come to a man who has finished two terms as General Chairman, Doug Chant. Doug has tried to depreciate his work, but those of us who worked with him closely on the Executive Committee realize the amount of work he put in on sectional activities, and I think the least this group can do today is to stand and give him the hand that he deserves.

MR. ROSEBUSH: Clayton has stolen some of my thunder, but I have asked for the opportunity of making a little talk before the meeting closes and to add to what Clayton has said. I think that we owe a lot to this brother from Canada, this easy, breezy, attractive personality, who has helped put forward so consistently and energetically the work of this Section. He has been congenial, tactful, resourceful, and efficient.

He has followed the work of a number of good chairmen in the past. He has set a high standard for his successors to follow, and I want to second what our incoming Chairman, Clayton Braatz, has said about the work that Doug has done, and I think that we also should give a vote of thanks to the officers and committeemen who for these past two

years have worked with Doug. I think they are well deserving of all of our praise, and Clayton is deserving of our continued efforts and sympathy in the work that he has taken upon himself.

CHAIRMAN CHANT: Thank you very much for that tribute, which I am satisfied is undeserved. Let me merely say that whatever small contribution I may have been able to make, I have derived greatly more from this work, from the opportunity to serve this Section than I have contributed.

What Would You Do? — Safety Exchange

Discussion Leader: W. F. COOK, Superintendent, Personnel Department, Lakeview Mill, Kimberly-Clark Corporation, Neenah, Wis.

W. F. COOK: This feature of the program has been entitled "The Safety Exchange" and "What Would You Do?" As such it will be a failure unless you do something about it.

I was pleased to learn from Mrs. Fritz that you fellows have the reputation of being full of "zip." Let's see a demonstration of it this afternoon. If you leave here without feeling that you got something out of it, don't blame me and don't blame the panel; blame yourself; and, as Victor L. Short says, I mean you and you and you! So without further ado, it gives me great pleasure to present to you the members of our discussion panel, as follows:

Mrs. Lillian Brewer, of the Oswego Falls Corporation, Fulton, N. Y.

D. T. Meany, of the International Paper Company, Dalhousie, New Brunswick, Can.

Russell Simpson, of the Brown Company, Monroe, La.

Ernest Dutcher, of the Pioneer-Flintkote Company, Los Angeles, Calif.

In order to break the ice, I am going to address question No. 1 to the panel and I am hoping that it won't be necessary for me to do this too often. Here is the question:

"The manager of our mill personally inaugurated an interdepartmental safety sanitation contest, which started out with a bang. Enthusiasm ran high and for a few weeks every department was spick and span with a place for everything and everything in its

The remaining part of this afternoon's program has been given the title, "What Would You Do?" and the arranging of that part of the program has been done by a committee appointed from your Section's Executive Committee. They in turn have delegated the major responsibility for the conduct of the program to Mr. Wesley Cook, of the Kimberly-Clark Company. It gives me great pleasure to introduce Mr. Cook, who will conduct the remainder of the program.

place. There were no lost-time accidents which, if they had occurred, would have counted heavily against the department in the contest. Quite suddenly lost-time accidents began to occur generally throughout the mill. Enthusiasm for the contest died. The mill is in the doldrums in regard to safety and sanitation. The manager brings the department heads together, pounds the desk and tells them something must be done. What must be done?"

I am going to direct this question to Mr. D. T. Meany.

In the particular case at hand, we have a plant that has established this safety contest, that has gone along with an excellent record for two months, and then has gotten into the position where this department has a lost-time accident. They have lost interest because so many departments have lost-time accidents. The question is, what must they do?

All right, let us take the experience of a paper company which runs successful safety contests. They limit the time in which the contests run—I believe it is a period of a month—and then there is an award through drawings. When the month's experience is passed every department starts again on a new slate. They have some objective to work for. In this particular instance, it does not seem to me that they have set any certain period of time so that they may have an objective and then are able to start again toward another objective.

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Now I would recommend to that particular manager that he have his safety contests run for a certain time and establish his awards, whether they be drawings for a watch, or for \$5 extra in the pay roll of the lucky drawer in the department that has maintained a record. I believe that he will get another spirit of life into his safety contest and will maintain it on a better standard than he has in the past.

