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DOWN'S COLLECTION
SWOPE FILES ON INDUSTRIAL HYGIENE AND MEDICAL CARE
OCT. 31, 1922 to NOV. 24, 1924
VOLUME I

SCHENECTADY MUSEUM, NEW YORK

Downs Collection

(66)

SWOPE FILES ON
INDUSTRIAL HYGIENE
AND MEDICAL CARE
October 31, 1922 to
Nov. 24, 1924

VOLUME !

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(1)

GENERAL ELECTRIC COMPANY

GENERAL OFFICE

SCHENECTADY, N. Y.

In Reply Refer to

118.9

November 19th, 1924.

Mr. Gerard Swope,
120 Broadway,
New York City, N. Y.

Dear Mr. Swope,

Thank you for the little book recording the meeting of the Conference Board of Physicians in Industry. I have read this through, I might say with interest but there is very little of the unusual or particularly helpful information in it because it is a summary of the usual practices that we follow in Schenectady and I believe most of our Plants adhere to. It is entertaining but not particularly instructive. It would be a good reference book for the physicians in our various Plants to have in their libraries so that I believe it might be a good move to obtain some copies and distribute them as you suggest.

I recognize in it some of the work of Dr. Rector who made a visit to us in the course of a tour to other plants in the country which, together with the expressions of the various members of the Conference Board and guests, summarizes very well a basic standard practice that an industry should be busy with in this day and age.

My only interesting comment consists in nothing relative to this little publication but considerable perhaps relative to the Conference Board which I have always objected to on the grounds that it is so thoroughly bureaucratic. This quality no doubt is determined by the habits and practices of some members of this Board which in itself, free from these bureaucratic ideas, could, I should think, be developed into an extremely useful body to industry at large in the same way that we believe our New York State Association of Industrial Physicians is useful to New York State industries, and a very potent factor influencing legislation in this field of work. I do not think that this Conference Board of Physicians in Industry as it stands can give us much until it is free from the ideas involved in bureaucratic practices.

Very truly,

DGS:S

W. D. Smith
W. D.

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April 18, 1924

MR. E. F. STEEVER

Schenectady

Dear Mr. Steever:

Mr. Swene has looked over the X-ray photographs that you sent him and has asked me to return them, under separate cover, in accordance with the request in your letter of April 17th. He has considered the question of taking these with him to Cleveland for the next Manufacturing Committee meeting but has decided he can discuss the matter without the aid of these X-rays.

Very truly yours,

JH:M

GENERAL ELECTRIC COMPANY

INTERNAL CORRESPONDENCE

APR 18 24

Schenectady, N. Y., April 17, 1924.

Dear Mr. Swope:

If you decide to have the X-ray "silicosis" photographs posted at the Manufacturing Committee Meeting, Wednesday, April 23d, I would appreciate your having them mailed Special Delivery that evening to Mr. J. M. Sampson, Care C. S. Dixon, of the Pittsfield Works, for use there of the Meeting of the Foundry Committee.

If you decide not to use these pictures at the Manufacturing Committee Meeting, please have them returned here so that I can give them to Mr. Sampson for use at the Pittsfield Meeting.

We purpose forming a Joint Subcommittee of the Safety and Foundry Committees with the Research Laboratory represented, for the purpose of going into this matter and devising a better method of taking care of this hazard.

Very truly yours,

E. Z. Steever

To
Gerard Swope, President,
General Electric Company,
120 Broadway,
New York City.

EZS/FEB

HARVARD SCHOOL OF PUBLIC HEALTH

THE GENERAL ELECTRIC COMPANY

ACCOUNT

RECEIPTS	DR.	CR.
Schenectady Survey (Jan. 15-16, 1923)		1000.00 (3/29)
Pittsfield Survey (Feb. 27-28, 1923)		500.00 (4/14)
Lynn Survey (May 14,16,17,31, June 7, 1923)		750.00 (7/30)
PAYMENTS		
Travelling expenses to N.Y. for Dr. C.K.Drinker	57.13	
Expenses Schenectady trip	210.81	
" Pittsfield "	90.79	
Services, Schenectady and Pittsfield surveys	550.00	
" Lynn survey	325.00	
CREDIT BALANCE	<u>1016.27</u>	<u> </u>
	2250.00	2250.00

Payments for services in connection with the Schenectady
and Pittsfield surveys, General Electric Co., at a rate of \$25 per day.

