EMPLOYEE

REPORT ON INVESTIGATION
OF EMPLOYEE COMMENTS
INDUSTRIAL RELATIONS BRANCH

The

Cly

1931

From the control of these studies, the identities of the persons under study have been kept confidential. We look to you to carry on this trust. Please guard the privacy of the persons involved by substituting fictitious names, or code symbols for real names.

~~; \*\* MINUTES OF MEETING OF NOVEMBER 12, 1930
WITH SUPERVISORS OF THE SAFETY AND HEALTH DIVISION

#### Members Present

Eight supervisors - two department chiefs and six section chiefs; all men.

## Material Presented

- 1. Description of the growth of analyzation.
- 2. Description of methods and mechanics of analyzation.
- 3. Outline of facts indicated by subject and substance analysis.
- 4. Possibilities for new studies in material derived from employees' interviews.

The foregoing talk occupied approximately forty minutes. At this time copies of substance analysis on "Safety and Health" were presented to those present. About fifteen or twenty minutes was occupied in general discussion primarily for the purpose of acquainting the group with the contents and method of locating and correlating various topics or comments.

## Impressions

This group was very much interested in the material presented and entered into discussion of various points quite freely. The question of follow-up meetings was discussed and the group seemed to think it desirable. Since the meeting, however, the division chief has decided that they will conduct the next meeting with no representative from this division present.

F. E. BYRON - 6088-4.

FEB:EL

November 17, 1930.

A meeting of all the supervisors in the Safety and Health Division was held Wednesday, November 12, 1930 at 10:30 A.M. in conference room 670 located in Building 38-6.

Hombers Present	Department
	6078-1
	6078-8
	6078-5
	6076-1
	0078-1
	6078-1
	8078-2

Mr. F. W. Syron of the Industrial Development Department 6088-4 gave an interesting talk on the means of obtaining employees' comments, both favorable and unfavorable, from interviews which are conducted by the Industrial Research Division. He also explained the value of these investigations in assisting in solving industrial problems.

From the 10,000 interviews required during 1929, there were selected 38 general subjects of which employees talked about nost. Vabulations revealed that 145 of the employees talked about payments, 105 about placement, 75 thrift and 55 Sefety and Health. This he stated was an indication that a large number of our employees are sefety minded.

No attempt was made by Mr. Dyron to tall us what to do regarding the Mofety and Health Comments received, but stated this information was tabulated and compiled for our use to use as we see fit. A pumphlet containing "inelysis of Comments on Mafety and Health" taken from Operating Branch employees interviews for 1989 was given to such member present.

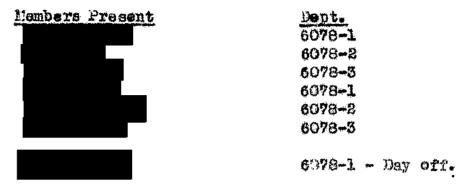
Arrangements have been made to hold another meeting Wednesday November 19, 1930 at 1/120 A.M. In conference room opposite private office 627 located in Building 25-6. Topic of Discussion to be problems on Cafety and Health found in the interviews of employees in the Operating Branch.

Beeting adjournes at 11:45 A.H.



November 26, 1930.

The second supervisor's meeting of the Safety and Health Division was held Sednesday November 19, 1930 at 10:30 A.M. in the conference room opposite private office 627 located in building 55-6.



It was agreed that topics for discussion shall be taken in their order as they appear in the Analysis of Comments on Safety and Health taken from Operating branch interviews, also that our meetings shall be limited to one hour.

Comment No. 1 - Smoke fumes, heat and dust hurt the eyes and lungs.

After a brief discussion, was appointed to investigate the departments from which the largest number of comments were received and report his findings at the next meeting.

Comment No. 2 - High speed to make bogey or piece work rate causes injury or illness - take chances.

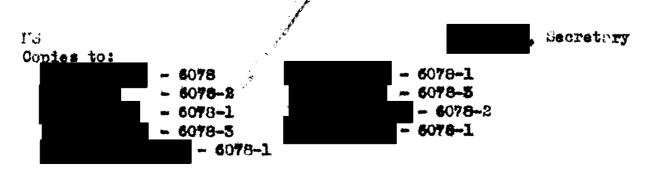
It was brought out that the short hours and general lay-off would have a tendency to make employees speed up but according to the plans of the Staff and line organization no job is keyed up to such an extent that would varrant an employee to be injured. Education of Supervisor is a solution that should solve this problem.

Comment No. 3 - Machines not properly guarded.

mumber of our new machines are guarded by the suppliers, as called for in the specification. Also every effort is being made to guard every machine and moving part where there is an existing hazard.

was appointed to investigate three or four departments from which comments were received to see if employees were justified in making these comments. Result of his investigation to be ready at our next meeting.

Next meeting to be held Wednosday November 26, 1930 at 3:00 P.M. in conference room opposite private office 627 located in Building 35-6.



December 2, 1950.

The third meeting of the Safety and Health Division was hald Mednesday November 26, 1950 at 3:00 P.H.

Hembers Present	Department 6076-1
	6076-2
	6078-3
	6078-1
	6078-1
	6078-3
	6078-2 Day Off

## Report of Investigations Assigned at Last Meeting

Comment No. 1. Smoke, fumes, heat and dust hurt eyes and lungs.
Assigned to Mr. W. G. James.

## Black Snamel Wire Department 6515.

The chief complaint at the time these interviews were conducted was irritation of the eyes and masel liming by the mephths fumes, but since then conditions in Building 72 have been greatly improved. A general ventilating system was installed by means of which fresh sir is introduced into the room continuously. At present the engineers are designing an entirely new ventilating system for this building, which will introduce fresh air along the center niels about fifteen feet above the floor, and will withdraw the old air by meens of duets along the base of the well. The rate of air changes will be from 15 to 18 times an hour.

#### Foundry Department 5350.

The smoke that at one time came from the ladle heater has been matinfactorily taken care of. The other complaint was due to the smoke that came from the arc furnace and the forges. In investigation is being made by the Manufacturing Development Branch 6430 to determine whether exhausts or other ventilating equipment for the arc furnace and forges is needed.

## Paper Condenser Department 6519.

Investigation disclosed that the dust from the scratch brushes her been eliminated since the interviews were made, by the installation of exhausts. The section chief in charge of the sold-ring operation stated that occasionally a new girl complains of neuses due to solder make. Then such a complaint is received, it is made clear to the girl that no health hazard exists. All girls are well satisfied after a few days on the job.

#### Relay Coil Windian Department 63%.

Occasionally complaints of solder macks are received from the girls in this department. Investigation shows that there is no existing health hapard, since the make is entirely resin make and is not exceptionally heavy. Adequate ventilation under the supervision of the foremen and monitor will be sufficient to relieve the condition.

## Lauding Coil Assembly Department 6521.

Comments have been received regarding the rosin amoke that emerges from the overs in Building 28. To aliminate this sucke, overs have been equipped with a canvas anchesers. Employees working at the evens complain that they connot use the enclosure because the high concentration of smoke incide is sufficienting.

Suginters are investigating the condition in order to devise a means of exhausting the sucke satisfactorily. They will have the present exhaust system cleaned and if it proves to be inedequate after cleaning, they will design a system having a larger capacity.

Comment No. 5. Machines not properly energiad.
Assigned to

## Milling Machine Department 6354.

The Ascident Frevention Decartment and the foremen of this department ere of the opinion that mechines in general in this department are adequately guarded.

#### Partial Assembly Department 6546.

There are several benches of Avey drill presses in this department on which the belts are not covered. The machines were recently installed but the belts will be guarded shortly as this is a standard practice covered in M.D.I. 29.16 204.4. Aside from this feature the rost of the description t is well guarded.

## Departments 0335, 5534 and 6546 also investigated.

It is the opinion of all that machines in those departments are guarded properly.

To feel that since these comments were made considerable work has been done, especially during the post year to provide proper guarding for all machines. Employees doubtless were justified in making these consents at that time, however most of the besards have since been corrected.

We also feel that a large percentage of these comments can be minimized because of the lack of understanding by the employed of what proper guarding consists.

## Investigation of New Comments

Comment No. 4. Smoke and fumes causes makes and illness. to report on the following departments.

Dope riment	Men	Homen
6715	45	) <del>****</del>
6519	5	11
6526	***	15
6745	9	7
6350	14	-

#### Comment No. 5. Oily and wet floors dangerous.

to report conditions in the following

departments:	,	
Deve Smeat	Ku	078-07
6530	4	
4357		***
6389	4	•
7261	4	**

#### Comment No. 6. Closk congustion dangerous.

Mr. I. F. Le Core to investigate the following denortments:

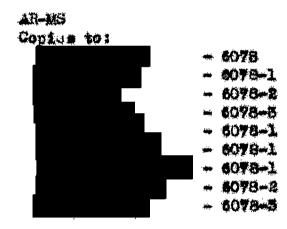
Dopartment	Men	ome n
651.8	8	13
6313	5	1
6338	Ö	***

Comment No. 7. Imroper light causes eyestrain.

will report on the following departments:

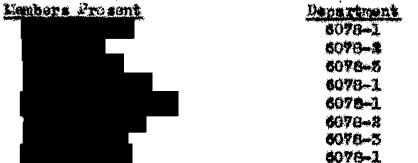
Department	<u> Mon</u>	Ones
6311	-	5
6312	6	4
6515	24	***
6819	1	9
6526	2 <b>46</b> 0.	17
6528	<b>₩</b>	11
6356	7	•





Jay Ott

The fourth meeting of the Safety and Health Division was held Nedmonday December 5, 1930 at 5:00 P.M.



Report of investigations assigned last menting.

Comment No. 4. Smoke and fumes cause aches and illness.

#### Departments 6215, 6319, 6326 and 8350.

Conditions in these departments were reported in minutes of Movember 25, 1970.