CHAIRMAN COOK: Does anyone in the audience have any comment to make either by way of amplification or difference of opinion with Mr. Meany's remarks?

E. F. TROOP (P. H. Glatfelter Co., Spring Grove, Pa.): At one time we also did not believe in the beneficial results of a contest, but we finally decided to try it. We now conduct drawings for prize awards for departments having no lost-time accidents. The contest lasts a period of three months, at which time we assemble as many people in our employ together as we possibly can, and the names of all the employees in the department that has not had any lost-time accidents are placed in a glass container, and a drawing is held to select the names of the people who are fortunate enough to win a prize.

At the end of the year we have our employees divided into four groups. In the quarterly drawing if any employee in any of those groups has had an accident, the entire group is cast out for that quarter. We have four quarters and an annual drawing, and at the annual drawing all departments that have had no lost-time accidents, regardless of what group they were in, are entered as possible winners. We have found that we get very good results from it.

CHAIRMAN COOK: Thank you, Mr. Troop. Our southern representative on the panel, Mr. Russell Simpson, would like to speak on this subject.

MR. SIMPSON: I think it is rather unfair even to try to give constructive criticism of a thing like this when you do not know the particulars about the contests. But I have had some sad experiences with contests. I think the biggest trouble with this particular contest is lack of understanding on the part of the employees. You cannot sit in a swivel chair and formulate rules for a contest and then take them out into the mill and say, "Fellows, here is the contest."

No matter what your award is or length of time or anything else, I think you must first sell it to the employees and let the men have a part in planning it with you.

Problem in First Aid

CHAIRMAN COOK: Shall we pass on then to another question? "If an employee comes to the dispensary with a foreign body in his eye that has been in for several days and he can give no information concerning the accident, what would you do?"

Mrs. Lillian Brewer, of Oswego Falls.

MRS. BREWER: I would first send the employee to the doctor and then I would look into the case history of the man's accident and find out whether or not it is compensative or whether it happened in the plant or outside of the plant. If it were a foreign body which I could not see myself, naturally the doctor would be the one to take it out. If I could see it, I would take it out myself.

ERNEST AUGUSTUS (The Mead Corporation, Chillicothe, Ohio): I should like to add just a little to that. If you have made your investigation and you have found nothing that would lead you to think that the man may have gotten the foreign body in his eye while at work, yet his eye has become inflamed and he may even lose time, would you consider it a compensative accident or not?

MRS. BREWER: I do not know your state laws, but in New York State we take the employee's word first, and if the doctor says that he got it in while he was at work—well, generally you know your employees and they are pretty truthful. It may have gotten in the day before or it might have been in several days and not noticed until the eye became inflamed. Sometimes they try to remove it themselves which causes inflammation. But we take the employee's word first.

MR. MEANY: I believe that you should have your nurse keep a record of the foreign bodies that are removed, for the safety man to review, and I think you will find from those records that if a man working, say, around a paper machine, around the calendar stacks, has had a number of foreign bodies in his eye over the period of a year, he needs glasses. In a number of cases we have found that the reason men working around machines have repeatedly gotten foreign

bodies in their eyes from paper dust has been because they needed glasses. In that way you will correct the condition that exists and probably prevent a serious injury.

MR. DUTCHER: Do I understand that this case showed up two days later?

CHAIRMAN COOK: Several days later.

MR. DUTCHER: Every employee who comes into our plant is given instructions that regardless of how small the injury is, whether it is a scratch, sliver, burn, or anything small, things that you would not pay much attention to, like a pin scratch, must be reported to the first aid the day it happens and not the day after; and we will not take the excuse two days later that it happened last Monday or something like that. Those are definite instructions with the admonition that if they do not come in they are likely to lose their jobs or to be laid off for several days.

A Superintendent's Mistake

MR. DRAPER: A paper mill superintendent is very proud of his department's accident record. He cooperates with the safety director 100 per cent in seeing that suggested improvements are made with all possible speed. One day after one of his paper machines had run twenty-four hours without a break in the sheet, it was noticed that dirt was accumulating on the bar which crossed the machine over the wire just before the suction couch roll. The machine was so set up that there was really no safe way of cleaning that bar in a hurry. The paper mill superintendent could see that the dirt was just about to drop on the sheet and give him a break. He talked it over with the machine tender. The machine tender wanted to go up on the bridge, just past the suction couch, over the first felt and lean over as far as possible with a rag on the end of a stick and take this dirt off; a very hazardous operation because a slip meant death.