Dr. C. K. Drinker	\$100.	
Mr. Philip Drinker	50.	
Dr. Alice Hamilton	75.	
Dr. Roger I. Lee	125.	
Prof. Edwin B. Wilson	100.	
Dr. Wade Wright	<u>100.</u>	\$550.

Lynn Survey

Dr. C. K. Drinker	\$75.	
Mr. Philip Drinker	75.	
Dr. Roger I. Lee	75.	
Prof. Edwin B. Wilson	75.	
Dr. Wade Wright	<u>25.</u>	\$325.

New York, August 6, 1923

MR. N. J. DARLING,
River Works,
West Lynn.

Dear Mr. Darling:-

I am enclosing two copies
of the report made by the School of Public Health
of Harvard University. If you wish additional
copies I can supply you with one or two more.

After you have given this
careful consideration and analysis I should be
glad if you would advise me what, if any, changes
you plan to make as a result of this report.

Very truly yours,

GS-H

CLYDE SVOPE

Enclosure

GENERAL STATEMENT
WEST LYNN AND RIVER WORKS OF THE
GENERAL ELECTRIC COMPANY.

On May 14th, Dr. E.B. Wilson, professor of vital statistics; Dr. C. K. Drinker, associate professor of applied physiology; Dr. Wade Wright, instructor in industrial medicine; Mr. Philip Drinker, instructor in applied ventilation and illumination; and Dr. Roger I. Lee, professor of hygiene, all of the Harvard School of Public Health, visited the River Works of the General Electric Company in Lynn and spent the day at the plant. Subsequently various individuals of the group made other trips for the purpose of studying in detail certain features of the River Works Plant, and also went over the plant at West Lynn. Professors Wilson and Lee visited the River Works on May 16th, and the West Lynn and River Works on June 7th. Professor Drinker and Mr. Drinker visited the River Works on May 14th and 17th, and visited the West Lynn Works on May 31st. Every facility was given to the Harvard group by Mr. Darling, general manager; his assistant Mr. Wilson; and by Dr. Schubmehl, in charge of the medical work.

The reports of professor Wilson on medical statistics is appended as appendix (1); the report of Mr. Drinker and Dr. Drinker on ventilation, illumination and toxic hazards is appended as appendix (2). In his report professor Wilson suggests the possibility of further study of certain employees classified under the present system, looking forward to a better classification of prospective employees, and to the better

Wilson was much interested in some admirable figures of Mr. Leitch and would appreciate those figures for his confidential use. Dr. Drinker and Mr. Drinker made one very definite suggestion at the West Lynn Works, but on the whole found conditions very satisfactory from the point view of their immediate interest.

The general plan of the medical department for the care of the sick and injured employees was observed with considerable care. Representatives of the Harvard School of Public Health have now had the opportunity of studying three plants of the General Electric Company, in all of which the medical department is organized on not only different lines, but with a different viewpoint. As we have pointed out in the reports on the medical departments at Schenectady and at Pittsfield we fully recognize that industrial hygiene and medicine is still somewhat in the experimental stage, and we also fully recognize that local conditions are often determining factors in many of the features of the medical department. On the other hand there is now adequate experience with industrial medicine practice, so that a general basis has been determined and it is possible to construct a somewhat ideal general plan. Such a general plan similar to the plans previously submitted in the Schenectady and Pittsfield report is appended as appendix (3).

A survey of employees coming to the dispensary at the River Works shows that the employees of the General Electric Company really utilize the dispensary only for in-

injuries and to a very slight extent for illness. It is of interest that these injuries may not always be acquired in connection with their work. Tabulation of the dispensary cases shows again that the surgical problem in the General Electric Plant is the treatment of injuries of the extremities. Dr. Smith, of the Schenectady Plant, has particularly studied this type of injury and it would seem to be most desirable for the information of the medical department at Lynn, and for the welfare of the employees at Lynn, that the Lynn plant should have the benefit of Dr. Smith's valuable study of these rather special conditions.