## Plating Department 6545.

Further investigation of exhaust system in this department will be made and reported next meeting. The matter will also be discussed with the medical division.

Comment No. 5. Gily and Cat Floors.

## Departments 4355 and 4357.

It is agreed that the complaint is justified. A study to provide a remedy for the condition has been going on for some time. The Safety and Health Division has a sample of a composition flooring called. "Mastipave" and will suggest to the Factory Planning Engineers that a sample strip be installed in one of the Screw Machine Departments.

## Pupol Press Department No. 1. 6870.

Conditions in this department will be reported at our next meating.

## Insulating and Twisting Department 7381.

Complaint investigated and it was felt that although the complaint was justified in the year of 1988, conditions have since been adjusted.

Comment No. 6. Clock Congestion. Descerous.

## Departments 5512, 5518, and 5538.

e feel that the question of running and erowding at the clocks is a problem for the monitor and supervisor. This matter received publicity in the October issue of the Accident Bulletin and will receive more attention in the future issues whenever required.

Communt No. V. Improper light onuses ave Aredn. Scottent Hanne.

## arbancibur out Assorbly beneficient 6711.

At the time these complaints were made, the amployees were located in Building 59-4. The descriptions has also been moved to Building 50-4-8. The complaint which was could at the time time this department was located in deliberal thin the time the time the new location and as a result the illustration provided one lopewed. The enfoty and Health Division believe that the illustration at present is adopted.

## Bisk Glutch Assembly Department 6712.

We faul the complaints are justified. The factory Plancing engineers have informed up the within a very abort time Glassical fictories will be rade after the new lighting system is installed to determine whether it will be applicatory.

Line the complaints were made Clemateri firtures have been provided. It is the opinion of all concerned that they are metiofactory.

#### dance Condensor Constituent 6519.

This department is located in Dections 27 and 26-4. Investigation made by the Defety and Health Division indicates that the illustration is estimated in both sections.

It is the opinion of the estaty and finalth division that the illumination is educate. I many therefore investigation will be reduce to determine actual conditions and if necessary, as effect will be reduce to here. The Cochainel Transh provide better illumination. The present plane are to install Classical fixtures within the rest two years.

Cable Forming Swortmant 6726. A report will be made at the most meeting.

## Invostication of New Companies

Convert St. D. Brown Pools Sangarous.

to report conditions in the following

最後有許なない。

Sep-rirent	<u>. sn</u>	O WIL
62.87	14	3900
	2	3003

## somet in. 9. Amore of follow markers last to injuries.

to record on the fillinging day expenses

Jane Beaut		Ox. On
627.8	<b>Ž</b>	1
6338	1	O
E.i.a.b	1	C

Commont No. 10. Night hours undermine health, cannot elsep days, stomach upset. to report on the following departments:

Department.	<u> </u>	i Vionen
5387	with:	14
6753	4	1.
6561	. 2	7
6397	10	1

Comment No. 11. System and masse of lifting or conveying work dangerous.

conditions in following departments:

Dapartment 6500	<u> </u>	Yoman.
6860	5	***
6321	7	<del>100</del>
6888	3	***
4557	25	***

Corment No. 15. Ventilation and Temperature Cause Illness.

to report on conditions in the following departments:

Department	Mon	HOMES 12
6820	21	A CONTRACTOR OF THE PARTY OF TH
6515	3.0	**
6818	9	1
6874	úceá	•
6321	2.5	<b>Abs</b>
6386	447	35
6755	4	20
5350	13	2
7585	17	***
7596	10	**
7598	18	***

- 6078 - 6078-1 - 6078-3 - 6078-1 - 6078-1 - 6078-1 - 6078-2 - 6078-3 Bearetery.

December 16, 1930.

The fifth meeting of the Safety and Health Division was held Secnesday, December 18, 1930.



### REPORT OF INVESTIGATIONS ASSIGNED AT LAST RESTING

Comment No. 5. Oily and wet floors dengerous.
Assigned to

Punch Press No. 1 Department 5339.

Investigation made by the Cefety and Health Division indicates there is no elipping hazard due to oily or wet floors in this department.

#### Cable Forming Department 6356.

The investigation is not yet completed, A complete report will be made at the next meating.

Comment No. 8. Improper Tools dengerous.

## Leading Coil Assembly Department 5581.

Although the commant is rather obscure as to any specific tools, we have discussed this matter with the formen of the department affected and have so far been unable to discover any tool that may be classed as dangerous.

Hand Screw Machine Department \$336.

roramen of this department from which these comments were made was interviewed. Investigation disclosed that as a number of the tools used in hand serow machine operations are in a some dangerous, it is felt that since practically the entire personnel of his organization is of a highly experienced and specialized type, there is no particular cause for concern about the samplaint.

Comment No. 9. Prenks of fellow workers lead to injury.

These complaints originated in departments 6332, 5338 and 6339. Investigation revealed that they resulted from the following practices.

- 1. Amployees throwing piece parts.
- 2. Tipping fire pails filled with water.
- 5. Capricious tickling.

Publicity is being given this form of herseplay from time to time in the Accident Bulletin. Hawthorne Microphone and Louters.

Comment No. 10. Night Hours undermine health - cannot alsop days, stoucch upset. Assigned to



Investigation of the Industrial Health literature shows very little information concerning the effect of night work on health.

The magazine "Rusiness Wook" reports that the Cotton Tentile Institute has decided to suspend night work in all associated factories beginning not later than March 1, 1951; but the excisions treat only the economic aspect of the situation. Apparently the move was not made out of consideration for the health of the workers.

The following taken from "Osaha Feinichi", Merch 27, 1930 via the Industrial and Labour Information" May 26, 1930, may be of interest:

Study of 1000 women, age 14 to 00, employed in cotton spinning factories in Japon and living in dermitories attached to the factories. Study covered five years ending 1050, during which night work was abolished.

Little variation was noted in the sickness reto.

Attendance rate - 92 per cent before abolition of night work.

96 per cent after abolition of night work.

Improvement in apposite, following abolition of night work shown by 10 per cent increase per capita in consumption of rice.

Fatigue symptoms less in evidence.

Maximum loss of weight during a week of night shifts was 5.9 kg. Maximum loss of weight during a week of afternoon shifts ( 2 P.2).

to 11 P.M.) wes 1.5 kg.

At the same time the number of persons who gained in veight on well as the actual enount gained during a week of morning chifts ( 5 d. l. to 8 P.M.) increased considerably.

Comment No. 11. System and means of lifting or conveying work dengerous.

A further investigation being made. Complete report will be made at next meeting.

Comment No. 15. Ventilation and Temperature causes illness.
Assigned to

0300

During the winter of 1929 - 1950, stock was unloaded through the windows of 44-1. Complaint adjusted by arrenging to unload stock at might when no one was working in the section.

451.5

Round shop section. Draft from bridge, the probably sauce of completate. Bridge will seem be slowed except for storego purposes, which should take care of completate.

6213

See minutes of the November 26 meeting.

5317

Complete study made of ventilation on main floor and on belcony. Conditions were not estimisatory on the belcony so all suployees were noved to the main floor.

652] See minutes of the November 26 meetings

See minutes of the November 26 meeting.

6355

During 1929 the hot galvenizing operation was sorking in the machine and galvenizing section. The exhaust oven the galvenizing tanks draw such a large volume of air from the room that a strong draft was orested mear the door leading into the iron foundry. Orill press one retors working in front of the door wore particularly effected. When the hot galvenizing job was shut down, the trouble was automatically corrected.

V533

Frequent use of the large kinnear doors at the south and of Bullding 62-1 has occased the whole south half of the building to be unusually cold. Plane are now being made to install a vestibule for the most frequently used door. Traffic is being routed in such a way that the use of large kinnear doors will be reduced to a minimum.

9596 and 9598

are located at 26th Street. Ventilation and temperature satisfactory.

#### Investigation of New Comments

	Investigation of New Comments							
Commant	No.	12.	· ·	Stock, to	ueke. otc.,	In	viole.	,
	<b>∂e</b> )	oa <b>rt</b> n	e <b>n</b> ;	6511 6319 6522 6565 6546 6571		3 7 4 10 10 10	Tonen.	28 10 5 5 29 4
Commont	Ħo,	14.		rend fail	zeonana Conco	ata:	à.	
	90	pa <b>rt</b> m	e <b>nt</b>	6511 6515 6511 6511 6514	Yen	0 64 0 4	domen.	60840
Comment	ko.	15.		ing out of med to	Plant.	ļ,		
	Da	perio		63 <b>36</b> there e	Ven Lagle someon		<b>Comess</b>	2
Comment	No.	16		operation	makan manika	of	body sor	•
	100	per ka		1311 1412 1413	Fon A	l	→ <b>09869</b>	2 2 1

# UNIVERSITY OF WISCONSIN - MILWAUKEE

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4525 .

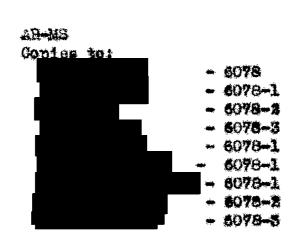
4515

Deportment	6327	Een	2	Comen	5
	6328		1		0
	6389		2		7
	6546		7		9
	6549		7		6
	63 <b>56</b>		1		6
	6391		0		5

Comment No. 17. Overtime undermines health, rains eyes. Assigned to

Department 6313 Fen 2 Vomen 0 7585 S 0

All other departments have single comments.



January 8, 1951.

The sixth meeting of the defety and Health Division was held dednesday December 17, 1980.



REPORT OF INVESTIGATIONS ABOUNDED LAND FARTING.

Commant No. 7 - Improper Light causes overtrain Assigned to

## Cable Forming Department 9356.

An investigation showed that the stendard lighting was blocked by the racks which hold the reels of cable used by the cable formers, so that the light was entirely inadequate for this type of work. Evan in the location where the cable is suspended from the ceiling the illumination is not satisfactory.