The superintendent would not let the machine tender do it. He went up and did it himself in the way in which the machine tender proposed to do it. He took exactly the same chance himself, and at that moment the safety director walks in and sees him doing it. What should the safety director do about it?

CHAIRMAN COOK: Who on the panel would like to take a crack at that one?

MR. DUTCHER: In our plant the management holds supervision responsible for safety. There is a safe way of doing that without going up there and if I caught him, in my position as safety supervisor I would have plenty to say to him and I might not stop there. If I thought very much about it I might go a little higher, but I would certainly get some reaction.

MR. DRAPER: I might mention that this paper mill superintendent is perhaps our keenest safety worker in the mill. Put yourself in the position of a paper mill superintendent who has made some changes on a paper machine and has promised the management that they are going to get a record out of that machine as regards breaks per twenty-four hours. Put yourself in the position of that superintendent.

Also put yourself in the position of the safety director and look at it this way: You must correct the condition and get that superintendent to do what you want him to do without hurting his feelings, without making an enemy of him, so that he will continue, after you have had your say with him, to be an up-and-up safety man. Every man in the mill must be a friend of the safety director but first of all the safety director must be a friend of every man.

A. D. WILKINSON (Kimberly-Clark Corp., Kimberly, Wis.): This problem points up to the question of management having sold its subordinates that safety first is more than just a slogan. In other words, if the rush to get out production comes first, "Safety first" isn't a slogan in that particular plant.

CHAIRMAN CHANT: The question is, "What would you do?" Taking that personally, I would wait quietly until the superintendent had gotten down off the footboard and was out of danger. Then I would ask him why he had not permitted his machine tender to look after the machine; and having gotten the expected answer that he would not permit his men to expose themselves needlessly to risks of accidents, I think he would have answered his own question before I had asked it. If not, I would go on and ask another question, what he would have done had he come in and found the machine tender

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in the position in which he had just been found? I think that could have been done under the circumstances.

With the personal relationship existing between the superintendent and the safety director, I believe the situation could have been handled without causing ill feeling. I think his very interest in safety would have convinced him in a moment or two that he had been guilty of a very serious misdemeanor in setting a bad example.

MR. MEANY: I was in a similar position with the master mechanic who went into a chip bin without his safety belt. It isn't so extraordinary a problem. I think that after the paper mill superintendent came down, having gotten the full particulars from him, I would have said, "Bill, let's you and I go up and see the old man and get this straightened out, whether it will be production or safety. I think we can iron out our difference with the boss and he will make the decision."

CHAIRMAN COOK: Thank you, Mr. Meany. That may not answer your question too directly, Mr. Draper, but I think in all of these things it is pretty much a matter of opinion. They aren't open and closed subjects.

DAVID P. FAIRCHILD (Berst-Forster-Dixfield, Plattsburg, N. Y.): In line with Mr. Chant's solution of the problem, which I think is probably the best, there is one thing that he did not mention. Would you speak to the superintendent in front of the machine tender? If you do not, the machine tender will think that the superintendent has gotten away with something. How would you handle that?

CHAIRMAN CHANT: That is another question.

CHAIRMAN COOK: Do you prefer to avoid it?

CHAIRMAN CHANT: No! When you are through with this question; that is another question.

MR. BERRY: No matter how many standards and safe practices you set up, if you get into a mill where they are going to put production ahead of safety, your standards won't do you any good at all, because if he were set on making this continuous run record, regardless of your standard he would

do the same thing over again, in my opinion.

What Type of Discipline?

CHAIRMAN COOK: I believe that Mr. Walter Strong has a question.

MR. STRONG: You probably saw the bell-hop come down and deliver to me this telegram. It says:

"George Willis broke left leg running downstairs. As you recall, he has been warned twice before about practice of taking stairs several steps at a time. Having disciplinary meeting with superintendent on him tomorrow. What do you think I ought to do?" Signed "Howard Aderhold."