The fact that apparently few medical cases as opposed to surgical cases come to the dispensary is important. It is probably true that in the absence of any apparent toxic hazard there are not concealed under the headings of ordinary illness cases of industrial poisoning. Nevertheless, it is a part of sound industrial medical practice that medical cases should clear through the dispensary wherever possible, and should return to work by the dispensary. Such a procedure enables the medical department to have some control over intercurrent epidemics, and at least to have immediate cognizance of the incidence of any disease that might possibly be spread among the employees.

The medical department at Lynn was rather convinced of the value of the first-aid kits scattered throughout the factory. That is a matter of opinion and we do not agree with the idea that the advantages of such a procedure do outweigh the disadvantages.

An interesting experiment is being developed both at the River Works and at West Lynn. A number of dentists and optometrists visits the Plants on schedule. The employees are permitted to employ these dentists and optometrists at more or less nominal rates, but without loss of time as far as pay is concerned. Such an arrangement seems to possess inherent dangers. There is no question but that the visiting dentists and optometrists will legitimately build up a private practice by this means. The Company is in a sense responsible and is granting a concession ~~that~~ much like any other concession that the Company might grant, with the exception that this particular concession means the beginning of a considerable professional practice, and in that sense cannot be terminated by the Company after once begun. It is true that the teeth and the eyes represent the greatest need for special medical attention, but this experiment established a procedure for the inauguration of all sorts of visiting specialists, who are to be paid by the employee, and the time is taken out of the Company's time. This is very different from the plan of having dentists and optometrists on the dispensary staff who see employees under the same conditions as the other members of the staff.

The physical examinations were physical inspections rather than physical examinations. It may well be that such physical inspections are all that the situation demands. As suggested in professor Wilson's report there are not the data upon which to form any very definite opinion. If at any time

the situation was such that the Company became financially responsible for many common disabilities, it is certain that a more thorough physical examination would be necessary.

Of considerable interest was an experiment being conducted and developed at the West Lynn Plant in connection with the employment office, along the lines of attempting to determine the vocational aptitude of new employees. This is a promising and progressing experiment in a new field and there are good grounds on the basis of many experiences for the expectation that such a procedure may successfully be adopted as a supplement to the physical examination.

It seemed to us that the Plant at West Lynn was short of continuous medical supervision. In fact, the responsibilities of Dr. Schubmehl as head of the department with supervisory control over not only the River Works, but West Lynn, and also the plants at Windsor, Conn., North Easton, Taunton, and Everett, are so great as to justify his release from much of the detailed routine which he has to carry. It seemed to us very likely that an increased staff would result in greatly increased use of the medical department by the employees and in the justified feeling on the part of the employees that there was more definite efficiency in safeguarding their health. It has been our experience that employees will utilize the medical department up to its ordinary working capacity and no further. Without any particular design the available medical service usually determines the limits of usage.

ciation of the various safety devices. There is a place for careful consideration of the seating problem from a hygienic point of view; there seemed room for certain sanitary improvements which demand the expenditure of time and energy rather than money. We refer to roller towels, an occasional tin cup, etc.etc., in which most large institutions, including the Harvard Medical School, are usually occasionally at fault. We were glad to note that the installation of bubbling drinking fountains was apparently progressing.

It is the policy of the medical department to send serious surgical cases, or cases requiring special treatment, to the various available specialists and institutions which are abundant in Lynn and in Boston. Some of the cases are sent to the Lynn Hospital, some to the Massachusetts General Hospital, and apparently an abundant use is made of all the available special opportunities. A further utilization of these special opportunities, more particularly the laboratory facilities in connection with the Harvard School of Public Health and the clinical opportunities of the industrial medical clinic at the Massachusetts General Hospital would beyond question lead to the organization of these facilities so to be of even greater service.

In conclusion, the River Works and the West Lynn Works represent an illustration of a somewhat perfunctory attack on the industrial medicine practice problem. It does not appear to be an excellently operating medical department, to which the graduate physicians who come to the Harvard School of Public Health might be sent in order that they might see an

excellent illustration of sound industrial practice, which might serve them as a model in their future work.

Roger I. Lee

Wade Wright

Edwin B. Wilson

Cecil K. Drinker

Philip Drinker

APPENDIX NO. 1.

MEDICAL EXPENSES.

COAST COAST RIFLES. In the afternoon of June 24th, Mr. Leitch showed us the best set of figures covering the cost of compensation and the medical service that I have ever seen.

