SOCIAL SERVICE IN INDUSTRIES

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I INTRODUCTION

With the development of modern industrialism which characterizes our present day civilization and with the concentration of vast population within small areas in close proximity to the centers of production, there arises many new and perplexing problems relative to the social welfare of the individuals and specified groups therein. Under this system, in contrast with the older order of things, the masses are no longer dependent on the soil primarily for sustenance. Although the products of agriculture still retain their place of importance as a means of man's survival and for the bodily nourishment; still, new and improved methods in this field of production have, of necessity, emancipated great numbers thus formerly gainfully employed and has thrown them into the ranks of those dependent on other industries for their entire support. Employment of the nature for which he is trained or fitted becomes a foremost factor and guiding influence in the individual's existence for he and his family are at the mercy of the periodical "pay envelope" for their right to participate to varying degrees in the consumption of those necessities and luxuries which this newer order of things has made available.

Employment is by nature, however, a most unstable entity, fluctuating to meet the demands of seasonal variation, supply of demand, buying power of the masses, cyclic periods of depression and various other influences of a minor or major, local or general, character. When an individual's means of support fail him and he becomes one of the unemployed (a condition so apparent to all about us in the present eco-

nomic crisis) his problem becomes a serious one. Whether man's first duty be toward himself and his family or toward the community of which he is a member is a debatable question; nevertheless, it stands that the first duty of a community is toward the welfare of its citizens. When an individual's employment fails him his only alternative is to direct his attention to the social structure of which he is a part for the simple necessities of life. Thus we see that the social order which has its foundation in the industrial system has created its own problems which perhaps time alone and the slow process of evolution of ideas will ever successfully work out for the betterment of all society.

For the present, however, the industrial unit (factory, plant, mine, etc.) is of necessity and essentially becoming more and more interested in the welfare of its employees. This interest is primarily from the standpoint of production. However, business executives are becoming more and more alert to the fact that the social background (the home life, state of health, and freedom from worries, financial, domestic and otherwise) of those employed in their organization is an important factor in the efficiency of the employee and his ability to produce. The recent economic crisis has developed a consciousness among industrial leaders of the necessity of conserving the buying power of the masses for it is this class of society, made up largely of the gainfully employed, who contribute to the utilization and consumption of the products of industry. Thus we can explain industry's fundamental interest in the social welfare of the worker from the standpoint

of both his physical and his financial well-being as an outgrowth of these facts. The present trend in industry is toward the development of a bond of common interest in the social welfare of its personnel; primarily, to foster efficiency in production and to provide a market for the consumption of the products of their activity, but, secondarily to promote employment and the further development of the industry in itself. Recently there have been great strides in the direction toward the betterment of the social welfare of the worker to the extent that it might be said that nations are becoming socially minded.

President Glenn Frank states in a paper delivered before the Convocation of the American College of Surgeons that "In addition these powerful private economic interests, making for a vast disease prevention program, there is a growing social conscience respecting the issues of health and diseases, a growing conviction that the health of the social order is importantly interlocked with the health of its citizens". Foremost in this movement is the interest maintained by industry of which the most outstanding manifestations are the installation of medical departments within the plant for the study of factory conditions and for the treatment of diseases and accidents and the maintenance of welfare and social agencies for the supervision and assistance of the worker in managing his many and varied problems.

It is within the scope of this paper to deal with the medical aspect of social service in industry and to present an unbiased summary of the problems involved, the present status of the movement for a change, and the methods in vogue in approaching these new situations.

II - HISTORICAL DEVELOPMENT

Any discussion of the historical development of social service in industry must be closely related to the salient events in the rise of modern medicine, since they have as their objective a common goal - the social and physical improvement of mankind. Almost one hundred years after the industrial awakening there began an era of new thought and discovery in the realm of medicine. This fact is pointed out by Glenn Frank, President of the University of Wisconsin, in a paper in which he states "The historian of medicine will look upon the period following 1875 as the time of the medical revolution as the historian of industry looks back upon the period following 1779 as the time of the industrial revolution. In both instances new forces came into the field to alter profoundly the prevailing policies and procedures".