This is bad news to get at a safety meeting. Apologetically, perhaps I might say that we don't have a complete organizational safety program, but we do attempt to reprimand and correct workers whom we find performing unsafe practices, and I think that the case in point is one of the most unsafe practices in any mill. It has nothing to do with the operation of machinery or the product, but it happens in our mill every day and I will bet it happens in yours. Men and women tearing up and downstairs. In this particular case there has been no penalty to date, and I would say that the man has already been penalized with a broken leg and there should be no penalty now. But there is the question: What would you do?

CHAIRMAN COOK: This man had been warned twice before about the practice of taking steps two or more at a time?

MR. STRONG: That is right.

CHAIRMAN COOK: He was familiar, therefore, with the company rules with respect to the use of staircases?

MR. STRONG: That is right.

CHAIRMAN COOK: I will refer the question to a member of the panel, Mr. Russell Simpson.

MR. SIMPSON: I think that there ought to be a thorough investigation. That is the only way to get at the bottom of accidents.

CHAIRMAN COOK: Gentlemen, tomorrow Mr. Aderhold and the superintendent have this practical problem right before them and I assume that Mr. Strong will be wiring advice tonight. The question is: What shall

he recommend they do. We have the suggestion that a thorough investigation be made. Let's assume that the investigation is made and it is found that George Willis was deliberately violating known company safety rules and that the condition of the treads of the staircase was normal. What shall Mr. Strong recommend?

ROLAND RICHARDSON (Gardner-Richardson Co., Lockland, Ohio): I think that it would be foolish to take disciplinary action against the man. He has suffered enough or he will suffer enough before he has recovered, back on the job. But I do think that it is a wonderful opportunity to use that accident for safety publicity, through bulletin boards or by word of mouth or in safety meetings, to show just what happens when that particular safety rule is disobeyed.

MR. BRAATZ: I do not agree that the man has been penalized enough. You establish certain safety rules and if a man does not live up to them you are saying in effect, "Our safety rules are no good." I will grant that the man is going to suffer, he is going to lose pay, but I think that if you are going to have an effective safety program you have to establish some penalties.

MR. HANK: I believe that the responsibility rests more with the safety engineer than with anybody else. I feel sorry for the man who has broken his leg, but I should think that at the time the second warning was given there should have been some kind of punishment imposed, such as demotion to another department or to sweeper for a week or so. I would really do something to prevent the accident rather than to let it happen and then try to impose punishment.

MR. GIBSON: Well, I disagree to a certain extent. I think that if a fellow is a hazard to his department and you keep telling him, time off won't do any good. You can keep on talking to some fellows and it does not do any good. We have put teeth into our rules in this way: if a fellow is caught a second time he gets his pay check cut, and that is the only way you can get action, because some fellows will keep doing the same thing over again, thinking that it is cute.

CHAIRMAN COOK: I would suggest that be enough discussion on the topic of disciplinary action. What is next?

The Safety Man's Qualifications

DELEGATE: I represent a new paper and pulp specialty company in the Middle West, as employment manager. They need a safety director, or a safety man, and they said, "Now all you have to do is go over to the Safety Congress, to one of the paper meetings and look those fellows over. You will be able to find what you need in a safety man."

In going out to find a safety man I should like to have some suggestions. I am here because my company has just recently joined the National Safety Council, and they feel that it would not be wrong to ask for at least ten suggestions as to what a safety man should be like. I have to start out looking for the man tomorrow.

CHAIRMAN CHANT: May I give him item 1 of his qualifications? I think that the first qualification for a good safety man or a good personnel man—the two terms are synonymous—is a genuine liking for people and a desire to help them.

MR. SIMPSON: I should like to add No. 2, the ability to get along with people.

H. E. NEWBURY (Ecusta Paper Corp., Pisgah Forest, N. C.): Initiative.

MR. RICHARDSON: He must have the courage of his convictions.

MR. DUTCHER: He must know his job. In other words, he must know what engineering is all about.

CHAIRMAN COOK: Maybe you might clarify that. Just what do you mean by engineering?