Champo notice 13-2 on order No. X-13403, has been issued by the factory Planning Engineers for the installation of special lights for this work. This order was forwarded to the Planning Department on January 6, 1931.

The order is scheduled to be released by the analyzers on January 14, 1931.

Comment No. 11 - System and masse of lifting or conveying dangerous.

Assigned to

#### Switchboard Ironwork Department 6300.

The complaints were made concerning the headling of trucks. A further report will be made at our next meeting.

#### Loading Coil Assembly Department 6321.

Go do not believe after observation that there is any undue hazard in connection with pouring hot emphalt in this department. Firther observation was rade to determine whether the truck drivers are handling their trucks in a manner dangerous to pedestrians. On the occasion of our visit the truck drivers seemed to be careful in handling their trucks.

#### Punch Press Department 6558.

Operators have at all times been instructed to use the standard hooks provided for this purpose. There is no means of determining what was done at the time these interviews were made. (The interviews indicate that wire was used instead of hooks.)

## Missellaneous Wiring Department 6507.

Complaints were made concerning the lifting of heavy units. The Safety and H alth Division after observing the lifting of the hoaviest type of units (weight 150 pounds) which are lifted by two men, believe there is no hazard.

Complaint was made concerning tools too heavy for one man to lift. The heaviest tool that is now used in this department weighs two pounds. There is no heard.

Corment No. 12 - Pans, Stock, Trucks, etc., in aleles.

Subscriber Sat Assembly Department 6311, Paper Condensor Department 6519, Fuse and Gable Terminal Assembly Department 6522, Funch Press Department 6355, Fartial Assembly Department 6346, Theater Squipment Basembly Department 6571.

Although there probably was justification for a complaint concerning congested aisles in the year of 1929, there is no occasion for complaints under the present working conditions. No action is deemed necessary other than that to observe present conditions which were found satisfactory.

Comment No. 14 - Looker end Washroom Concestion Dangarous.

Subscriber Set Assembly Department 6311, Snamel Mire Department 6815. Conditions were found to be satisfactory.

Comment No. 15 - Running Out of Plant Dengarous.

Ol U. Lejonstoin investigated the main exits from bridges, main aisles, and courtways in the Plant and found the conditions to be as stated in comments made by employees. Several of the supervisors and gatemen were interviewed but no favorable solution for preventing employees running when leaving the plant was forthcoming.

A suggestion was made that painted white lines in center of cisies, be tried out to allow two way traffic. This suggestion was discussed with the supervisors and gatemen, and they felt that nothing but an iron railing would keep an orderly condition in our sistes. Safety and Health Division feel this is a problem of monitors and supervision. Publicity has been devoted to this and will be continued to be given in Accident Bulletin. Microphone and Posters.

Comment No. 16 - Work operation water parts of Body Core.

Gaven of the thirteen departments from which most of the complaints came were assembly departments, in which the repeated use of tools such as an automatic screw driver or a vair of pliers is liable to cause a blister on the hand of a person not accustomed to the work. The constant use of a certain set of muscles may cause those muscles to become stiff and sore until they are adepted to the work. Relief can be obtained in such cases if the employee will report to the hospital for treatment.

Loading Coil Assembly Department 6521.

Has a number of jobs requiring considerable heavy lifting, which may occasionally cause some muscle strain. Such cases can elso be relieved by hospital treatment plus adaptation to the work.

Socol and Covering Department 4527.

This is similar to the assembly departments, in that there are small tools and standardized operations which may cause some muscles or blisters occasionally.

Loading Coil Winding Department 6225.

Coil Finishing Department 6323.

Cable Forming Department 9356.

Insulating and Twisting Department 7281.

All are productive of similar complaints in that they have operations which require the operator to handle or pull out lengths of wire. This may cause a fissure in the skin or make the hands or arm muscles sore.

Any operator who experiences such trouble should report at once to the hospital for treatment. New employees to be given special consideration.

Comment No. 17 - Overtine undermines health, ruins eyes.

Assigned to

Unusually long hours of work are certain to produce excessive fatigue if continued over a long period. According to Hope's "Industrial Hygiene and Hedicine" if a worker the is accustomed to working eight hours a day is required to work ten hours, he will consciously or unconsciously reduce his working speed in an effort to corponate for the increased hours. Eventually, if he works two or three hours evertime, every second or third day, he will work for a whole week at the slower rate. Long hours of work which requires exact focusing of the eyes may produce fatigue of the musculature of the eye and if prolonged excessively may result in the occurrence of space of accompodation.

The worst effects of overtime are seen in occupations which have a seasonal fluctuation. The worker who is overtimed by excessive work most readily falls a victim to anxiety when work fetls.

when overtime is an absolute mecessity, it should be governed by the following considerations:

- 1. It should continue for as short a period as possible. If it continues for several months the slower rhythm of work will be so thoroughly established that it will be difficult to return to a normal rhythm. Furthermore outsilative fatigue will be greater and there will be a marked increase in both the sickness and accident rates.
- 3. It is better to work one hour overtime every day then to work two hours every other day, during the period when overtime is required. It is more difficult for the operator to adjust himself to irregular overtime and the nervous strain and consequent fetigue is greater.
- 5. Especial care should be taken in requiring overtime on occupations such as fine assembling, adjusting or inspecting, which require exact eye focusing.

INVESTIGATION OF MON COMMENCES

Comment No. 18 - Locker and Washroom location, space and equipment an assident and health hazard.

Nen 85 Nomes 15
Assigned to - 6078-1.

6215	Jameled Wire Department	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Omen 1
6321	Loading Goil Assembly Department	4	1000
6353	Drilling Department	3	1
6334	Milling Machine Department	4	·
6336	Hand Screw Machin- Department	18	-
0337	Automatic Borow Machine Department	4	***
0379	Funch Press Department No. 1	5	1000.
6379	Lamp Department	4	1947
7381	Insulating and Twisting Department	5	1
7563	Lond Pross Department	9	486

## Cormont No. 10 - Oil causes sores, affects health.

Man 25		Comen
issigned	to	

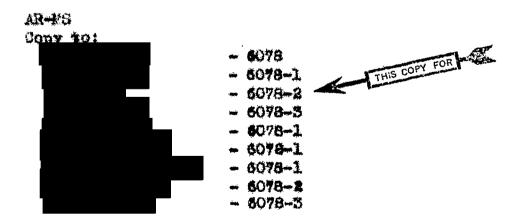
6325	Loading Coil Winding Department	2	mir
6333	Urilling Department	2	***
6334	Milling Machine Department	2	•
6336	Hand Borev Machine Department	11	***
6337	, Automatic Screw Machine Department	7	***
6358	Punch Press Department No. 2	2	***

## Comment No. 20 - Hairmets and headbands unsatisfactory.

# Assigned to

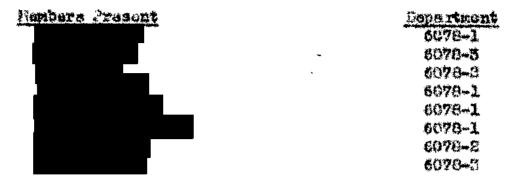
6326	Relay Coil Winding Department	<u>nemon</u>
6358	Tapping Department	4
6353	Drilling Department	24
6394	Elagnet Vire Department	4.

- Decratery.



January SR, 1951.

The moventh meeting of the Safety & Moelth Sivision was held January 6, 1931.



MANUAL OF THE ASSOCIATION: ASSISTS OF LAST PARTITION.

Commont No. 18 - Locker and we shrow location; space and equipment an accident and health hazard.

13 Non - 15 Nomen. Assigned to

Depertments 6213, 6621, 6333, 6534, 6836, 6237, 6339, 6370, 7231, 7367.

comployees referred to shop lockers as crowded and too close together. The contrast have been installed according to standard layouts. There are sufficient lockers to take cere of all employees in normal production periods.

If greater consideration were given to educating employees to be more careful in closing locker doors, the bumping hexards rould be reduced to a minimum.

Improper storage of clothes sticks in upper shop lockers has been the cause of a few complaints. Ofter an employee resource his clothing from the clothes stick he scretimes lesse the stick against the side of the locker instead of hanging it on the book. Then the locker door is opened the stick falls out, striking the apployee on the head.

Cur observation indicates that the proper storage of these aticks can be most effectively brought about by education of the employee. Sublicity has been given this matter on several consions and will be repeated from time to time in the future.

Comment No. 19 - Dil causes sores, affects health.

Workers who must have their hands covered with oil most of the time. Since the trouble is apparently caused by infectious beginned which are collected after the oil has been refined, a plan was considered for disinfecting all dutting alls by adding a small arount of sresplic and to them. In april, 1920, it was learned by the enfety and Wealth Division that, although creating acid had been in the ators com for several months, no authorization for its use had ever been issued. This fact was called to the attention of the Engineer of Lamafacture and in September 1970, the orders were issued for disinfecting all outting oils. The disinfected oils were put on trial in the Sand Jores Machine Reportment 6726, on However 1, 1920, and a few days later all departments using outting oils were furnished with the distinfected oils. The foreign of these departments have stated that they are

entirely entiried with the disinfected oil and feel that it will be of material help in reducing the incidence of oil infections.

Comment No. 20 - Hairnets and Headbands unsatisfactory.
50 Toman. Assigned to

The complaints generally indicated that heimets and headhands were not conducted to good appearance.

## Relay Coil Winding Department 6386.

Coil winding machines travel approximately 6800 R.P.L. and it is possible for an operator to less over and place her hand very close to the revolving motor shaft or relay speed head.

The necessity of wearing heirnets effectively is deconstrated by the fact that in November 1970 a coil winder of 6006 hod her heir caught in a revolving motor shaft, causing her head to be pulled downward striking the machine with considerable force. The suffered a lacerated wound left ald, of forebead and lost six days.