Hope, in the Journal of State Medicine, states that "since the time of Queen Elizabeth in England concern has been manifest for the injuries of workers in many industrial occupations and especially to lessen the injury to employed children. A great statesman (Disraeli) in 1849 had expressed his conviction that the rights of labor were as sacred as those of property (labor being regarded as living wealth); that if a difference were to be established, the interests of living wealth ought to be predominant. "The Mansion", he wrote, "is not safe when the cottage is unhappy".

Any discussion of social service in industry from the medical standpoint is chiefly concerned with industrial hygiene and preven-

tive medicine. As to the developments in this field of endeavor, Sappington and Morbaker summarize this in the Journal of the American Medical Association: "The scientific origin of industrial hygiene is usually dated from the publication of a treatise on diseases of occupation entitled "De Morbis Artificium Diatriba" in the year 1700 by Prof. Bernardo Romazzini of the University of Padua. Since that time great strides have been made in the study of diseases of occupation and the many ramifications of industrial health work. Mention might well be made of some of the outstanding events showing the importance of the development of industrial medicine.

According to Dr. Harry Mock, the first physical examinations of which there is any record were done by Dr. Frank Fulton, of Providence, Rhode Island, in 1906. These examinations were made free of charge for the purpose of discovering tuberculosis in workmen. In 1909, Dr. Mock began examining employees of Sears, Roebuck and Company, in Chicago, and this practice was speedily followed by other pioneers in the field of industrial medicine. The first official section on industrial hygiene was inaugurated in 1914, by the American Public Health Association.

The year 1915 was particularly significant in the history of industrial medicine. Three events of outstanding importance took place, namely -

1. The organization of a division of industrial hygiene and sanitation by the United States Public Health

Health Service at Washington, D.C., under the direction of Surg. J. W. Schereschewsky.

2. The creation of a section on health service in the National Safety Council, which section held its first session in conjunction with the Fourth Annual Congress at Philadelphia, in October.
3. The inauguration of the Section on Hygiene and Preventive Medicine by the American Medical Association, under the chairmanship of Dr. Otto P. Geier.

Many educational institutions readily saw their opportunity and their responsibility in this developing field. Harvary University, however, was the first institution in the world to establish a course of instruction and research leading to degrees in industrial hygiene, in the year 1918. These studies led to the Certificate of Public Health in Industrial Hygiene and to the Degree of Doctor of Public Health in Industrial Hygiene. Following these educational curriculums, the school started the Journal of Industrial Hygiene, which now occupies a prominent place among journals, exclusively devoted to this subject.

A number of state departments of health have established bureaus of industrial hygiene and have attained definite and worthy objectives in this field. In 1916 a group of industrial physicians assembled and formed the American Association of Industrial Physicians

and Surgeons. This professional group has been instrumental in preserving the ideals of medicine in industry".

This brings the developments in the field of social welfare in industry up to their present day status and gives a chronological idea of the various steps in this line of advancement.

III-DEFINITION, SCOPE, OBJECTIVES OF INDUSTRIAL MEDICINE

Some years ago the National Industrial Conference defined the industrial physician in the following words:

> "A physician in industry is one who applies the principles of modern medicine and surgery in industrial workers - sick or well - supplementing the remedial agencies of medicine by the sound application of hygiene, sanitation, and accident prevention, and who in addition has an adequate and cooperative appreciation of the social, economic and administrative problems and responsibilities of industry in its relation to society".

Sappington and Marbaker, in the Journal of the American Medical Association have outlined the objectives of social service in industry, in a recent paper as follows:

1. To study the health of the employee and help him to realize the best health development of which he is capable. This is one of the fundamental principles of industrial hygiene.
2. To protect the worker against contracting disease from another and also to prevent him against conveying disease to another. This is a basic public health measure and is accomplished chiefly by vaccination and isolation.
3. To study the natural health hazards of industry and to provide measures of their control. Here accident prevention, first aid to injured or sick, and toxicology come into play.
4. To discover and call to the attention of the em-

ployee any defective health habits, especially those of a remediable type, and to assist and encourage the individual in securing proper correction. These procedures are considered to be characteristic of groups most advanced in industrial health work.