MR. DUTCHER: If he is in Illinois, he must know what the state laws are, what it takes to guard a belt, how far up it must be, what the height of a railing or a toeboard must be, whether a sprocket should be guarded fully or partly.

CHAIRMAN COOK: No. 6?

MRS. BREWER: Patience.

CHAIRMAN COOK: No. 7?

MEMBER: Tact.

CHAIRMAN COOK: No. 8?

MEMBER: Thoroughness.

CHAIRMAN COOK: No. 9?

MEMBER: Should be a certified first aider.

CHAIRMAN COOK: No. 10?

MEMBER: He should use good common sense.

CHAIRMAN COOK: There are ten qualifications of a good safety man.

MR. TROOP: He could have ten more.

CHAIRMAN CHANT: I should just like to tell the gentleman to let me know when he has discovered an individual who has all ten of those qualifications and I will raise his ante several dollars and we will bid for him.

MR. SIMPSON: May I make a suggestion to the gentleman? The National Safety Council has among their safe practice pamphlets a pamphlet on the safety man. I think it would do us all good, no matter how many time we have read it, to go back home and read it again.

MR. DUTCHER: You might also apply to the National Safety Council. They have men on their lists.

CHAIRMAN COOK: It seems to me that those are some pretty practical suggestions from a group of men who ought to know, and we are glad that you were directed to the highest authority.

All right, let's pass on to another question.

A First Aid Problem

H. P. HEUBNER (Flintkote Co., New York City): If a plant closes down on Saturday and Sunday and a worker receives an injury, a scratch let's say, or some minor injury, on Friday afternoon and he lives twenty or twenty-five miles from the plant, and the normal procedure in the first aid room is to make a man come back the next day so that the wound or injury may be inspected, should that employee be expected to come back on his own time the following day to see the first aid attendant?

CHAIRMAN COOK: There will be an attendant there on Saturday?

MR. HEUBNER: Yes.

CHAIRMAN COOK: I would suggest that we direct that question to Mrs. Brewer.

MRS. BREWER: Well, I should think

that would all depend upon your plant rules. Twenty or twenty-five miles, of course, is no drive to come back, providing that is your rule. Why didn't he report on Friday?

MR. HEUBNER: He did report on Friday, but he has to come back for re-inspection.

MRS. BREWER: Of course, it all depends upon where your doctor is. If the nurse is taking care of it and she asks him to come back to her, naturally he will have to report to her.

MR. HEUBNER: Can we expect him to travel fifty miles, for example, the next day?

MRS. BREWER: Of course, it all depends upon the type of accident.

MR. HEUBNER: It is a scratch.

MRS. BREWER: I should not think so. I should think that when he left her she would give him instructions.

CHAIRMAN COOK: Would it not depend in part on the extent of the injury? I think your question, Mr. Heubner, has to do with whether or not the man should come back and receive pay for the trip.

MR. HEUBNER: That is part of it, yes.

MR. ROSEBUSH: Mr. Chairman, I think that would depend upon the state law. In Wisconsin you would have to pay him for his travel.

ARTHUR CARLE (The Northwest Paper Co., Cloquet, Minn.): I think the Wagner Act says that if you tell a man to do a certain thing and he does it you must pay him for it. For example, if you want a man to read a magazine article and you tell him to do so, I think you are stuck and you have to pay him if he wants to get technical about it and collect. We have had the question of men taking up first aid. If they had wanted to collect for it they could have, but most of them volunteered.

A Carbon Monoxide Problem

MR. AUGUSTUS: How many here have in operation in their plants gasoline propelled lift trucks? (5)

We have several of these motor trucks in our plant, and in one of our warehouses (it is about 250 feet long and three stories high and 100 feet wide) there is abso-

lutely no ventilation other than through the one door and the elevators on each floor. That gasoline truck is used constantly eight hours a day in those closed rooms. The building was erected that way intentionally to maintain as nearly as possible a constant humidity. As a result, hardly a week passes that two or three men do not come to the first aid room complaining of severe headaches and sometimes they are nauseated. Several times they have had to be sent home for the rest of the day. While I am here this week a test is being made to determine the percentage of carbon monoxide, but I am certain that carbon monoxide is causing the trouble.

