abandoned. Men will have worthy goals to guide and admirable goals of attain-

ment to inspire.

Traditionally, labor unions have performed two important functions in industry. The first, and most active, has to do with welfare; the second, with production. The trade union has certainly raised the standard of living of its members. It has established a wage structure. It has regulated hours and working con-Under a policy of full employditions. ment these functions will be routinized. They will still be enormously important for they will need to shift to higher levels of operation-in most countries, to the national level. But they should not demand the assiduous attention that they did on local levels. This should leave labor free to develop its other great function of increasing production. Through this door—if labor opens the door, and passes through—labor will move into a promised land, long beckoning.

Labor can and should arrange its

staff and its internal affairs better to cooperate with management. Labor must become management-minded. This has nothing to do with class-strugglism. Management is a form of creative activity. Managers are workers. The chasm -now closing—between managers and workers has been artificially induced by the attachment of management to ownership. As this set-up changes, as managers and workers draw nearer, labor can and must understand the objectives and techniques of management. Labor must gauge its demands on the welfare level by the volume of production achieved on the technical level. Labor must move toward participation in management by fitting itself for such participation.

To one who has read labor history, watched with jealous eye all labor developments, participated in labor conferences and viewed national and international events, this appears the only way in which labor can cease playing

second fiddle.

## Placement of Disabled Workers

By P. S. DEQ. CABOT

THERE is some evidence that public interest in the employment of the physically impaired in industry is increasing. Prior to the outbreak of the war, business and industrial firms were slow to recognize the productive potentialities of the handicapped, especially those with physical disabilities. Opportunities for the employment of such persons were limited, partly because they could not meet rigid physical requirements, but chiefly because of the lack of confidence on the part of employers.

Gradually this attitude is changing. Several reasons may be found for this. More improved methods of the sel-

tion, placement, and promotion of employees have focused attention upon the positive contributions each employee can make toward raising the production rate. At all levels of responsibility the more enlightened leaders in industry appreciate the significance of the scientific approach in an analysis of the (1) effect of working conditions upon employee morale and efficiency; (2) the social and interpersonal relationships among employees; (3) an objective determination of the particular skills, duties, and responsibilities required of jobs at all levels, with a corresponding emphasis upon a careful evaluation of an applicant's skills, abilities, and personality through well validated testing and interviewing procedures. Moreover, advances in medical knowledge, particularly in the specialty of orthopedics, have contributed in no small

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measure to a better understanding of the capabilities of the physically impaired.

The critical need for manpower brought about by the demands of war has forced upon employers the necessity for considering for employment every potentially productive individual. The physically hanoicapped person has accepted the challenge and demonstrated his worth. Again, carefully conducted researches have demonstrated well that the physically handicapped are at least equal or superior to the able-bodied in production, with lower accident and turnover rates and with similar significant results in regard to absenteeism. For example, in a survey conducted by the Bureau of Labor Statistics<sup>1</sup>, 300 manufacturing concerns reported that of approximately 63.000 physically impaired workers 87% were just as efficient, 8% more efficient, and only 5% less efficient than the able-93% had an absentee record as good as, or better than the physically able and only 7% had one worse. So far as accident rate was concerned, 89% of the physically handicapped had one lower than, or as good as, the physically able, with 11% having a higher rate. In labor turnover 89% of the physically handicapped had a record comparable to, or better than, the able-bodied with only 11% having one worse.

Statistics from other sources, notably the United States Office of Education, Such facts as confirm these findings. these should tend to dispel prejudices and convince employers that, apart from the wholesome and satisfying effect on the individual, the physically handicapped is a good business investment.

Finally, the rapidly developing reconditioning and rehabilitation programs for disabled veterans conducted by the United States military services have captured the attention of industrialists and the public in general. The legal protection of a veteran's reemployment rights carries with it an implication that in the case

Already there have been written into the policies of numerous industrial and manufacturing companies provisions which specifically deal with the retraining and rehabilitation of physically or otherwise disabled veterans. Whether industry will continue to hire those disabled employees who successfully contributed to the war effort or replace them with physically disabled veterans may become an issue with social consequences of no little importance. At any rate it is clear that current available figures relating to those with physical handicaps will be increased by the end of the war. So much greater then will be the responsibility of society to make every effort to continue present efforts in encouraging the employability of such handicapped individuals.