## Zapping Capartment 6572.

Marolving machines of different types are operated in this department. The foresten of this department is in second with us that famely ampleyees should make bairness while operating machiness.

## Drilling Jenertrent 680%.

The foresen is also in accord with us that it is essential that female operators wear hairness while operating drill presses.

## Fagnut Iro Department 6594.

Headbands. In the latter part of 1989 headbands were discontinued in lieu of heimets for verious remons as listed below:

- Headbands strutch losing their effectiveness, whereas kalraute are hold in place with pins.
- S. They do not hold the loose ends of heir, permitting them to heng over in such a measur that in some instances bands contribute to the hexard instead of offering protection.
- 2. The radical change in women's heir dress during the past several years has rendered headbands practically ineffective in most instances.
- 4. The operators themselves prefer hairness to bands because the former do not flatten or bind the heir.
- 5. Heirnets present a better appearance, being lose conspicuous.
- G. Hairness cost opproximately 2.4 cents spicos whereas hendbands cost 19 cents each.

In 1925 the Sefecy and Health Division originates a study to determine the advisability of female employees wearing hairness when working on power driven equipment.

The Gafaty and Health Division is now attempting to neoure a more substantial heir severing for operators.

It was concluded that hairmets are a very essential part of our safety program, and as such as would in dat on women vearing the hairmets on all occupations where it was considered unsafe not to rose than.

Comment No. 21 - Heve too heavy lifting. 84 Non 35 The Ameliand to

#### Londing Coil Assembly Department 6321.

There were two compleints made by men and one by a roman.

The weight any individual is allowed to lift in this department is approximately 25 pounds. All employees have been instructed to request help shan lifting hervior objects. Somen employees have no occasion to lift more than five pounds. Suring 1950 a number of locaing coil cases were handled with stevedore trucks. This work is now practically all being done by electric trucks.

### Fuss and Cable Forminel Assembly Department 6522.

Two complaints were made by men and one by a women.

The cable terminal job from which these complaints were made her been transferred to Baltimore.

### Roceiver and Transmitter Asserbly Department + 52%.

Three complaints were made by women and one by a man.

During 1929 it was customary for women amployees to lift trays of transmitter and receiver appearatus seighing approximately 25 pounds from stacks on the floor and place them on a beach. Lines that time however, trays and equipment have been changed to a new type. Boys are new placing work on the beaches and else removing it. At the present time women amployees have no occasion to lift more than 20 pounds.

## Coll Finishing Department 6300.

There were four complaints made by woman employees.

These complaints included the corrying of work, getting no service and work too heavy to lift. During 1920 there were trops of step-by-step relay coils and sequence switch coils weighing approximately 35 pounds which were handled by women. Since these comments were made this departments has provided male help to handle natural weighing more than 25 pounds. Thenever complaints concerning lifting are made by women, the matter is immediately taken up and adjusted.

#### Eilling Eschine Repartment 6774.

laterial of all types is delivered in various sized containers to this department for machine operations. It is necessary at times for employees to lift pass of material weight a speroximately (b) pounds from the floor to the machine stock table. Operators have been instructed to request help when they want it.

## Punch Frees Department No. 1. 6,39.

Esterial is delivered in various sized containers. It is nucessary for

employees to lift pane of material soldbing approximately 85 pounds from the floor to the machine stock table. All employees are instructed to request help when necessary. One comment was made regarding the necessity of employees carrying hunty tools from the tool crib to punch prisacs due to a shortage of tool trucks in this department. The forumen has agreed to determine whether additional tool trucks are needed.

#### Plating Department 0347.

Four complaints were unde, all by women.

Investigation revealed that there are only too operations in this department concerning which complaints could be made regarding lifting. One is the spring soldering job on which all lifting at the present time is taken care of by men. The other is the racking and unracking operations where some operators wire and unrice parts before and after plating operations. They have been instructed not to lift rore than two racks at a time, the maximum weight of which are about 10 pounds.

#### Insulating Twisting Department 7081.

Muro wors six complaints all made by women.

There has been practically no change in the method of lifting in this department since 1930. The women paper insulating mechine operators lift a maximum pulght of approximately 30 pounds. It is necessary for them to lift coils of wire from a stock beach which is about waist high end place them over an arbor on the insulating machine. This is done approximately 60 times a day. Operators for these machines are uspecially selected by the Employment and Medical Departments with consideration as to their physical qualifications for this work.

## Mrs Tawing Department 6885.

Complaints were made by four men.

There has been practically no change in method of loading and unloading wire drawing machines in this department since 1929. All species of sire weighing more than five pounds are rolled, tipped, or slid into place saking it unnecessary for an employee to apply the direct lifting. The maximum weight a men lifts in this department is approximately 170 pounds. Samployees have been instructed to request help when it is necessary for them to lift more than 100 pounds. The Employment and Modical Organization select only men who have physical qualifications which suits them for this work.

Vocament No. 25 - Chances of Surn on Job. 24 Man. 10 Comen.

## Loading Goil Assembly Capartment 6581.

The comments were rade du. to spleshing hazards caused when loading resin compound in tanks. The method of loading compound tanks has been changed from hand to mechanical methods. This climinates the hazard caused by hot solution aplashing.

### Melay Coil Sinding Department 5386.

colder from hazards. Hecently these from vere equipped with a guard and drip pan. This protects the operators from burns.

#### Japanning Department 0345.

Two compaints were made concerning hot trucks.

During 1929 it was necessary at times owing to high production activities to take hot Japan trucks from the evens and place them out in the open room until sufficiently sool for handling.

#### Aire Drawing Department 2315.

There were tre complaints made that compound burns the hands thru the convex gloves which are worn on this job.

The compound used on the wire drawing machines is heated to approximately 180 degrees and may be alightly higher on warm summer days. Exployees are supplied with two pairs of gloves per day; a new pair is given them in the morning and a pair ismediately after lunch. These corrects were evidently made by employees who falled to ask for gloves when their's were sorn out. Tests made by the Engineer of Lamifacture organization indicate that empound heated to 180 degrees will not cause burns, provided the gloves are whole.

Comment No. 23 - Lack of working space dangerous.
47 Hon 25 Komen. Assigned to 1

## Switchboard Ironwork Department 6500 (6358).

There were four complaints made due to iron lying all around.

Ascent investigation revealed that although the entire department is somewhat congested there is no tripping heart. Earing 1929 house-keeping methods were not as regidly enforced as at the present time.

#### Departments 6313, 6328, 6728, 6327, 6346, 6350 and 6357.

There were 26 commonts regarding the lack of working space in these departments. Recent investigation of these departments revealed that no conception exists at the present time.

Comment No. 24 - Close work - causes eyestrain.

#### Departments 6313, 6320, 6348, 6349 and 6379.

It is recognized that there are certain operations which are very delicate and require close concentration. Such operations include assembly and adjusting work, in which fine parts must be fitted together and adjusted with a hair breadth precision; wiring jobs, in which fine color distinctions must be rade and blue prints must be followed accuratedly; and lamp manufacture, where pieces of hair-like wire must be fitted into lamps. Such operations always provide rather strenuous exercise for a delicate muscles of the eye, and may produce systemin. In fact, many people with normal vision are unable to do this type of work correctably, elthough the rejority suffer no ill offects and some ray experience discorfort only temporarily. It therefore is impossible to select unerringly the type of person who can do work involving constant

and atrenuous use of the eye. It is easy to pick out of a group of normally besithy men the type of men whose mucoular etructure is such that he is able to do heavy foundry work, but it is difficult to detect individual differences in the delicate medicales of several pairs of eyes.

It is therefore felt that the personnel organizations, working with the hospital, should consider cases of continued eyestrain, obviously due to close work, as cligible for transfer before serious permanent damage is done to the eyes of the individual concerned. This is in accordance with the policy of the Company to provide work for which the employee is physically suited.

Comment No. 23 - Type or Condition of Floor an Accident or Health Heart.

53 Nam. 36 Nomes.

This comment has been fully covered in Comment No. 5.

Compant No. 29 - Job is Unhanithy, dangurous.
69 Man 15 Nomen. Assigned to

## anamaled dire Department Chib.

The naphtha funce arising from the solvent of the black ensuel are irritating to the eyes and nessl lining of the operators. This condition is being remoded by the installation of a complete ventilating system, as outlined in the minutes of the November 26th meeting.

#### Londing Coil Assembly Department 6321.

Cleaning of the exhaust system for the overs in Building 38, mentioned in the report on Comment No. 1., has so improved its officiency that no enlargement of the system will be necessary.

The ancident hexards in Department 6321 are discussed under Cornent Nos. 21, 22, and 23.

#### Lording Coil Minding and Minishing Department 5325.

There is no reason for supposing that loading noil winding is either an unbushthful or a hazardous operation. The materials are clean, and there are no injurious funes. There was formarly some danger of a section of the winding machine flying out and striking the operator, but this has been taken care of by ro-designing the machine.

## Drilling Department 6500.

The outting oils which are used as inbrigants in drilling operations may produce a dermatitie on the hands and arms of the operation. This complaint should be reduced considerably since the introduction of disinfluents into the outting oils as described in the report of the investigation of comment Ko. 19.

#### Japanning Department 6345.

All operations in the Japanning Department are well exhousted so that it is practically impossible to detect any odor of leaguer or japan in the

apraying room. The solvents thick are used in the japan and the languous contrin no beauti or other hazardous substances.

#### vire Braving Congressed Hills.

The fact that a cooling solution is used in all vire drawing operations tends to increase somehat the relative humidity in the wire drawing room. There is also a considerable amount of comer dust in the companient. However, the chrosphere is not sufficiently deep to be considered bazerious and copper dust in not belt ved to be a surrow of occupational disapes. The componed wiring room in the beareast is assembly deep and is therefore a possible become. The operator who works in this room is given a physical exertination each month by the Feddard Division in order to be certain that he is suffering no ill effects from this job.