Management tells me that we cannot use an electric truck in that department because we cannot get one with a short enough turning radius or one as short as the gasoline truck. They do not want to put a ventilating system in because then they get away from the constant humidity.

Has anybody else had any experience with that problem, and how has he solved it?

CHAIRMAN CHANT: I perhaps cannot answer the question as applying to the exact conditions. I can merely suggest that on submarines they provide a method of air purification for use prior to the use of oxygen. The air in the vessel is sufficient to maintain the life and comfort of the crew for a certain number of hours submerged. At the end of that time the air purifier is put into operation, which merely circulates the air in the vessel. It does not add any because they may be 50 or 100 feet under the surface. It merely purifies it. After another period of four or five or six hours that is no longer sufficient and the oxygen supply has to be introduced into the air. I feel that you could perhaps use some application of that principle.

MR. BERRY: Ernest, we had the same situation that you have. We have more circulation, no doubt than what you describe, but we did have some of that trouble, and we changed that particular truck over to a battery truck, using the same frame and everything else, and we haven't had any trouble since then.

MR. GLEASON: I should like to say to Ernest that I do not know why the fire insurance company has allowed him to use those

gasoline trucks. They would not let us use them in any of our warehouses.

MR. AUGUSTUS: We have the underwriter's guarantees and everything else on it. It has been passed, but just the same these men are being affected.

Safety Meetings

MR. SIMPSON: I think that one of our best means of education is safety meetings. I should like to find out how many meet on company time and how many meet on a voluntary basis on the part of employees?

MR. DUTCHER: Ours meets on a voluntary basis on the part of the employees. We invite them.

MR. SIMPSON: Is it successful?

MR. DUTCHER: We held a meeting just a week ago last Friday and by actual count 92 per cent of our employees were there.

MR. BERRY: We have two committees that function among the employees; that is, our supervisor group and our employee group. We meet on their time, but we try to compensate them by feeding them. We generally have meetings of those committees between twelve and two. We give them a little lunch first and the meeting follows.

MEMBER: Is the question in reference to a general safety meeting of the mill or a department?

MR. SIMPSON: Well, both.

MR. DUTCHER: Our committee meetings are all on company time, and they pay for them; but when it comes to our general mass meetings of all employees, where we bring them all together for presentations of awards and things like that, we invite them to attend and we make it interesting enough that we do not have any trouble whatsoever.

CHAIRMAN COOK: What is next?

Compensation for Lost Time

EARL M. BOWLER (Rhineland Paper Co., Rhineland, Wis.): We had a maintenance worker who was injured. It wasn't a lost-time accident, but a cyst developed on his leg as a result of a strained muscle. The man was entitled to a week's vacation with pay. The physician told him that he would probably be laid up a few days. The man hated to lose any time. He wasn't

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even anxious to take his week's vacation, but we were insisting on that. He figured that he would like to have the operation during the time he was on vacation, and he assumed that he would be back on the job the following Monday morning. He lost a total of two weeks. The question came up (not raised by the man, understand) whether or not in fairness to the man we would back up into the vacation period with the three-day waiting period in order not to affect the man's earning power, inasmuch as he was willing to have the operation on his own time during the vacation period. In reporting the accident to the Industrial Commission for compensation would you be willing to back up into that week? Management wanted the man to have continuous pay, that is, a week's vacation with pay and then compensation starting from Monday morning instead of starting, say, from Thursday morning of the second week.

MR. ROSEBUSH: The Wisconsin state law fully covers that. So far as compensation is concerned, if you paid the man for the week's vacation, if he got his regular pay, the Industrial Commission would allow that to go as compensation, but as for going back the three days, I am sure that you would have to consider that case from the time it started. Even though you paid him those three days of the previous week, they would be considered a part of his lost time.

DAVID P. FAIRCHILD (Berst-Forster-Dixfield, Plattsburg, N. Y.): We have two employees, one of them a young boy from a farm on his first job, the other one an old employee who is riding him most of the time. An argument develops in the plant. They punch out at noontime for lunch. The old employee attacks the younger employee in our parking grounds and knocks him down and he suffers a broken shoulder bone necessitating six weeks' lost time. It is held to be a compensable injury under the New York State Compensation Law. Is that a reportable lost-time accident under the National Safety Council rules?