In a National Health Survey conducted by the United States Public Health Service in 1935-36 it was estimated that between 2,500,000 and 3,000,000 physically disabled persons were available for employment in industry. When we consider further that in 1942 approximately 6,500,000 men between the ages of 15 and 64 were identified as able to work under industrial conditions, provided vocational guidance and selective placement were carried out, the task ahead is staggering.3 Yet some progress has been made. In 1944 the United States Employment Service of the War Manpower Commission (Washington, D. C.) found jobs for 300,000 handicapped work-

of the physically disabled veterans industry should see to it that measures be taken to continue the excellent results achieved by the Army and Navy, and especially the Army Air Forces, before the veteran is discharged.2

<sup>1</sup> Trump, C.A. and Montgomery, F.J.: Impared workers in industry. Monthly Larbor Review, U.S. Dept. of Labor, Bur. of Labor Statisties, 1944, 59(Oct.), 677-683.

<sup>2</sup> Jostes, F. A.: The plan of the medical department of the United States Navy for rehabilitation of Navy and Marine Corps personnel. In Convalescence ana Rehabilitation, Proc. Conf. of Comm. on Pub. Health Relations of N. Y. Acad. Med., 1944, 21-31.

Thorndike A.: The reconditioning of patients in Army Service Force Hospitals, (supra) pp. 51-55.

Rusk, H. A.: The convalescent training program in the Army Air Forces, (supra) pp. 81-89.

Rusk, H. A.: The Army Air Forces Convalescent Training Program. Southern Med. J., 1945, 38, 12-16.

<sup>3</sup> Donahue, W. T. and Tibbitts, C. (Eds.): The disabled veteran. Ann. Amer. Acad. Pol. and Soc. Sci., pp. 102.

ers representing a gain of almost 50% over 1943.4

Many companies in the United States have demonstrated the profitable employment of the physically handicapped. Within the scope of this paper it is possible to mention only a few illustrations. For many years the Ford Motor Company has employed workers with different kinds of physical disability. total number so employed in the Baton Rouge plant in 1944 was 8,739. hundred who had one arm amputated worked as tool crib attendants, stock counters, clerks, elevator operators, and 150 drug employees door attendants. with no residual hearing and no speech ability worked as assemblers and machine 162 epileptics were or press operators. placed at benches doing burr and file work, packing stock, inspecting small parts, and handling light stock. totally blind employees, among other tasks, wrapped and packed stock, inspected small parts by means of gauges, and fabricated cardboard cartons. employee with both hands amputated was a build-up and tear-down inspector of Pratt & Whitney engines.

With carefully planned and executed plans, especially for preplacement medical examinations and subsequent selective placement procedures, the Lockheed Aircraft Corporation has on its payrolls approximately 25% of its 3,800 medically limited employees who have commonly classified serious physical disabilities.<sup>5</sup> These employees work in the factory as well as in office and tech-

nical occupations.

In the retail field, the J. C. Penny Company, Inc., reports with great satisfaction the employment of more than 100 men who have lost the sight of one eye. Twenty-six employees totally deaf, have worked regularly in warehouses. These and others, including cases of facial disfigurement, spastic paralysis,

Walter Kidde & Company, Inc., engaged for many years in the manufacture of life saving apparatus, reports gratifyingly of the performance of the handicapped, especially those who are blind. the Consolidated Vultee Corporation approximately 4.000 employees with physical limitations have helped in the production of Liberator bombers for the United States Forces. In the summer of 1944, 400 disabled veterans were employed by the Oregon Shipbuilding Corporation. A unique treatment-training program is carried out by the Arma Corporation which for the past 26 years has made exclusively for the United States Navy precision instruments. By this scheme, through the services of and experienced occupational therapists, naval servicemen with varying kinds and degrees of disability are employed and paid on the basis of their skills and demonstrated performance.8

So far, we have limited our remarks to a consideration of the physically handicapped. We shall continue to do so, but in passing will note what is a comprehensive and adequate definition of an applicant for employment. The following one adopted by the United States Employment Service of the War Manpower Commission gives a breadth and scope to the problem of the proper placement of the handicapped beyond the limits of this discussion:

"Any applicant is considered handicapped when he has a physical, mental or emotional impairment or deficiency which:

tuberculosis, and infantile paralysis, have been employed on a strictly business basis and all have been successful.<sup>6</sup>

<sup>4 (</sup>Anon.): Placement of handicapped workers in 1944. Monthly Labor Rev., 1945, 60 (May), 1008-1009.