#### Soodworking Vonertment 9396.

This department is located in one of the rost modern buildings in the Corks. It is call lighted and all medicus are admissible that there is no costbility of dust accumulating in the excophers.

Correct No. 20 - Jos Materials Inferious and Unhabitar.

## initiple Bank Asseria, Copertrant 1916.

A coreful survey of this department has shown that there is no metorial in the department which could be considered in any may inhealthy or injurious.

#### Halay Goil Abading Department 6526.

Anch operator in this department is expected to a certain extent to the empke from resin core solder. However, the concentration of make is very small one the type of make is such that it is not injurious to the besith.

#### Spool and Grania, Perceptant F727.

The cament which is used for fastening machers to the special in this deportment has been a source of numerous complicate because of the objectionable character of the func produced by evaporation of the solvent. Arren aments have been made with the supplier of this can at an provide a satisfactory non-hazardous solvent. Another can at which has recently been introduced in this department has enused similar complaints, but it is expected these will be taken age of by the installation of an adequate extens system.

## Lunch Frees Department No. 1, 6759.

The possibility of outting oils sensing dormatitis in this departy of a continuous fraction of the production of a disinfeetast into the sutting oils. The tunkling operations are productive of considerable dust which is resognized as a health henced. ... urangemust be also below that the Feetary classical are selected to provide anitable exhausts and dust collectors for the trabiling berrols and eifter. Until this provision is made all the operators working on this job are being exemined once a month by the hespital.

#### Plating Deportment 0743.

Since the complaints one from woman operators it is probable that the lecquoring operation is the source of the complaints, although the lacquer is approved on the parts while they are in a book they are insectionly placed on an open steem table to dry. During the drying process all the solvents are evaporated into the room and produce a rether strong and possibly assessing oder. The lacety and Health Minister expects to have air tests made in this location in the near future in order to determine whether the concentration of report is conficuntly high to require the installation of an achieve evaporation the drying process.

## Partial Associate Coperations (146.

at the time these complaints were made the operation of soldering bandest inserts produced a resin prote which erose directly into the operator's face in objectionable quantities. These that the first a solder has mathed charaby a one flowe is played directly on the solder has been introduced. This has effectively eliminated the objectionable more so that conditions are now retisfactory.

#### Sable Forming Law repeat 6796.

There is no operation connected with media forming which uses metarias which vould be considered uphability. The notice outle forming processor exectines range clisters up the hands of the operators. Is world serious office a from this the processor outlines upday the major through he. It should be fallowed.

## Sorue and Can Apparations 4759.

The sproy operations in the legs open sproy booths have been somewhat objectionable since the respirator which was being used did not adequately filter out the paint funes. According a respirator with a character filter has been supplied to those now. They have indicated that they are entirely satisfied late, this equipment since it removes all traces of point funes from the air which the operator inhales.

### Thouser southwest sensebly Courtment DEVI.

The use of benzino in closning the transference in this department frequently occase a fermitiate on the bonds and arms of the operators. Instruction by the foremen as to the proper rethod of doing this work together with an escaped change of work for the aperators has explotedly eliminated this trackle. Somet the sold ring operations in this department its productive of considerable make and force. The barard connected tit this elimation has been eliminated by the installation of an adequate exhaust system.

## Insulating and Intoting Department 7191.

There is no material used in this department which could be considered unhealthy or injurious to the operator.

#### Stranding Department 7388.

There is no meterial used in this department which could be considered unhabitary or injurious to the operator.

## hirs rawing Department MAS.

Neither the copper dust nor the wire drawing solutions are to be considered hezardone to the health of the operator.

#### Rubber Department 7307.

Several materials used in the manufacture of rubber are polsomous. However, special processions are taken in handling this unterial and adequate exhausts and respirators are provided. It has also been found that bakelike dust may cause dermatitis in susceptible individuals. Any operator who contracts dermatitis while working with behalite is impediately removed from the job.

Corment No. 55 - Drinking Water Too Cold. Too arm, Bad Taste. 14 For 4 Women. Assigned to

The following record is submitted which shows that the drinking sator is kept at an almost uniform temperature both in vinter and summer. There may be occesions where the fountain is located some distance from the main loop so that the water is allowed to warm up somewhat. If the water from this fountain is allowed to run for a short time before being used it will soon reach the proper temperature.

All drinking water used in the Plent is filtered and purified by owns. Hocause of this, it is even better then city water.

# January to July, 1930

Date		Temp. of hater Received from City Hains	Temp. of water es it Leaves Treating System & Enters Local Pains
Jan.	18	36	54
tr	13	36	50~58
äŧ	14	56	50-54
*	15	<b>56</b>	50-5 <b>6</b>
**	18	5巻	50-56
295	17	35	49-59
i'eb.	1	36	52-58
雅	24	59	50-62
×	28	41	50-G1
Nar.	1	39	50 <b>-62</b>
14	25	39	cx-63
Ħ	30	59	65-66

ate		Torp. of Water Medeived from City Mains	Toop. of vator as it Leaves Treating System & Anters Local Mains
Apr.	1		10-60
77	5	40	60-64
ř.	10	48	56-50
rt	17	44	N#-62
		50	52 <b>-56</b>
i'ey	1	46	54-64
<b>\$</b>	7	50	34-50
		COLLEGE MARKET SE FLARMED IN O	PARALOII
Hoy	9	· 52	92 <b>-54</b>
<b>33</b>	12	50	46-48
賃	18	80	00
**	20	50	52 <b>-56</b>
22	23	54	47-49
**	25	54	62-60
eş.	28	54	48-50
幹	30	54	46-60
June	1	54	<b>58</b>
i.	5	55	44-40
**	ð	56	5 <b>8-</b> £0
<del>}</del> ‡	13	56	46-58
糖	19	60	44-51
44	28	63	41-68
July	1	62	5 <b>1-57</b>
93	8	38	53-50

Comment No. 39 - Overtime, Late Heals, Indianastrion.
R Non. Assigned to

For the effects of overtice on the health of the individual reference should be made to Comment Do. 17 in the minutes of the meeting of December 17. The fact that the operator is late for support is a minor consideration since it cannot northenlarly effect his health.

Comment No. 44 - Sitting all day Unhealthy.

1 Mag. 1 Nomen. Assigned to

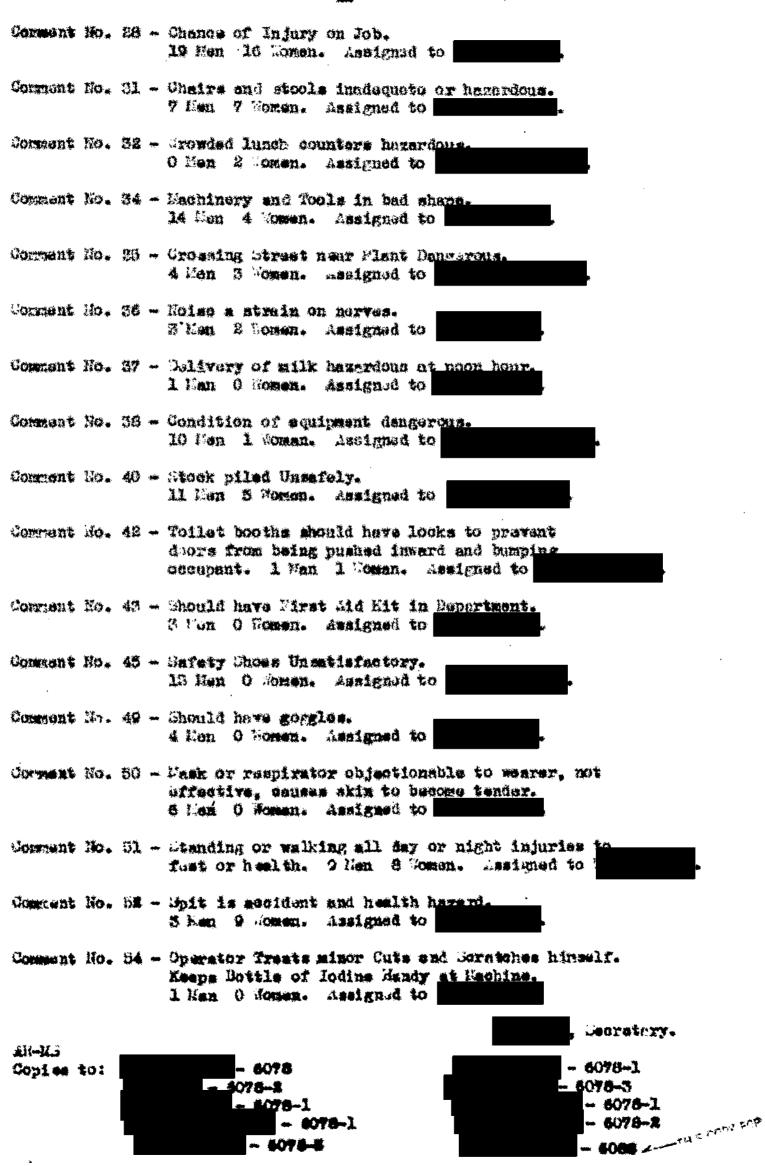
If may operator is told by his doctor that he should not be slaced where he is required to sit down all day, the operator should report that fact to his supervisor who will send him to the hospital for a physical examination. It is impossible to make any general statement to the effect that sitting all day is either healthy or unbealthy. There are many operators in the plant at the present time who by the instruction of the Redical day remont are not allowed to work at any operation where they are required to stand for any length of time.

#### HAT GULL MY. ALGIONAD

Comment No. 25 - Glasses are objectionable.

184 Sen 244 Somen. Assigned to

Comment No. 27 - Olives or rubber "ingers are objectionable.
Sies I comm. Assigned to



# UNIVERSITY OF WISCONSIN - MILWAUKEE

March 19, 1931.

The eighth meeting of the Enfety & Health Division was held on March 19, 1931 in conference room 506.