MR. GLEASON: I think it depends upon the state law. In Pennsylvania it would be. He was on the grounds and it would be considered that he was there in the interest of the employer.

CHAIRMAN COOK: In the National

Safety Contest would that be considered a lost-time accident?

MR. AUGUSTUS: I have not had that same type of case but several times I have had something similar to it and have written to the Council. The reply invariably has been that if the accident is compensable in your state then you must count it in the contest. It depends upon your state law.

CHAIRMAN COOK: Hands up those of you who feel as Mr. Augustus does about it? There you are, with the majority feeling that that is the proper interpretation to put on it.

I have here a question worded somewhat in the form of a narrative. The man says: "We have a gang of 60-inch diameter slasher saws cutting wood into four-foot lengths. The wood comes up from the river on a jack ladder to the saw table. These saws are staggered at four different points on the saw table. In front of these saws we have suspended a heavy wire mesh guard from the roof of the building. The guard hangs low enough so that it is possible for the wood to run under it. We have experienced a number of accidents due to blocks and butts flying back from the saws and going under the mesh guard, and recently had a rather serious accident when one of these butts struck one of our saw operators. It is impossible to lower the mesh guard any farther, as the wood coming from the jack ladder to the saw table must pass under this guard. We have tried various safety schemes, such as suspended chains, but have found that this has created a greater hazard. These 60-inch saws are running at a speed of about 700 revolutions per minute and are cutting about 600 cunits of wood per eleven-hour shift. (A cunit equals 100 cubic feet of solid wood.) We have felt that perhaps the chains carrying the wood up the jack ladder have been overloaded, and we have also endeavored to see that the wood is placed straight on the jackladders, but this is very difficult to regulate as the wood sometimes moves when it strikes the saws. The wood that we are receiving comes in the following lengths: four-foot, eight-foot, ten, twelve, fourteen and sixteen. When a boom of wood arrives at the mill it usually contains the sizes mentioned. We have also conducted an investigation and found that the shape of the saw tooth is apparently a factor that causes the wood to fly; we have been unable to sub-

stantiate if this is a direct cause or not, but from the experience of saw operators we are inclined to believe that this claim has some merits. If any of the mills in the Paper and Pulp Section have developed a guard which will prevent wood from flying back and striking the operators, we certainly would appreciate hearing from them."

CHAIRMAN CHANT: As the question is put I am not altogether clear whether it is the so-called butts that fly back or whether they are also bothered with flying sticks of wood.

CHAIRMAN COOK: It is both.

CHAIRMAN CHANT: The use of a divider behind the center saw has very often been found to improve that condition. By a divider I mean simply a stationary wedge put immediately after the saw. I have seen instances where that worked very well to correct that condition. That won't deal with the short butt that is left outside.

MR. GIBB: That is my question. I sent it in. We have that, Mr. Chant, but we still haven't been able to get away from the trouble. I really think that our saw table is not long enough. The construction of the building will not permit our getting away from the hazard entirely, but if there are any slasher or woodcutting mill operators here, I should like to have their experience.

CHAIRMAN CHANT: What is the pitch of your saw table?

MR. GIBB: It isn't a very severe pitch.

CHAIRMAN CHANT: How far back of your center saw is your hanging shield?

MR. GIBB: Well, our saws are staggered.

CHAIRMAN CHANT: Your center saw is the closest one to the jack ladder?

MR. GIBB: About 11 feet.

CHAIRMAN CHANT: Have you tried moving the shield closer to the saw?

MR. GIBB: We are probably a foot from the first saw. The butts and logs are flying from the back two saws. We haven't sufficient room at the head of the jack ladder for the sawyer to stand if we move it forward, and we cannot go back very much further on account of the distance from the saw. In addition to this hanging shield we have a suspended guard over the saw.

CHAIRMAN CHANT: That is to protect against accidental contact with the saw.

MR. GIBB: We find that is a possible hazard. The small butts sometimes fly and hit it and then they fly into the air.

CHAIRMAN CHANT: What is the position of the saw that the wood strikes first after leaving the jack ladder?