<sup>5</sup> Plummer, P. B.: Lockheed's use of physically handicapped workers. Industrial Relations, 1944, 2 (Oct.), 7-9: 35

<sup>6</sup> O'Connor, E.: Fifteen years' experience with handicapped employees. Executives Service Bull., Metropolitan Life Insurance Company, 1944, 22 (Oct.), 5-6.

<sup>7</sup> Rigeron, D. C.: Industrial rehabilitation of the handicapped. Industrial Medicine, 1945, 14 (March), 174-177.

<sup>8</sup> Nelson, R. F.: Plan for rehabilitating handicapped veterans. Executives Service Bulletin. Metropolitan Life Insurance Company, 1944, 22 (Sept.), 1-2: 8.

A somewhat similar program is also carried out in the Birmingham General Hospital, Van Nuys, California, in cooperation with the Northrup Aircraft Company, Los Angeles.

- (a) Requires the applicant to modify or change his occupation.
- (b) Makes it difficult for the applicant to secure employer acceptance for suitable work.
- (c) Requires special consideration to prevent the applicant from undertaking work likely to
  - (1) aggravate the disability or
  - (2) cause him to jeopardize the health or safety of others.
- (d) Restricts the opportunities of an inexperienced handicapped applicant for entering industry, trade or profession.
- (e) Requires referral to a cooperating agency for restorative or other adjustment services."9

Actually, job performance does not depend exclusively upon one's anatomical structure. More important are such enthusiasm factors as and interest. motivation, attitude, perseverance, and concentration. No individual ever works at his greatest capacity all the time. In fact, in this respect the physically handicapped is more like the able-bodied employee than he is different. enough, skill is required. But the employee with a physical disability may either learn a skill to compensate for that lost by the absence of a particular part of the body or be placed in a job where he can still be a sound business or industrial investment.

It is important to note, too, that the physically handicapped should not be segregated from other employees. To do so would tend to emphasize an apparent disability and to make the handicapped unnecessarily self-conscious. disabled wish to be considered normal. They know that if well placed, they will do a good job. They are also willing to assume responsibilities according to their proved qualifications. Promotion based on performance record and on the ability to meet new qualifications should apply to physically handicapped and nonhandicapped alike.

After management has decided to develop a plan for the selective placement of the physically handicapped, has formulated its policy, and has delegated the responsibility for carrying it out, the next consideration is the machinery for doing the work. At this point it is important to emphasize that basically the principles underlying the placement of the physically handicapped also apply to the non-handicapped:

- (1) We must know the applicant. In appraising him we consider his general and specific qualifications by considering his former experience, training, educational background, his aptitudes, personality, and interests.
- (2) We must know the job. We need to know the nature of the skills, knowledge, and abilities involved; the duties and responsibilities—general and specific, regular or occasional—and the qualifications required.
- (3) We then proceed with selecting that applicant whose qualifications best fit him for the job.

Placing the physically handicapped follows the procedures of good job analysis with a slightly different emphasis upon the physical and environmental requirements of the job and the physical capacities of the applicant. The physically handicapped, like the ablebodied, should also qualify for any job in terms of all the factors and qualifications concerned. Emotional stability, specialized abilities, and educational standards should be demanded of applicants regardless of physical disability.

It is undesirable to proceed by listing a series of jobs which can be done by individuals with specific disabilities. Two people with arrested tuberculosis or two others with an amputated left arm may adjust quite differently to their disability. Their different work histories, educational backgrounds, and temperamental traits may be responsible for one to be a failure

<sup>9</sup> Selective Placement for the Handicapped, War Manpower Commission, United States Employment Service (Rev. Feb., 1945), United States Government Printing Office, Washington, D. C.

and the other a success on the same job. Again, all jobs designated by the same title do not necessarily give as sufficient an indication of successful placement as the working conditions, social relationships between supervisor and employee, and the physical operations which may vary from one part of the country to another, from one organization to another, and even from one department or plant to another. This group approach, although helpful, violates the essential principle of individualized placement with a careful consideration of what qualifications this applicant A has for this job Two main areas of information are therefore needed:

(a) The physical demands of the job (physical demands analysis);

(b) The physical capacities of the individual (physical capacities appraisal).