5. To enlist the cooperation of skilled medical specialists and organized groups for the correction of defects found among the personnel. This is a common practice among large industrial groups.
6. To provide special and optimum conditions for handicapped persons and to furnish satisfactory supervision for them, especially with regard to proper occupational placement.
7. To provide a dispensary service which will give prompt and efficient attention to slight indispositions, in the attempt to ward off major illnesses This is the practice of first aid to illness and has been considered of great economic importance.
8. To instruct the employee how to lead a life of health, and if he is defective, to instruct him how to overcome, as far as possible, the handicap which he possesses. This covers the great field of health education and includes talks, health examinations, posters, health articles, pamphlets, periodic check-ups, and the like.

9. To furnish technical guidance and information to all other departments of any given company, with a view of improving the mental, moral and physical status of the group. This includes placement, illumination, ventilation, and chemical hazards.

10. To act as a coordinating mechanism on matters of personal health between the company, the employees, other physicians and all other existing health agencies, such as state and city boards of health and state and county medical societies.

The above outlines the objectives of social service in industry from the medical standpoint. The problem before this movement is realized is great. When we consider that there are approximately fifty million people engaged in industrial and mercantile pursuits in the United States and that on their ability to produce rests the progress of industry. The nation will probably continue to increase its industrial activities. Industries and industrial communities will make substantial progress usually in proportion to the care given to the health and efficiency of the backbone of industry - its workers. A well known industrial publication has expressed this point of view forcibly by the phrase, "The public health is dependant on the health of the nation's workers.

IV-DUTIES OF INDUSTRIAL MEDICINE

In the beginning, industry largely felt the need for the services of physicians, because of the necessity of treating and preventing injuries. Gradually, however, it became apparent to the industrialist that there was a greater source of economic loss. Industrial physicians themselves soon became convinced not only that they must be able to cover the whole ground of sanitation and safety, spending an hour or two at the plant daily checking up on injury cases, but also that there were more important considerations.

The efficient industrial physician of today gets out into the plant from time to time. He makes an adequate study of the conditions under which men work, namely heating, lighting, ventilation, toilets, lockers, lunch rooms, shower baths, drinking water, and the places provided for eating. He studies especially the chemical hazards involved in manufacturing processes; the dangers to the eyes, the hazards to the skin, the risks of exposure to poisonous gasses, dusts, heat, cold, electricity and moving chains, belts and gears. He likewise recognizes the relative value of physical examinations prior to employment and of periodic examinations during the course of employment. He knows what physical defects exist in his industrial clientele and whether those in responsible positions (as operating costly and dangerous machinery) are physically fit, mentally alert, and capable. Through a check-up system he is able to supervise the correction of these physical defects. He consults freely with the employment department and with the division of personnel relations, using their expert knowledge

on job analysis and placement so that those with permanent physical defects may be placed on work where the effects will be minimized.

Preventive medicine in industry is further emphasized by the giving of first aid to minor illnesses, before they become a major consideration. The various complexities and ramifications of mental hygiene in industry are given proper time and consideration, assisting in the establishment of an equilibrium in the important field of human relations.

Thus we see that the duties of social service in industry are many and varied and for the most part well nigh indispensible both to the employer and the employee and as a part of a general health improvement and disease prevention project.

V-BASIS OF NEED FOR INDUSTRIAL MEDICINE

The basis of the crying need for some means of approaching the problem of medical assistance and care in industry is clearly emphasized in a statistical study in a paper by President Glenn Frank, in Surgery, Gynecology and Obstetrics, as follows:

"In 1909 it was estimated that at all times in the United States 3,000,000 persons were seriously ill. This meant an annual loss of thirteen days per person on account of illness. It was then estimated that 42 per cent of this illness was preventable. About 3 years ago, when I last looked carefully into this situation, we had cut this loss from 13 to something like 8 or 9 working days per person. At that time about 42,000,000 persons were classed as gainfully employed in the United States. When these lose something over 8 days each year from illness, disabilities, and non-industrial as well as industrial accidents, it means that these 42,000,000 gainfully employed persons face an annual loss of nearly 350,000,000 working days. Disease must bear the blame for a staggering loss of working time. Of the 500,000 workers who die each year, it is considered probable, by dependable authority, that one-half of the deaths would prove postponable by adequate medical supervision, by medical exmmination, by health education, and by community hygiene.