It would be much appreciated by me if the General Electric Company would authorize Mr. Leitch to let me have a copy of these cost figures, with the understanding, of course, that they were to be treated as confidential material.

The report covered the Lynn plants, and

those under the same executive direction, and the Pittsfield plant. It would be very interesting to have similar figures covering the Schoenectady plant.

It would further be interesting to have comparable figures prepared for the operation of the Mutual Benefit Association, in respect to the relief of illness, and of the pension arrangement of the Company for the relief of disabilities of age.

Although we may expect, as the excitement from the war subsides, that for a period there will be a tendency toward conservatism and toward a diminution of liberalization in government, it is, nevertheless, reasonably certain that sooner or later such matters as disabilities of old age pensioning will be taken up. These matters are, in my opinion, far more costly than compensation

on a similarly general scale. Almost every scheme for non-contributory pensions has broken down, and it seems to me that the question of disability, whether due to occupational disease or to old age, should be treated as a problem in insurance with contributions from the persons insured, whether or not the Company makes some contribution. At any rate, it is certain that it is none too early to begin to keep accounts of payments for compensation.

MEDICAL STATISTICS. I have examined the various reports, kindly submitted for our consideration by Mr. E. J. Wilson and Dr. Schubmehl. These contain a large amount of interesting material showing the activities of the medical department. Particularly interesting is the table showing how the persons applying for employment were classified into the four classes according to their physical condition; and the fact revealed by these figures that out of over 57000 examined from 1913 to 1921, only 53 or less than .1 of 1%, were found to be physically unfit for employment and that only 5100 were found to be physically unfit for any but certain employments specifically approved by the physician. This means that about 99% of the applicants were found to be physically fit for any employment; of these more than 2/3 were found to be below par in their physical development or in some other respect, but still fit for any employment.

It would be interesting to follow up the classification of employees into fit, fit but below

and, and fit only a certain kind of work, to ascertain how the causes of industrial accidents, and how the causes of lost-time, and how the causes of illnesses not rated as industrial accidents, were distributed among these three classes. The figures for the cost of compensation seemed to indicate in a general way that which one might naturally expect, namely, that ^{as} the number of employees was increasing, the cost per employee tended also to increase; whereas when the number of employees was decreasing, the cost for compensation per employee was decreasing. This would correspond to the hypothesis that it was the new labor and the less efficient labor which was the more productive of compensation risks; that is the class of employees that presumably is the least productive industrially is apparently the most costly for accidents. May it not also be true that in proportion to their numbers the employees rated as class 1, class 2, and class 3, are increasingly expensive from the point of view of accident or illness. In order to make a fair statistical analysis to answer this question a good deal of special investigation would be necessary, and the subject might be one which would furnish the basis of a good thesis for one of our students for the degree of Doctor of Public Health. In my opinion it would pay the Company to have such an investigation made when the right man could be obtained.

From the point of view of preventive medicine and hygiene it would also be interesting to follow up particularly the class of employees rated as

-4-

class (2), who were taken on by the Company as fit for any employment, but being not physically in some other respect. If the kind of pressure were put upon this class of individuals which is now put upon undeveloped students in our colleges, it might be found that they could take such care of themselves as to raise their rating to class (1). It is of great importance, not only to the health and happiness of the community but to the industrial efficiency of the employees, to have as large a proportion of them as possible thoroughly fit and up to par. I can very well understand that the Company might very well not desire to undertake any systematic and permanent investigation along the lines of the follow-up of class (2) just mentioned, but interesting results might again perhaps be obtained by a properly qualified student working on a research in industrial hygiene for the degree of Doctor of Public Health. The question as to whether under present conditions the employees were graduating from class (2) into class (1) could probably be answered by a certain number of re-examinations of persons rated as class (2) when employed; but the matter of undertaking to persuade the employees of the importance to them of taking such steps as would raise their rating, is a sentimentally one of educating the employees by the right kind of propaganda and would naturally be treated in the same manner as the safety campaigns by committees of the employees.

SUMMARY

The cost accounting for compensation and medical service is highly satisfactory, being the best I have seen anywhere.

