

atherosclerosis, there appears to be no immediate hope of overtaking this upward trend.

Nor should concern for the cardiac patient stop at the conventional retirement age of 65. At present 7.7 per cent of the total population is above 65, and in 50 years this will have increased to 13.2 per cent. Useful, productive years should be put into the lives of this older generation, or the burden of their support may become too great for the younger workers to carry.

During the acute shortage of manpower which prevailed at the time of World War II, employers had an opportunity to gain experience in the employment of the physically handicapped. This experience as reported by such men as Crain³ of Eastman Kodak Company, Poole and Bent⁴ of Lockheed Aircraft Corporation, Carlisle and Gibson⁵ of Merck & Company, Edmonds and Feil⁶ of the Erie Railroad Company, and Irvin⁷ of the Cadillac Motor Division, General Motors Corporation, was surprisingly good. A study by the Bureau of Labor Statistics of the United States Department of Labor⁸ can be cited as typical. Observations were made on 1,840 workers with heart disease, who were matched as to age and experience with 3,055 unimpaired workers performing jobs of the same type. The cardiac worker had a slightly higher rate of absenteeism than the control group, but this difference amounted to only 2½ days more per year. On the other hand, the cardiac group did not display greater proneness to disabling or nondisabling injury, and what is more significant, they outproduced the healthy controls by an average of 2.4 per cent.

For some of you who may be concerned about the effect of including a certain number of substandard risks in low premium, group insurance plans, Poole and Bent⁴ found at Lockheed that the claims of 777 "cardiacs" for lost time payment, hospitalization, medical and surgical benefits were fewer on the average than those in the plant in general.

Not only do persons with heart disease work and work well, but they can perform a wide variety of jobs. Stroud,⁹ some years ago, studied 40,000 workers employed at 1,000 different operations in 25 separate industries. From these observations he concluded that 25 per cent of all jobs in industry could be performed by the person with heart disease without compromising either the job or the jobholder.

I have avoided the use of the term "handicapped worker" in referring to the cardiac patient. The patient with heart disease can be considered as handicapped, just as any one might be, only when he is called on to perform work beyond his physical capabilities. The fact that he can match or exceed the production of the

3. Crain, R. B.: Placement of the Cardiac in Industry, *Indust. Med.* **12**:368, 1943.

4. Poole, F. E., and Bent, J. R.: The Employment of Cardiacs, *Indust. Med.* **13**:479, 1944.

5. Carlisle, J. M., and Gibson, A.: Clinical, Electrocardiographic and Pathologic Correlation of Certain Common Cardiac Conditions, and Evaluation of the Cardiac Patient in Industry, *Indust. Med.* **13**:783, 1944.

6. Edmonds, R. W., and Feil, H.: Cardiovascular Problems in Railroad Industry, *Indust. Med.* **17**:7, 1948.

7. Irvin, E. A.: Personal communication to the author.

8. Bureau of Labor Statistics Survey, United States Department of Labor. Survey may be obtained from New York Regional Office, 341 Ninth Ave., New York 1.

9. Stroud, W. D.: The Rehabilitation and Placement in Industry of Those Handicapped with Cardiovascular Disease, *J. A. M. A.* **105**:1401 (Nov. 2) 1935.