Going on the conservative estimate that the average life, aside from its human values, is worth to industry say $5,000. and estimating the cost of special diet, nursing, and medical attention needed by a sick man at the very conservative figure of $3.00 a day, the economic loss from preventable disease and postponable death in the situation I have described, reaches the staggering total of $1,800,000,000 annually borne by those gainfully employed in the United States. On the basis of the most dependable research available, it is estimated that this loss could be cut to a point where, over and above the cost of prevention, a balance of something near $1,000,000,000 annually could be left in the pockets of the working population and industries of the United States.

It is obviously inevitable that the growing enlightment of labor leadership, and the intelligent self-interest of industry, should set about seeing to it that this unnecessary loss is stopped. Much has already been done by industry, but as yet only the surface of possibility has been scratched. And you may be sure that when the forces of labor and the forces of industry get fully under way in a determined effort to lift from labor and industry this burden of loss from preventable disease and postponable death, they will not be concerned primarily with the effect on the private practice of medicine".

VI-VALUE OF HEALTH EXAMINATIONS IN INDUSTRY

The value of pre-employment and periodic health examinations is well brought out in a paper by Cassius H. Watson, which was presented before the Conference on Traumatic Surgery.

"The majority of human beings in the pursuit of life, liberty, and the pursuit of happiness can obtain necessary remuneration only through work, and also they have a right to expect, as proceeds from this work, something besides food, clothing and shelter. There are many of the good things of the world which lie just beyond the absolute necessities, and whose attainments can come about only through an increase in the character, extent and refinement of the several phases of endeavor. Thus an available field lies at the door of all who can and will work.

When a man goes to an industry for work he generally goes because he needs a job and hopes that some job needs him, regardless of his physical qualifications. Industry does not approach the prospective employee. With inducements of various kinds, unless the individual has something worth while to sell. The romancing formulation of the Declaration of Independence stated that 'all men are created free and equal'. We know that this is true only in a measure. Unfortunately, environment, heredity, poor food, living habits, ignorance and disease have forced upon a certain portion of our community bodily impairments for which, in the main, they cannot be held responsible. The source of these impairments is no respecter of persons; it invades all grades of society, and, of course, it is manifest that employment of some form or other is necessary for the majority of persons. A part, at least of the obligation to provide employment belongs to industry because of its immediate and remote responsibility for the environmental conditions.

As medical science develops and becomes more exact in diagnosis and examination, we find that the physical perfect individual is fast becoming a rarity. We can generally uncover some physical defect in everyone. Thus it is that industry can never attain the place where it employs only the perfect man and perfect woman. It becomes a self-evident fact that we must accept for employment individuals with certain impairments. In the industrial world there are various grades of physical requirements and into these certain individuals with impairments can and should be fitted.

The examination of the prospective employee then becomes a physical appraisal for the purpose of making it possible for industry to know the condition of the various new labor units which it brings within its walls and to place them suitably. This statement admits

the unassailable declaration that industry should not employ individuals who through employment constitute a menace to themselves, to others, to property, or to service.

The physical examination of the prospective employee, it is to be hoped, when carried out at the hands of industry in a proper fashion, may become one of the most valuable of our public health and health maintenance agencies. As individuals are examined and their several sub-standard factors uncovered and appraised, it is apparent that, if their physical condition does not preclude employment, there exists the potential urge to correct the ordinary impairments."

Aside from the advantages of rejecting hazardous persons or the placement according to physical abilities, the initial pre-employment examination has no other function than to provide an urge for the correction of impairments. Once the industry is entered, if no further physical appraisal is made, a real opportunity along the lines of health conservation is lost. To justify from all angles the pre-employment examination, it should be coupled with physical surveys at certain times in the course of employment.

In a general discussion, no attempt to classify the various types of impairments found can be made other than to say that they may be grouped as minor and major, and correctable and non-correctable.