MR. GIBB: The four-foot or the eight-foot, I believe, are the front two. It is the twelve-foot cut that is giving us all the trouble.

CHAIRMAN CHANT: Have you considered rearranging your saws so that the closest saw to the jack ladder is the one that will cut the sixteen-foot log in two? Take that up with your slasher superintendent and see if he does not think there is something in it.

MR. ROSEBUSH: I do not know whether our set-up will help you any but briefly here it is. Our logs come up a bull chain and are guided on the saw by men on each side of the incline. I think that our saw table is inclined probably 20 or 30 per cent. Between these men who are guiding the logs onto the chain which carries them to the saw there is suspended a mesh guard built on a frame. It is just to their right or left as they stand on either side, and that comes down close enough to the saw table to allow the logs to go underneath it. We have the slasher saws such as you described. We have no trouble with any log kicking back beyond that suspended guard.

MR. GIBB: What is your wood cut? We are cutting 600 units and you realize that that is a lot of wood.

MR. ROSEBUSH: I cannot answer that question.

MR. GIBB: We had never had that trouble before, not until we started such a big cut. I think that is probably another factor. We are overloading our jack ladder.

MR. ROSEBUSH: I think that Mr. Chant has given you one very good solution, to put the saw that makes the first cut nearest your guard so that you have your sixteen-foot logs cut first.

MR. GIBB: We will look into that angle.

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CHAIRMAN CHANT: That gets your small blocks farthest away.

CHAIRMAN COOK: Here is a question submitted, I think, by H. G. Bickley, Chairman of the Safety Committee of the West Virginia Pulp and Paper Company, Williamsburg, Pennsylvania. "Removal of chips from chip bin without man having to go down into bin to punch the chips loose. Present method is for man on digester floor to remove as many chips as possible with air lines. Man with life belt on goes down ladder into chip bin and pries chips loose with a long pointed pole. At times he has to leave the safety of the ladder to reach some of the chips. While we have had no serious accident, we are afraid that some time a chip slide may catch him. What to do?"

J. C. QUINLAN (International Paper Co., North Tonawanda, N. Y.): About six years ago such an accident occurred in our chip bins. The men going into the chip bins were supposed to put on safety belts, but in this particular instance the chipper man entered the chip bins without putting on his safety belt, and in knocking down the chips a slide occurred and he started immediately to go into the digester. In the chute that connects with the floor of the chip bins and leads into the digester there happened to be probably a two-inch hole. I do not know why it was cut out of the chute, but it was there and he was fortunate enough to catch two fingers in that hole on his descent to the digester. The cook noticed his fingers ticking out, and realized there was some trouble. Immediately he secured help and they got the man out all right. Since that time we have installed steam jets on either side of the chip bins (We have only two chip bins) and they have corrected the condition. Immediately upon the placing of the chute from the chip bin into the digester, steam is injected into the chip bin and we have no trouble.

MR. GLEASON: There are air vibrators that you can install in your chip bins that will keep your chips moving down. I think also you should have a bar over the center of the opening between the chip bin and the chute. We installed that, and in addition we have, of course, the safety belt, and the others are that no man can go into the chip bin unless the attendant is there. We have a chip bin attendant who changes the conveyor from one bin to another, and he must station himself so that he has access to the safety rope on which the man has the belt.

CHAIRMAN COOK: What is next?

MR. DUTCHER: Mr. Chairman, before you close, going back to that problem of the gas tractors, I certainly would like to get a solution to it, because we have eight gas tractors in our place and we are having all kinds of trouble. I have been trying to think in my own mind that there might possibly be something to put on the end of the muffler that would purify the air to a certain extent so that you would not get the carbon monoxide.

MR. AUGUSTUS: The National Safety Council advised me that there is no satisfactory attachment that you can put on your exhaust that will absorb those gases.

CHAIRMAN COOK: Gentlemen, I think I also express the opinions of the panel members themselves when I say that we greatly appreciate your cooperation in making this a very profitable meeting and it has been largely because of the participation of you people in it.

The meeting is yours, Mr. Chant.

GENERAL CHAIRMAN CHANT: Thank you, Mr. Cook. I am sure we are all very grateful to you for your handling of this panel discussion.

ADJOURNMENT