The statistical work on industrial morbidity seems not to be undertaken and this seems to be a general state of affairs at present in industry; accidents, although they cause a small part of the lost-time and inefficiency of the employees, have the centre of attention, perhaps largely on account of the operation of the compensation laws, whereas illness, which causes by far the greater amount of lost-time and inefficiency, is not made the subject of any careful investigation, and is taken care of insofar as it is taken care of, in a somewhat haphazard fashion. Conditions in this respect will be improved only as: (1) The government places upon the industry the obligation to do something, or: (2) The industry itself becomes sufficiently convinced that to do something pays good returns in dollars and cents.

Edwin B. Wilson

APPENDIX NO.2.

REPORT ON VENTILATION, ILLUMINATION, AND TOXIC HAZARDS.

THE RIVER AND WEST LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

THE RIVER WORKS.

On May 14th and 17th the following buildings and processes were visited:

- (1) Turbine plant.
- (2) Iron, steel, and brass foundries.
- (3) Drop forge.
- (4) Wire enameling and fabric impregnating.
- (5) Fabric Gears.
- (6) Small motors.
- (7) Gasoline, benzine, oil and paint storage.
- (8) Enameling.
- (9) Punch press.
- (10) Lacquering.

The pattern and carpenter shops were not visited.

In general both the ventilation and illumination were good. In operations such as buffing and grinding the operatives were adequately guarded against dust by exhaust fans. Where goggles were needed as a protection for the eyes they were, in general, worn. The few exceptions in the latter were in operations involving fine grinding and here the exhaust fans were eliminating practically all the dust.

Dr. Schubmehl and Mr. Sanford mentioned a complaint from a crane operator in the steel foundry regarding fume from a core compound. This building was inspected further on May 31st. The fume in question is a source of annoyance to two crane operators and probably arises from an oily compound used in the moulding sand. On burning this oil one obtains a white acrid smoke rather irritating to the eyes. A certain amount of this smoke appears during the actual process of casting and much more is given off when the molds are broken up after hardening has occurred. We are inclined to regard the situation presented rather as a nuisance affecting relatively few men than as a distinctly injurious practice which should be eliminated at once. If the crane operators can be provided with suitable masks for use at certain times it would seem to us that this situation had received adequate treatment.

In the small motors building two men were cleaning housings by pouring gasoline on castings and blowing off the gasoline with compressed air, a procedure designed to remove such grease as was dissolved by the gasoline. The air blast probably diluted the gasoline fumes to such a degree that they were rendered harmless but the process seemed to be a crude one and one to expose the workmen to a possible hazard.

In the enameling plant the method of hydrochloric acid pickling for cleaning the metal parts, prior to applying the enamel, would probably have to be changed with increased production. The present method requires the men to scrub off the scale loosened by the acid treatment by hand and so

GE MUSEUM 00173

casionally to get their arms or hands wet with hot acid. While the work is not hazardous from any toxic properties of the acid fume, there seems no reason why the process could not be carried out as in the pickling of sheets or tubes in the steel industry.

In the punch press house one man was engaged in a paint spraying job. An adequately ventilated hood was conveniently located and the spraying should have been carried out in the hood but the facilities were such that a short man was unable to get at the top of the piece to be sprayed. It would be advisable to remedy this, and enforce regulations requiring spraying to be done in the hood intended for the purpose/

Gasoline, benzene and paint storage did not appear to present any dangerous hazard. Benzene is used in very small quantities, there is but little paint mixing while we saw no varnish cutting.

GE MUSEUM 00174

In the fabric impregnating plant the ventilation seemed adequate, particularly in the new units for wire enameling. The heat coming from the fabric dryers probably reaches unpleasant proportions, particularly in warm weather. A new unit under construction will completely enclose the fabric while it is drying. This should prove a saving in steam consumption and should make the working conditions more agreeable.

Considering the River Works as a whole we wish to emphasize the fact that possible hazards from operations seen are invariably limited to a very few men. In a plant of this character we feel we could be of more use in advising upon new processes before they are started on an experi-

mental or large scale, rather than after such processes have been put into a production basis and troubles from inadequate ventilation eliminated by the slow course of improvements attending alterations of elaborate installations.

WEST LYNN WORKS .