Individuals with no discernible impairments should come under the schedule of the yearly health survey, whereas those with major or minor non-correctable impairments should submit themselves for examination at intervals to be determined by medical advice. In the light of our present understanding, the care and correction of such impairments is not within the scope of the field of endeavor of the industry.

"A sick man is rarely considered an asset, but a man who has been sick and recovered, even though with physical residues, who is cooperative and who knows how to maintain health, is oftentimes a more reliable, loyal and appreciative employee than the individual who has never been ill. As we consider the monumental contributions to society, literature, art, science, and music, we are astonished to find that in many instances they have been made by chronic invalids and frequently the greatest contributions have been made during their periods of extreme discomfort or even serious illnesses. The physical imperfect individual deserves and must have real consideration when he seeks industrial opportunities".

To bear out this contention one has only to look back a few years and consider the regard with which one of our greatest and largest corporations held an individual who personified physical imperfection - the great Steinmetz, and yet whose prolific contributions, scientific skill and accuracy were held to be invaluable by the industry by whom he was employed.

VII-INCIDENCE OF DISEASE AMONG WAGE EARNING ADULTS.

Some insight into the incidence of disease among wage earning adults may be gained from the results of a study by Theodore L. Squier, M. D. in the Wisconsin Medical Journal. He states that in a large series of cases examined in the early adult age group the prevalent impairment found was that of correctable chronic focal infection which is such a factor in the etiology of the chronic degenerative diseases of later life. Such sites as teeth (periapical disease), tonsils (hypertrophic and infected), prostate (chronic specific and nonspecific), were found to be the chronic foci prevalent in many outwardly healthy and normal adults. He emphasized the problem of pulmonary tuberculosis and illustrated three points for the control of this malady, namely (1) The workers who have quiescent or arrested tuberculosis must be watched carefully, (2) that home care is a poor substitute for adequate sanatorium treatment, and (3) that careful supervision with the hours of work controlled by clinical signs is of very material aid in the rehabilitation of the tuberculous worker.

Chronic cardiac valvular disease was considered from the standpoint of its incidence and necessity of controlling further damage to an already damaged circulatory system. Syphilis was mentioned only to remark of its surprisingly rare incidence among those seeking employment or those in employment.

In summary he states that the incidence of illness in apparently normal individuals emphasizes the value of early discovery and correction of the minor impairments met with so commonly with a view

postponement and adding to our knowledge concerning the degenerative diseases of later life.

VIII-VALUE OF MEDICAL DEPARTMENT TO INDUSTRY

Since the advent of legislation relative to Workmen's Compensation, medical departments have become indispensible to industries, large and small. Aside from their function along the lines of preventive medicine and hygiene, which tends to decrease the illness among the workers and increase their efficiency, first aid facilities must be available at the plant in the event of accident and expert professional advice and testimony are in demand in the adjustment and final disposition of these cases.

The lines of endeavor carried out by modern medical departments in industry is outlined in a paper by R. V. Rickcord, Director of Personnel and Statistics, Brooklyn Edison Company as follows:

> "The medical activities of this company may be divided into three groups, namely the examination of new employees, the maintenance of the health of present employees, and the care of accident cases".

With regard to the first mentioned activity, the examination of applicants, this might be said to be an almost absolute necessity to industrial concerns. In the first place, it seems to be an exceedingly unwise procedure to allow an employee to do work for which he is physically unfit.

It is, of course, the medical bureau's responsibility to make the decision as to whether the employee is suitable for a particular vacancy or not. In modern organizations the physician is or

should be provided with an analysis of the various positions. This job analysis defines the work and the conditions under which it is performed and provides the basis on which the physician may make this judgment.

One of the important uses of physical examinations of applicants is the opportunity it gives for adjusting them to the right work. Most concerns can and do employ individuals with minor defects, but they keep in close touch with them to see that the condition is not exaggerated. The procedure that no concern can afford to adopt is the wholesale employment of decidedly defective individuals. This undesirable condition is prevented by physical examination of applicants.