Fembers Present	Department
- Chairman	6078-3
	6078 <b>-1</b>
	6078-2
<u> </u>	6078-1
	6078-1
•	6078-1
	6078-3
	6078-3

#### TELPO RE OF INVESTIGATIONS ABSTRACE AT LAST MACTIFIC

Comment No. 26 - Glasses are objectionable.

244 (Jomen, 124 Men.

Assigned to

## Departments 6325, 6326, 6328, 6335, 6334, 6348, 6348, 6385, 6391 and 6394.

Practically all complaints concerned the weight and the fit of goggles.

During the latter part of the year of 1929 a special goggle with small

42 millimeter lenses, but providing adequate protection with a minimum of
weight was designed for our women employees. These goggles were individually fitted to the employees and replaced the 46 millimeter type.

The same type of goggles that men employees were wearing in 1929 are in use today.

In January, 1930, a storeroom and fitting room was set-up and all employees are now fitted individually by a man especially trained in this work.

The large number of complaints made concerning loggles during the year 1929 was accentuated by the fact that 11,000 pairs of goggles were issued that year, coupled with the fact that there were no special goggles for wemen until the latter part of the year 1929, and the fact that goggles were issued to all employees without being fitted individually. The improved facilities and the enlightened attitude of our employees toward accident prevention has practically eliminated complaints concerning the wearing of goggles.

Comment No. 27 - Gloves or Rubber Fingers are objectionable.

8 Men. 1 Woman. Assigned to

#### General Machine Department 6331.

There was one comment made regarding the hexardous practice of drill press operators wearing gloves when operating machines. Since this comment was made, parts for which gloves were worn have been rerouted to other departments. Gloves are not worn by drill press operators in this department at the present time.

#### Drill Press Department 6335.

There were three comments. One corment was made regarding the hazardous practice of drill press operators wearing gloves while operating machines. In 1929 sanvas gloves were worn by operators of high speed machines for various operations on mounting plates. Since that time leather gloves have replaced the sanvas ones.

The apparently hazardous practice of wearing gloves while operating drill presses is being referred to the Operating Brench Safety Supervisor with the idea of determining why it is permitted to exist.

#### Plating Department 6343.

There was one comment made concerning the wearing of rubber fingers. It is necessary for momen operators to wear rubber fingers on spring coldering operations to protect them from solder and flux thrown when superfluous solder is shaken off.

## Cable Forming Department 9356.

Gloves burt hands. A special glove with the right hand thurb and index fingers out 3/4" below the tip has been developed expressly for cable forming operations. These comments were evidently made when the gloves were first introduced and the hands were not touchened to the work. There have been no complaints since they were introduced.

Comment No. 28 - Chance of Injury on Job. 16 Men, 16 Moren. Assigned to

Departments 6021, 6026, 6332, 6333, 6371, 6394 and 6396.

Practically all the complaints made by employees concerned the possibility of an employee being injured while performing his regular work.

An investigation revealed that in each instance the possibility of an accident is remote after employee become accustomed to doing their work safely.

Corment No. 31.- Chairs and Stools Inadequate or Hazardous.
7 Men. 7 Women. Assigned to

#### Departments 6312, 6313, 6319, 6321, 6326, 6328, 6339, 9356, 6371 and 7382.

In 1924 the Clerical Methods organization started on investigation on "Fatigue Reducing Chairs to Replace Shop Mtools", in the course of six months they obtained 25 semple chairs from 4 leading manufacturers for trial purposes. The product of the Toledo Metal Furniture Corpany proved to be the only one suited to our operating requirements, but at that time it could not be proven in on a cost saving basis and samples were returned and the case closed. There was a decided preference of both men and women for the new form-fitting "Postur Chair" made by the Toledo Corpany rather than wooden straight backed stool then in use and a short time later the Factory Planning Engineer took the matter up. A shop strol incorporating all the advantages of the "Fostur Chair" was designed and specially constructed to meet the requirements of the Corpany, and the Toledo Metal Furniture Company on the contract to manufacture them for us.

The old stool had a small circular supped piece of wood for a seat and did not properly support the leg between the knee and hip actually impeding bl od circulation. Its straight wooden back affording support only to the shoulders and spine, cousing fatigue in relatively short periods of time. The modern chair which was standardized after various tests completely eliminates the disadvantages of the old by the use of

a saddle or the posture shaped seat and low-hinged self alligning back rest mounted on a heavy double rod of spring stuel. Seat and back rest are of five ply wood and the remaining parts are of metal, making an extremely sturdy stool and one in which maintenance costs have been greatly reduced. The stool comes in sizes, as measured from floor to seat of 19", 24", 26", and 50". The work of replacing the old type stool with the new was begun in 1928 and is being continued as the old become unserviceable.

The majority of amployees who complained about chairs and stools were concerned with splinters and blisters received from cracked stools in various steps of disrepair. Others complained about torn clothing from the same cause while there were two complaints about the scarcity of seats. The Operating Branch Safety Supervisor was interested in the master and the chiefs of Departments 6339 and 9356 were notified that they should request seats from Office Imainment Department 6048. This situation has been provided for and complaints of this nature will be entirely eliminated when replacement is complete and there are no longer any of the old wooden shop tools at Hawthorne.

Comment No. 52 - Growded Lunch Counters Hazardous.

O Men. 2 Momen. Assigned to

#### Punch Press Department No. 5, 6835.

Our invostigation indicates that the lack of lunch counter facilities during the year 1029 was the cause for the above complaint. Since that time this condition has been relieved by the installation of additional lunch counters.

Because of the crowded conditions there were instances where certain individuals jostled or roughesed their fellow employees. Anforcement of stronger discipline by the monitors has eliminated this difficulty.

Comment No. 34 - Machinery and Tools in Bad Shape.

14 Nen, 4 Tomen. Assigned to

## Departments 6300, 6326, 6336, 7361, 7982,

A recent investigation in the above departments, except 7581, revealed that practically all of these have been taken care of by the departments in which the complaints were made.

In Department 7381 two complaints were rade due to oil dropping from high speed thisting machine. This is being directed to the attention of the Operating Branch Safety Supervisor.

Comment No. 35 - Crossing Street near Flant, Dengarous.

4 Men. 7 Women. Assigned to

#### Departments 6312, 6313, 6323, 6326, 6329, 6344 and 6371.

These complaints referred specifically to the fact that double parking of automobiles on 22nd Street at quitting time made it difficult for employees to cross the street.

This matter was given publicity in the Microphone in an attempt to eliminate the hazard. An actual photograph of the rows of automobiles parked was published, and an appeal was made to employees requesting that they urge their relatives and friends to meet them at some other convenient location. The aid of Cicero police officers was enlisted to keep drivers moving who attempted to park their cars in double rows. Further publicity will be given this matter both in the Mawthorne Microphone and the Accident Bulletin with the hope of eventually eradicating the practice.

We have learned from our observations that although the automobile traffic is heavy at quitting time, drivers and pedestrians alike use considerable care.

Comment No. 26 - Noise a Strain on the Nerves.
Silon, Silonen. Assigned to

Although there is some evidence that noise interfered more or less with the efficiency of a worker, there are very few people who cannot adept themselves sufficiently so that their nerves are not seriously affected. Any case of nervous disorder should be investigated by the Redical Division and the Personnel Division interested, since there is probably some other factor, such as physical impairment or dissatisfaction with the work, which is causing the complaint.

One complaint was received from each of the following departments:

6310 - Paper Condenser Department,

6333 - Drill Press Oppartment.

5538 - Punch Press Department No. 3,

6371 - Theatre Equipment Department,

9396 - Woodworking Department.

It is interesting to note that the Paper Condenser Department 5319, is not especially noisy and the Theatre Equipment Department is one of the quietest in the Plant.

Comment No. 37 - Delivary of Milk Hazardous at Noon Hour. Assigned to

There was one compleint made by a men employee which swidently concerned the practice in 1929 of allowing several employees to leave the Plant a few minutes before the noon hour whistle blow and purchase wilk from a milk vegon on 22nd Street. We the employees were returning to their departments carrying tray: of milk, they would encounter others on the stairways going out to lunch. This condition has since been eliminated by allowing authorized individuals to 1 ave their departments fifteen minutes before the noon whistle blows so that they can return with the milk before the congestion occurs.

Corment No. 48 - Should have a First Aid Kit in the Department.

In order that each employee may receive expert medical treatment for any injury, a central emergency department with competent doctors in charge is operated in connection with the Plant hospital. This is intended to avoid the possibility of inexpert first aid treatment resulting in serious complications. However, in cases of revere injury, there may be need for immediate treatment to prevent undus pain or loss of blood. In order to take care of such emergencies, first aid kits, containing two packages of vivo swabs, one tourniquet, one

pair of scissors, one two ounce bottle of antiseptic oil, five packages of 22 inch by 3 feet bandages and six 5 inch by 3 inch compresses, vere cuthorized about two years ago for use in shop departments. Here recently, First aid Stations with a trained murse in charge, have been established at the Cable Plant, 26th Street, and outlying Plants; a larger First Aid station with a doctor in charge is located in Building 29-3. Arrangements have also been made with physicians living in the neighborhood of outlying Plants, so that they may be called to take care of any cases which require a physicians attention.

Comment No. 49 - I would have Coggles.
4 Man. Assigned to

## Step-by-Step P.B.X. Siring Department 6348.

Two comments were made by employees of this department, complaining that employees should wear goggles while performing coldering operations. This has been directed to the attention of the Operating Branch Serety Supervisor.

## Foundry Department 5250.

There was one comment made concerning employees the necessary information as to who shall be furnished with this type of goggle. The foremen is familiar with this instruction.

## Rubber Department 7597.

One complaint was made by an employee who claimed he needed coggles. Since 1929 all press operators in this department have been supplied with coggles and supervisors will supply a pair to any employee requesting them.