This plant was visited on May 31st with Mr. Sanford and Mr. Walters. With the exception of the department concerned with mixing electrode material the general conditions of work were ideal and cannot be too highly commended. This commendation should also be extended to the management of the whole problem of accident prevention, which was clearly most effective both in this plant and in the River Works.

The department given over to mixing electrode material and to filling electrode casings is a marked contrast to the rest of the plant and indeed to anything seen in any plant of the General Electric Company so far visited. Even when the department is idle the air contains a large amount of very fine dust and the general arrangements for dust removal are most unimpressive. A sample of the dust was obtained and apparently contains a rather small and somewhat variable amount of silica. Even though this element is relatively inconspicuous it would seem to us that this department presents a true dust hazard, and that plans for thorough remodeling should be considered.

Cecil K. Drinker

Philip Drinker

APPENDIX (3).

A GENERAL PLAN FOR THE MEDICAL ACTIVITIES. OF THE RIVER WORKS AND THE WEST LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

This plan only covers the River Works and the West Lynn Works, which were the plants visited, and does not cover the other plants now operating under the supervision of the head of the medical department of these two plants. In the absence of exact statistical data only approximate estimates can be made of the future demands. It is recommended that the program include the same services as proposed for the department in Schenectady and Pittsfield Plants, namely, physical examinations of applicants for employment, annual examination of Key men, frequent periodic examination of workers exposed to any possible toxic agents, dispensary service to medical and surgical cases, the clearing through the dispensary of all workers leaving the establishment sick, and the clearing through the dispensary of all workers returning through the establishment after absence on account of sickness of more than three days duration. On the basis of a total of 12,000 employees for the two Works, experience in another large establishment would justify the assumption of the following figures:

Physical examinations upon employment	6,000
Periodic re-examination	1,000
Key men	500
Total	<u>7,500</u>
Surgical cases, new injuries	5,000
Re-dressings	15,000
Total	<u>20,000</u>
Medical Cases, non-disabling new cases	20,000
Revisits	12,000
Total	<u>32,000</u>
Disabling, clearing out	12,000
Clearing in	6,000
Total	<u>18,000</u>
Grand Total	77,500

If the head of the medical department has supervisory responsibility over various other plants, at least one additional physician would be required. If the physical examinations are to be more than medical inspections, the service of another full-time physician would be required. One full-time physician ought to be able to cover the medical examinations and the dispensary work at the West Lynn Plant.

There should be more dispensary space, both at West Lynn and at the River works. More adequate waiting room facilities ought to be provided. There should be better facilities for the separation of clean and septic cases and also for the reception and care of medical cases. An additional nurse ought to be present at both West Lynn and the River Works.

A further recommendation which has been made for Pittsfield and Schenectady is also applicable to Lynn. It is recommended that a record of physical examination be filed in the dispensary and be considered the beginning of

each employee's medical record. The use of four groupings from the physical examination would be of value and would assist in any further special study in regard to the problem in the placing of labor applicants with physical disabilities.

1. Physically fit for any employment.
2. Physically undeveloped, or with some slight anatomical defect, otherwise fit for any work.
3. Fit only for certain employment when specifically approved and supervised by the medical department.
4. Unfit for any employment. Rejects.

It is desirable that the employees who leave through illness report at the dispensary and report again on return in case the absence is over three days. A system by which daily report of absenteeism is forwarded to each department and then to the medical department, such a report stating the probable reason for absence, has been found useful in some large establishments. The sending of doctors and nurses to the homes of employees known or suspected to be sick is now considered an essential part of sound industrial practice. Well done, it presents few dangers other than those of apprehensive speculation and affords information of great value regarding sickness and absenteeism, and facilitates the care of sick employees.

It is recommended that the dental and optometric experiment be carefully scrutinized as to potential dangers. It is certain that some form of dental and optometric service should be carefully considered, but presumably in connection with the ordinary medical and surgical service in the dispensary, and as an integral part of it,

It is recommended that the question of mutual benefit organizations be further studied and developed so as to bring a unified body in close working association with the medical service.

It is recommended that prompt attention be given to the matter of proper seating, especially of the female employees, and that this question be investigated before purchases of equipment are made.

The expenses of the medical department at Lynn in gross are not great. It is reasonably certain that the benefits derived from the rational development of the medical department would be large and would rapidly develop. At present the only activities are those urgently demanded by obvious injury or disease or required by law. The additional expenditures could easily be justified by the provision of services really important to sick and injured employees and by the prevention of some of these illnesses and accidents.