Large industries disburse much money in the way of sick pay, insurance, and death benefits. In the Brooklyn Edison Company these payments amount to approximately a quarter of a million dollars annually. If permitted, they might easily reach twice that amount, but instead they are limited through the physical examinations given to applicants for employment.

As regards the second group of activities, namely the maintenance of the health of the employee, perhaps the largest part of the physician's time under this head is given to voluntary requests on the part of the employees for advice and minor treatments. These treatments are almost entirely of a type that the employee would neglect if it were not made convenient for him to receive attention.

The advantage to the company of these treatments is that in

numerous minor conditions, for which ordinarily time off would be taken, employees are enabled to remain at work and continue to devote their time to the job almost without interruption. Those employees who would ordinarily slow down and become inefficient, because of a temporary painful condition, are often relieved by treatment and quickly return to their usual efficient selves.

The third group of activities consists of accident treatments and related work. In many concerns accident cases absorb much money, by the absence of employees and disability compensation. Therefore, any improvement that can be introduced both in the way of prevention and in the treatment of accidents is of great benefit to industry. It is a good start to insist that every accident of every kind, no matter how minor, be reported to the medical bureau. Also it is not too much to ask that every employee who reports receive treatment from the physicians of the company. Only by such rules can the supervising physicians be held responsible for preventing the development of serious conditions.

If there were any question as to the value of systematic industrial medical activities, the work conducted in connection with accidents alone would remove such a question. When an accident occurs it is a great reassurance to feel that the condition of the employee was known before the accident took place, and that only as much compensation can be claimed by him as is justified by his injury.

Thus, from the above, we see how indispensible the medical

unit has become to the organization of industry from a purely business and economic standpoint.

IX-WHAT BUSINESS EXPECTS OF MEDICAL PROFESSION

Because in this age of industry upon which we find ourselves so totally and willfully dependant, and because it is the goal of medicine to alleviate the suffering and illness of mankind, business perhaps has a right to expect certain things from the medical profession. This aspect is adequately revealed in a paper by James S. Kemper, President of the Lumberman's Mutual Casualty Company, as follows:

"In the history of the world, this of all times is the economic era. In this era the world looks to business for the maintenance of that standard of living which makes the home life of the artisan of today more expansive and comfortable than that of the king of yesterday. American business has measured up to this opportunity. American standards of living, conveniently measured in the number of automobiles or bath tubs, for example, surpass anything heretofore known.

To grasp fully the opportunities of the future, business must first of all be kept physically fit. We look to you of the medical profession to do this job for us and to do it even better in the future than you have in the past. We ask you to help fit the applicant to the work suited to him. The efficiency of the men and women in business should be improved by taking adequate care of those whom the workers leave at home in the morning and return to in the evening. We should extend every effort to see to it that the man who is injured is made comfortable and is returned to work without depreciation of his capacity to do work.

We expect in this field that you will indeed go on from wonder to wonder so that the traumatic surgical marvel in repair and rehabilitation of today will be the commonplace of tomorrow. I am sure you will not want us to set for you an attainment less loftier. Particularly we want you to place an emphasis upon human values that will prevent the possibility, however slight that possibility may be, that dollars and cents will ever, even intentionally or thoughtlessly, be allowed for one moment to weigh in the balance against a sacred human life. This treasure lies in the preservation of invaluable personalities, in retention of loyal and experienced workmen and in the satisfaction that comes from defeating death, disfigurement and disaster.

Business expects to be held to the highest mark of idealism in the care of its injured workmen. By the same token business expects

that traumatic surgery will cooperate in eliminating those who would prostitute the profession, who would bear false witness or condone perjury, or who would contribute in any way to an improper reward to an individual, which must always be to the disadvantage of the fair, honest and honorable."

The above quotation from an address delivered before the Conference on Traumatic Surgery explains a few of the demands business makes upon the medical profession.

X-RELATION OF PHYSICIAN TO INDUSTRY

The relation of the general practitioner and his attitude toward the rising new trend of social service in industry is largely concerned with the manner in which this affects his private practice. Any physician of good standing has expended large amounts in time, effort, money and study to attain his position and it comes within the code of the profession that equipped and willing as he is to render adequate medical service, it is within the realms of reason that he should expect a comfortable livlihood and a fair remuneration in return for the service he renders. He also has a right to expect that there be a market for his services. Should social service in industry attempt to annex the field of the private practitoner there would be adequate grounds for resentment on the part of these highly trained individuals.