Not Effective, Causes Ukin to Fecomo Tender. 6 Fen. O Fomen. Assigned to

A careful study of various type of respirators is now being made by the Manufacturing Development organization, in an effort to find the type of respirator which will be best suited to each type of job on which respirators must be used. Attention is being paid both the effectiveness of the respirator and the comfort of the wearer. Then this study is completed, a specification will be written which will designate the type of respirator to be worn on each type of job.

Corment No. 51 - Standing or Talking All Day or Night Injurigues to Feet or Health. 8 Men. 8 Romen, Assigned to

There is no reason for supposing that an occupation requiring employees to be on their feet continuously is generally unhealthful. If an employee feels that his physical condition is such that it is inadvisable for him to be on his feet all day, his supervisor should send him to the hospital for an examination. If this is confirmed, arrangements should be made with the Personnel division to have him transferred to suitable work.

Comment No. 52 - Spit is an Accident and Hamlth Hazard.
3 Man. 9 Women. Assigned to

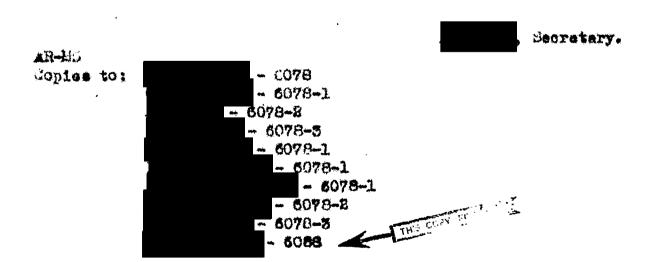
The problem of spitting or floors and stairs and in seate baskets has been carefully studied by the Safety and Health Division. A ceries of posters on verious phases of plant cleenliness is being prepared. The of these posters have already been used. Others will appear in the future. Arrangements were made with the janitor service to have a check made to determine in which organizations employees were spitting in weste baskets. Memoranda were written to the supervisors of those organizations where there was evidence of this practice, asking them to call the attention of the employees to the nead of exercising care in this matter. Discophone propaganda, including articles and a cartoon, has also been used.

One of the Operating organizations has originated a Housekeeping contest between its various departments. Each wonth the departments are graded and the department having the highest ratios is given a suitable award. Each employee who chews tobacco, is given a small curdboard box filled with sawdust. Anytime he spits on the Cloor instead of the box he must clean up the resultant spot.

Comment No. 54. - Operator Treats Minor Cuts and Scratches
Fin self - Keeps Bottle of Indine Hendy at
Fachine. 1 Man - O Women. Assigned to

The company rule that all injurios are to be reported immediately so that the injured person can receive proper treatment, should be strictly enforced. Even though the operator feels competent to treat himself, he should follow the regular routine, because of the effect on his follow employees and also because the corpany assumes responsibility for accidente and therefore should be essured that all processions have been taken to prevent serious complications.

The importance of this has been stressed continuously in the Accident Prevention Bulletin and was also the subject of an article on infections in the Nicrophone. There is no legitimate reason for any departure from the established routine.



Byron,

DON'T DICCLOSE IN THE FORM AND A SECOND OF THE PARTY OF T

The winth meeting of the safety a Health Sivision wantheld on a April 23, 1931.

carry on this trick if the thick have of this involved by substituting fictitious names, or

ombers Present

code s**imble basen** names.



#### ELECTED OF THE CONTINUE SCREEN OF MASS MERCHAN

Comment No. 38 - Condition of Squipment Rengerous.

1 comen. 10 Man.

tesigned to

## Depertments 6311, 6316, end 6322.

There were three comments made regarding the bed condition of the sheet iron covering on shop banches. An inspection of the table tops in these departments indicates that they are now in good condition.

#### Lording Coll Assembly Department 6321.

Two complaints referred to loose mails in the wooden boxes used for storing apporatus under the present program. These boxes receive periodical impaction by the Froduction branch and necessary repairs are made when necessary. Replacement of these boxes by metal containers is note whenever the wooden boxes are considered appoints.

#### Relay Coil winding Department 6326.

There was one comment made by a woman employee to the effect that the piece parts were dirty. A recent investigation shows that under present conditions there is no basis for this complaint.

## Japanning Deportment (346.

Due employee complained that the machinery was dispideted, and that parts of equipment were held together by wire. About one year ago the old machinery and equipment was replaced with automatic feeding and appropriate equipment. Parent investigation of the machinery and equipment revenied that everything is in good condition.

#### Casusian Wire Department 6315.

The complaint referred to the poor and unsafe condition of the ladders. Department 6315 is responsible for the maintenance of this equipment. They agreed that in the year 1929 some of the ladders might not have been resolved as often as necessary. A recent inspection of the ladders, nowever, indicates that they are in good condition.

## Disaire Equipment Dopertment 6371.

One comment referred to the soldering iron holder as a sura hexard, due to the solid wheat metal construction. Maring 1929 a new style of holder, with a performted masst metal guard, was designed. Mus to the large projection schedules, it was impossible to make the new holders in sufficient quantities to meet the desard until the middle of 1920. The new holders have alluinated the burn hazard.

#### Strending Jenartment 5282.

Ins employee criticised the design of the racks for storing special containing short lengths of wire. Open investigation it was observed that the racks served the purpose satisfactorily from a safety viewpoint.

## Switchdowed Cable Department 6391.

he apployee completed that the burre on the periphery of the metal reals were handlous. Secontly a more thorough inspection has been instituted on metal reals to climinate the possibility of apployees receiving more token from the reals.

Comment So. 40. - Stock Filed Unsafely.

11 Man. 5 Forest.

## Departments 6321, 6339, 6243, 6349, and 6357.

crowled benches, and careless steaking of stock pens. At the time these interviews were mede liewthorns was operating at capacity, shop alsles, arons bround elevator shafts, and other unusual places were utilised for the parking of tracks, stacking of trays and storing of meterials. How congestion has been eliminated and good housekeeping and well ordered storing apace is in evidence. Comments from Department CDDY related to overloaded benches and lack of floor space, which massic conditions have been taken care of by the addition of bailding 28-4 to this department. Although Department 6357 has a larger personnel and is producing more today than in 1928 the work has been redistributed to include the new building and congestion has been redistributed to include the new building and congestion has been redistributed to include the new

Inspection of departments ephserned revealed that containers are new stacked safely and in an orderly measure and foremen and essistant foremen assured the investigator that this is insisted upon as an important factor in the program of good housekeeping and socident prevention. Shen stacked for any length of time, ald type shop pass are timed or and tied together by boards, which support the pass solidly.

The general drive for good housekeeping throughout the forks is examplified by the good housekeeping contest which is being conducted by the departments in Sub-Brench \$305. Poster and Ascident Sullatin publicity also has been irrected toward elemnliness, order, spring housecleaning, and good housekeeping.

The Manufacturing Planning Branch has developed a moinl stacking tray to replace the old type pany and baxes. Pive types of the container will raplace the 128 types now in service and eventually all containers under 35" in length will be of metal construction. The new container is rectangular in shape with sides perpendicular at the bottom and has a shoulder at the inside top edge which supports the tray placed upon it. It is of welded construction throughout and the standard 5/16" hendles are strached by sleaves securely welded to the ends of the box. Esplacement of the old by the new type container was begun in 1928 and approximately 100,000 of the new have been placed in service to date. About 160,000 old type pane are still in service, and it is believed that replacement will be complete in 2 or 4 years. The new containers make possibility of accident due to falling pans remote as they rest securely on the shoulders and stock proper icularly from the floor. Their rectangular construction contributes to ctability. With proper maintenence this development of the Constactoring Flouning Breach should remedy the situation.

It is the business of trackers to inspect pens and containers which they handle and to send any needing attention to the storeroom where they are inspected and repaired before being cent out again.

Comment No. 41. Pire Prevention Inedequate .
Dangerous, or Unbesithy.
10 Men. 1 Vouce.
Assigned to

Departments 6316, 6322, 6327, 6336, 6346, 9356, 6371, 6396, and 6396.

Comments ranged from the conviction that Fyrane Extinguishers should bot be used in the Works because they give a polsonous gas, to a complaint made by a women supleyes that the was so hurried in fire drill that she became overheated.

while the earbon tetrachloride from Pyrene extinguishers does produce a gas when it comes into contact with flows, fire is an energency matter and requires quice, positive action with a good extinguisher. Pyrene has proved actiofactory for use at Hawthorns and the opinion is given that but a small amount of gas is generated which immediately discrepass when the fire sector is aired out. There is no record of any one's having suffered ill affects from the use of this type extinguisher. As to look of a sufficient number of fire extinguishers in some departments, these responsible pointed out the entirely sacquate protection system. In no spet, with the exception of 3 or 4 buildings with special occupancies, can a fire start without being within 15 feet of a sprinkler head, 40 first of a water pail, and 65 feet from 5 fire home. Heads of the departments from which these comments came have been advised to request fire extinguishers if they think it necessary.

states that drills should be held by the head of the largest organization in a building at least once a month. In addition to this, the regular imposition organization helds surprise drills frequently.

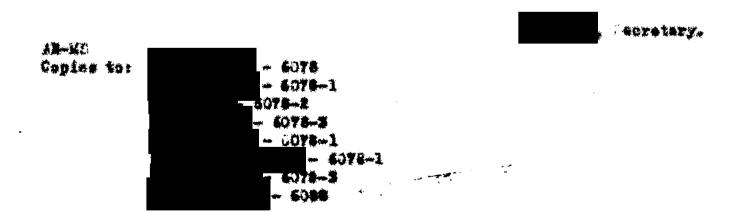
hen the Enferorable comment an Homan Avenue was referred to the Carks Inspection Deportment, they pointed out that that plant as well as the other plants is inspected regularly by a representative of the City Fire Department, a representative of the Department of Labor, and an insurance re-

presentative. Those checks upon our own inspectors should serve to insure entirely responsible fire protection.