With this approach it is possible—as it is desirable—to emphasize an applicant's positive contributions to a job rather than to exaggerate the disability as a possibly negative factor. As we have already seen, this approach is also individualized, focusing interest and analysis upon the sum total of an individual's qualifications for a particular job which has also been analyzed with respect to physical activities and working conditions.

In this analysis the preplacement medical examination is an essential step. It differs from a general physical examination by analyzing more precisely the physical limitations and the functional capabilities of the applicant in the same terms which are used in an analysis of the jobs. The physical demands analysis requires analysts with special training; but it is wise procedure to have as much participation as possible by supervi ion, both on terms of understanding the processes and in assuming the responsibility of continuous studies of the same The job is analyzed as to what is done and how it is done. Care must be taken that it is not the individual who is analyzed. He may have developed some particular method for achieving

a desired result, but this method is not necessarily required of him. In addition, caution must be used not to confuse physical activities of an emergency nature with those regularly required by the job.

After the data concerning the job and the applicant are collected, the employment interview and subsequent steps follow largely those normally considered in the employment of the physically able. However, special precautions should be taken with carefully conducted periodic physical examinations in the case of the physically disabled, together with carefully collected records on illnesses, accidents, and any corrective therapeutic action. In addition to such training procedures as may be necessary to perfect skills already demonstrated by the physically handicapped and a continuous remedial treatment program, a flexible system of transfers should be available.

With the foregoing procedures put into practice, and once prejudices and ignorance are removed, there will be in the minds of management little doubt about the productiveness of the physically disabled. But the program must be carefully planned, scientifically conducted, and well understood by all employees, especially at the supervisory level.

The following statement represents a comprehensive program governing the general topic to which we have referred briefly:

- 1. The criterion for the training and employment of disabled workers should be the employability of the worker, whatever the origin of the disability.
- 2. There should be the closest collaboration between medical services for the disabled and vocational rehabilitation and placement services.
- 3. Specialized vocational guidance for the disabled should be developed in order to make it possible to assess each disabled worker's capacity and to select the most appropriate form of employment for him.

4. (1) Wherever possible, disabled workers should receive training in company with able-bodied workers, under the same conditions and with the same pay.

(2) Training should be continued to the point where the disabled person is able to enter employment as an efficient worker in the trade or occupation for which he has been trained.

(3) Wherever practicable, efforts should be made to retrain disabled workers in their former occupations or in related occupations where their previous qualifications would be useful.

(4) Employers with suitable training facilities should be induced to train a reasonable proportion of disabled workers.

(5) Specialized training centres, with appropriate medical supervision, should be provided for those disabled persons who require such special training.

5. (1) Special measures should be taken to ensure equality of employment opportunity for disabled workers on the basis of their working capacity. Employers should be induced by wide publicity and other means, and where necessary, compelled to

employ a reasonable quota of disabled workers.

- (2) In certain occupations particularly suitable for the employment of seriously disabled workers, such workers should be given preference over all other workers.
- (3) Efforts should be made, in close cooperation with employers' and workers' organizations, to overcome employment discriminations against disabled workers which are not related to their ability and job performance, and to overcome the obstacles to their employment including the possibility of increased liability in respect of workmen's compensation.

 Employment on useful work in special centres under non-competitive conditions should be made available for all disabled workers who cannot be made fit for normal employment.

7. Information should be assembled by the employment service in regard to the occupations particularly suited to different disabilities and the size, location, and employability of the disabled population."<sup>10</sup>

10 International Labor Office: Official Bulletin, 1944, 26 (June), 72-73.

## To Build or Not to Build

By GRANT CRAWFORD

FOR several years the local governments throughout Canada have been giving consideration with varying degrees of enthusiasm to the matter of planning for the post war years. Their interest was aroused by the work of the Reconstruction Committee of the House of Commons, by their memories of the difficulties resulting from the unplanned

handling of a previous national emergency, the depression of the 30's, and the price paid by all levels of government by reason of the lack of planning in those years.

As a result of publicity along these lines there has been a rising chorus of suggestions and demands from many quarters that the municipalities should plan now for the extensive construction and works programs to be developed

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