However, the growth of social service in industry has been wisely cand carefully managed so that the work attempted has not aimed to limit the clientele of the doctor in private practice nor to even make inroads therein. The apparent aim of social service in industry is in harmony with that of the general practice of modern medicine, namely to attempt to eliminate and to prevent disease wherever possible by means of health education and public hygiene. Aside from physical examinations by which their personnelis safeguarded, facilities for the immediate treatment of those accidents occurring within the plant, and the treatment of minor ailments among the employees which would otherwise be neglected or go unattended, little in the way of therapy is

attempted. However, in many industrial medical units an earnest effort has been made to cooperate with the family physician by reference of patients who are in need of further treatment to him, by turning over to him the results of laboratory findings and tests as an aid in his arriving at a diagnosis and in various and kindred ways. The relation between the physician and social worker in industry should be made to be a charitable and harmonious one, with an attitude of mutual respect and understanding between them.

Sappington and Morbaker in a recent paper in the Jounnal of the American Medical Association have stated their viewpoints as follows:

> "Where well directed systems of health supervision in industry have been inaugurated, the general practitioner has found this service distinctly helpful. Diagnostic material with recommendations of procedure are sent him by industrial groups for his guidance; physical defects are referred to him for correction; chronic diseases which are not considered the responsibility of industry are sent to him for prolonged observation and treatment."

It is easy for the general practitioner to say to the employee who consults him, "You must change your job" without knowing what this involves. The real answer to this situation was given by Dr. Harry Myers some years ago when he said. "No doctor has a right to give such advice unless he is willing to go to the plant and personally see what his patient is doing and under what conditions he is doing it". On the other hand, it should be said that the industrial physician should not infringe on the rights of the family physician by treating members of the employee's family.

XI-ORGANIZATION OF MEDICAL DEPARTMENTS IN INDUSTRY.

A suggested plan for the organization of a group medical service for application to small industries and well adapted for their needs in the safeguarding of the life and health of the employees is outlined in a paper by C. D. Selby, M.D., F. A. C. S. of Toledo, Ohio, read before the Conference of Traumatic Surgeons, as follows:

I - Plant Service:

1. Visits to plant dispensaries or first aid rooms.
2. Sanitary inspection.
3. Health instruction
4. Physical examinations.

This plant service is entirely within the plants. If a factory is too small to justify a dispensary and individual attention, the service is rendered in the group clinic.

II - Clinic Service:

1. Treatment of injuries and occupational diseases, occurring in small plants which have no dispensaries.
2. Special examinations for the purpose of rendering opinions as to diagnosis, cause, and disability of cases in dispute.
3. Treatment of private patients (a group may practice general and special medicine as it sees fit).

III- Hospital Service:

1. Surgical and orthopedic care of serious injuries,

including reconstruction work.

2. Medical treatment of serious occupational diseases.

3. Care of private patients.

4. Hospital betterment (all of the active staff should occupy positions in one or more general hospitals and assist in their betterment).

IV- Consultation Service:

1. Survey of plants to determine their medical and allied requirements.

2. Recommendations submitted in detail.

3. Assistance in organizing plant medical departments.

4. Supervision of plant medical department.

The organization may consist of the following:

1. The directing committee or individual director.

2. The active staff, which may be composed of
   (a) A plant physician
   (b) A general surgeon
   (c) An orthopedic surgeon
   (d) An internist, who may be also the industrial hygienist.

3. The auxillary staff. This is composed of
   (a) Professional assistants in clinic hospital and plants.
   (b) Plant nurses, attendants and clerks.

4. Allied specialists. This comprises the following specialists whose services are supplied on request:
   (a) Oculist
   (b) Roentgenologist
   (c) Dermatologist
   (d) Dentist
   (e) Laboratory man, etc.

5. Clinic Staff. This includes the assistants that are necessary for the service in the central clinic and for carrying on the affairs of the group.

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