Comment No. 45 - Safety Shoes Unsatisferiors.

Compleints were made that emfort shoes were heavy, failed to give resemable service, and hur; the feet. Development work on the quality and distribution of choos has been intensive since these compleints were made and a
vestly improved shoe is the result. Cafety shoes are neevier than the ordinery
atreet models, which weight is, of source, most noticeable in the extend, but
the weight is due as much to sturdy materials and construction on to the effect
toe cap. The toe box material has been developed to a maint where it is noninflammable and practically impervious to moisture and oil. Every respondis
provision has been made for increased durability and confort by the properation of specifications calling for the very best in materials and worksenship.

Complaints about shows being unconfortable, causing blisters, pinching tong, country callouses on the soles of the fest, at catera are not encousion. investigation of complaints made by persons whose shoed "hurt their fact" revenied that they had deliberately discagnaded the advice of our storeme por as to size regulrenests and vero, from senity or parasserity, webring aboas actually tee mail or tee large. In most completate chout selety shoes the trouble is due to a sorrectable but uncorrected condition of the fook or important fitting rather than to any fault of the shoe itself. In July, 1980, School fitting equipment was installed in our storeroom, with the sid of which equipment shoot are recurriely fitted and any deformities or renormalities of the feet are brought to the employee's notice for correction. As a Cartinal marks of suburing more gunifort to wearens of excety bloos. A stormkaspars in minurum of the secaty shos proverses were recently kant to bis live toball School of Orthopodics for training in the care and fitting of the feet. These wereness have reduced complaints about extery shows arestly and with more the struct development work on the same traction of the shoc itself the preemption is that eventually such complaints will be reduced to a minimum.



## MINUTES OF MEETING OF NOVEMBER 12, 1930 WITH SUPERVISORS OF THE HOSPITAL DIVISION

## Members Present

Hospital Division with approximately eight women supervisors of the Hospital Division.

## Material Presented

- 1. Description of the growth of analyzation.
- 2. Description of methods and mechanics of analyzation.
- 3. Outline of facts indicated by subject and substance analysis.
- 4. Possibilities for new studies in material derived from employees interviews.

The foregoing talk occupied approximately forty-five minutes. At this time copies of the substance analysis on "Hospital" were presented to those present. From this time on the Chief of the Hospital Division led the discussion.

## Impressions

Little or no response was made by the women present. The reaction to the comments and discussion seemed to be almost entirely of a defense nature. However, so little part did the general group take in this discussion that it was not possible to accurately judge their individual reactions. The question of follow-up meetings was not discussed, but the division chief stated that they would probably have such a meeting at a later date, which was left open.

- 6088-4.

## MINUTES OF MEETING OF JANUARY 14, 1931 WITH SUPERVISORS OF THE HOSPITAL DIVISION

Members Present

and twelve women supervisors.

Material Presented

No additional material was presented.

Impressions

All of the discussion took place between as a softened by any other member of the conference. All discussion was of a defense nature. Little or nothing constructive came from this meeting. There was no intimation that further meetings were to be held.

This meeting lasted approximately one and one-half hours.

- 6088-4.

## MINUTES OF MEETING OF NOVEMBER 21, 1930 WITH SUPERVISORS OF THE SERVICE DIVISION

## Members Present

Approximately twelve members were present; divided between men and women.

## Material Presented

No additional material presented.

This meeting was turned over to the group for an informal discussion which followed with no urging on the part of the leader. Various comments were discussed, and one main point brought out in this meeting was the fact that the responsibility of the Service Division extended to the successful termination of a case, even though it necessitated following it through the entire organization, even so far as the Works Manager and into the home itself.

## Impressions

This group seemed to be entirely in accord with our ideas of the use of this material for their benefit. There is complete absence of any defense reaction. While the response of the women members of the group is very little, they seem to be very much interested in the discussions and from comments outside of the group we receive the impression that they feel a great deal of benefit from them.

It was again suggested at this meeting that Supervisors' Conferences could help a great deal by covering concrete subjects in connection with welfare work.

- 6088-4.

# MINUTES OF MEETING OF NOVEMBER 24, 1930 WITH EXECUTIVES OF THE HAWTHORNE CLUB

#### Members Present

Club Evening School, Hawthorne Club Stores, and several members of various committees - approximately fourteen people in all.

## Material Presented

- 1. Description of the growth of analyzation.
- 2. Description of methods and mechanics of analyzation.

This talk had occupied approximately thirty minutes. At this time, one of the members of the Club pointed out that it was necessary for many of this group to be back on the job at three-thirty, and suggested that they were not interested in the abstract values of substance analysis or general description of uses to which this work might be put and suggested that it would be well to discontinue the talk and present them with the substance analysis at this time, which was done.

#### Impressions

The impression was that the group in general was very much interested in the discussion. This was also intimated in conversation after the meeting had closed. However, the position of the individual who had suggested the discontinuance of the talk necessitated the acquiescence of the general group. A short discussion of the analysis was indulged in mainly for the purpose of acquainting them with its general make-up. The meeting was closed with no suggestion of further follow-up.

Since this meeting, Chairman of the Member-ship Committee, who was not present at the meeting, requested twenty-five copies of the substance analysis on "Club Activities" for use among the members of his committee. These have been forwarded to him.

- 6088-4.

FEB: KL

## MINUTES OF MEETING OF NOVEMBER 21, 1930 WITH SUPERVISORS OF THE EMPLOYMENT DIVISION

#### Members Present

visors, section chiefs and department chiefs, evenly divided between men and women.

## Material Presented

- 1. Description of the growth of analyzation.
- 2. Description of methods and mechanics of analyzation.
- 3. Outline of facts indicated by subject and substance analysis.
- 4. Possibilities for new studies in material derived from employees' interviews.

The foregoing talk occupied approximately fifty minutes, which was followed by a brief discussion of the analysis of "Welfare" comments presented at this time.

Due to lack of time and inclination on the part of the members of the group, little or no discussion was indulged in at this time. However, it is the plan of this group to hold further meetings, which will be arranged for at a later date.

- 6088-4.

## MINUTES OF MEETING OF DECEMBER 1, 1930 WITH SUPERVISORS OF THE EMPLOYMENT DIVISION

#### Members Present

Supervisors of the Employment Division and the interviewing staff.

#### Material Presented

Several members of the interviewing staff, who were not present at the first meeting and had not received the complete talk usually given to a group before discussing comments, were present at this meeting which necessitated a short outline of probably five or ten minutes of the previous talk.

#### Impressions

This group entered into discussion very freely and seemed to be very much interested in the expressions by employees. There was considerable defense reaction, but as a rule the group themselves ironed this out, although repeatedly members expressed the idea that the comments on employment were in general rational on the part of the employees. However, the leader was impressed with the free discussion on the part of both the men and women and the amount of interest shown in general.

This group also expressed the opinion that a great deal of missionary work could be done by the supervisory training group in spreading knowledge of employment policies. Comments No. C-18 and C-24 brought out the discussion on this point.

The third meeting has been arranged for on December 8th.

- 6088-4.

## MINUTES OF MEETING OF OCTOBER 31, 1930 WITH SUPERVISORS OF THE SERVICE DIVISION

## Members Present

14 L.

A mixed group of approximately fifteen supervisors in the Service Division, including the superintendent and assistant superintendent.

## Material Presented

- 1. Description of the growth of analyzation.
- 2. Description of methods and mechanics of analyzation.
- 3. Outline of facts indicated by subject and substance analysis.
- 4. Possibilities for new studies in material derived from employees' interviews.

The foregoing talk occupied approximately fifty minutes. At this time copies of the substance analysis on "Welfare" were presented to those present. About ten minutes was occupied in the discussion of individual comments primarily for the purpose of acquainting the group with the contents and method of locating and correlating various topics for comments.

## Impressions

This group received the talk quite attentively and appeared to be very much interested in the substance analysis, and of their own initiative requested follow-up meetings and time was set for the following week with the request that this organization again be represented.

- 6088-4.

## MINUTES OF MEETING OF NOVEMBER 7, 1930 WITH SUPERVISORS OF THE SERVICE DIVISION

#### Members Present

Approximately fifteen supervisors were present - from section chiefs to division chief.

#### Material Presented

No additional material was presented.

This meeting was turned over to the group for an informal discussion, which followed with little or no urging upon the part of the leader. Various comments were discussed and discussion seemed to be entirely on the fact that employees' comments were of very great benefit to the Service Division people, whose function it is to administer welfare policies, as an indication of reactions to their contacts with employees.

## Impressions

Prior to this meeting it was felt that the second meeting would probably develop to a great extent a defense reaction in the members of the group. The surprising item in this meeting was practically the entire absence of the expected defense reaction. All criticism seemed to be of a constructive nature. It was suggested that a course of training for general supervisors should be outlined for use in the supervisory training conferences.

In one case a member of the group cited a comment which was representative of a fairly large classification of comments, and remarked that this was something which he himself had been saying to employees for several years and had never realized that any unfortunate impression could be drawn from it, but now realized that this was possible and could see plainly that some other method of pressing his point could be used which would avoid the wrong impression being carried away by the employees.

It was intimated that a number of the comments pointed to the fact that employees being sent to the Service Division from the Hospital for an investigation of Company accident cases were told to go to the Pay Roll Building, which in many cases gave employees the impression that possibly they were being sent to the Pay Roll for their final check. This impression sent them to the Service Division with a distinct feeling of fear as to what was coming. After a consultation in cooperation with the Hospital Division, it has been decided that the Hospital people will now tell each employee to report to an individual in the Service Division rather than to Gate 1 or to the Pay Roll Building.

Altogether this group seemed to realize that the majority of the comments, favorable and unfavorable, were the outgrowth of some psychological factor which affected the individual in his dealings with the Service Division, and that they must be very careful to avoid anything which might allow an employee to carry away an unfortunate impression.

- 6088-4.