Roger I. Lee

Wade Wright

APR 2 1936

GENERAL STATEMENT
WEST LYNN AND RIVER WORKS OF THE
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The reports of professor Wilson on medical statistics is appended as appendix (1); the report of Mr. Drinker and Dr. Drinker on ventilation, illumination and toxic hazards is appended as appendix (2). In his report Professor Wilson suggests the possibility of further study of certain employees classified under the present system, looking forward to a better classification of prospective employees, and to the better utilization of apparently hand-

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The medical department at Lynn was rather con-

vinced of the value of the first-aid kits scattered throughout the factory. That is a matter of opinion and we do not agree with the idea that the advantages of such a procedure do outweigh the disadvantages.

An interesting experiment is being developed both at the River Works and at West Lynn. A number of dentists and optometrists visit the Plants on schedule. The employees are permitted to employ these dentists and optometrists at more or less nominal rates, but without loss of time as far as pay is concerned. Such an arrangement seems to possess inherent dangers. There is no question but that the visiting dentists and optometrists will legitimately build up a private practice by this means. The Company is in a sense responsible and is granting a concession very much like any other concession that the Company might grant, with the exception that this particular concession means the beginning of a considerable professional practice, and in that sense cannot be terminated by the Company after once begun. It is true that the teeth and the eyes represent the greatest need for special medical attention, but this experiment establishes a procedure for the inauguration of all sorts of visiting specialists, who are to be paid by the employee, and the time is taken out of the Company's time. This is very different from the plan of having dentists and optometrists on the dispensary staff who see employees under the same conditions as the other members of the staff.

The physical examinations were physical inspections rather than physical examinations. It may well be that such physical inspections are all that the situation demands. As suggested in professor Nilson's report there are not the data upon which to form any very definite opinion. If at any time the situation was such that the Company became financially responsible for many common disabilities, it is certain that a more thorough physical examination would be necessary.

Of considerable interest was an experiment being conducted and developed at the West Lynn Plant in connection with the employment office, along the lines of attempting to determine the vocational aptitude of new employees. This is a promising and progressive experiment in a new field and there are good grounds on the basis of many experiences for the expectation that such a procedure may successfully be adopted as a supplement to the physical examination.

It seemed to us that the Plant at West Lynn was short of continuous medical supervision. In fact, the responsibilities of Dr. Schubmehl as head of the department with supervisory control over, not only the River Works, but West Lynn, and also the plants at Windsor, Conn., North Easton, Taunton and Everett, are so great as to justify his release from much of the detailed routine which he has to carry.

It seemed to us very likely that an increased staff would result in greatly increased use of the medical department by the employees and in the justified feeling on the part of the employees that there was more definite efficiency in safeguarding their health. It has been our experience that employees will utilize the medical department up to its ordinary working capacity and no further. Without any particular design the available medical service usually determines the limits of usage.

In general our survey indicated an adequate appreciation of the various safety devices. There is a place for careful consideration of the seating problem from a hygienic point of view; there seemed room for certain sanitary improvements which demand the expenditure of time and energy rather than money. We refer to roller towels, an occasional tin cup, etc., etc., in which most large institutions, including the Harvard Medical School, are usually occasionally at fault. We were glad to note that the installation of bubbling drinking fountains was apparently progressing.

It is the policy of the medical department to send serious surgical cases, or cases requiring special treatment, to the various available specialists and institutions which are abundant in Lynn and in Boston. Some of the cases are sent to the Lynn hospital, some to the Massachusetts General hospital, and apparently an abundant use is made of all the available special opportunities. A further utilization of these special opportunities, more

particularly the laboratory facilities in connection with the Harvard School of Public Health and the clinical opportunities of the industrial medical clinic at the Massachusetts General Hospital would beyond question lead to the organization of these facilities so to be of even greater service.

In conclusion, the River Works and the West Lynn Works represent an illustration of a somewhat perfunctory attack on the industrial medicine practice problem. It does not appear to be an excellently operating medical department, to which the graduate physicians who come to the Harvard School of Public Health might be sent in order that they might see an excellent illustration of sound industrial practice, which might serve them as a model in their future work.

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