

pects. This is in comparison to 180 miles an hour, a speed now quite common. The bulk of the air travel in the United States about a year from now will be carried in planes of from 40- to 60-pas-

senger capacity, with a few of 100-pas-senger capacity. It is not expected, he said, that any of the super-sized airplanes will be in use for some time.

Science News Letter, December 8, 1945

ENGINEERING

Disabled Are No Problem

Physically impaired workers present no employment problem to industry if definite program of fitting man to job is followed.

► PHYSICALLY impaired workers, whether returned veterans or others, present no employment problem to industry if management follows a definite program of fitting the man to the job, declared John V. Grimaldi, research engineer, National Conservation Bureau, New York, at the meeting of the American Society of Mechanical Engineers in New York. Fitting the job to the man is frowned on in the modern selective placement program and "only should be considered as a last resort," he said.

Mr. Grimaldi is a research engineer in the Association of Casualty and Surety Executives in its national conservation bureau. The successful placement of the physically impaired depends primarily on good personnel or management plan-

ning, he emphasized.

"Before one can recognize fully the employment equality between the impaired and the normal worker, he must cleanse his thinking of any misconception concerning the impaired," he stated. "He must be able to look at a noticeably impaired worker objectively and remember that a twisted, deformed or lame body may be equipped, for example, with a fine mind or be capable of extreme dactyl dexterity. An impaired person may have any grouping of a number of outstanding abilities.

"It is generally our unfamiliarity with severe impairments that corrupts our thinking," he explained, "so that we evaluate the impaired solely in terms of the deficiencies we see. It would be more

appropriate if we regarded such workers not as physically disabled, but as physically exceptional."

The program for the successful placing of impaired workers, Mr. Grimaldi outlined, should contain a definite company policy on rehabilitation, analysis of jobs with special reference to disabled workers, medical determination of an applicant's physical capabilities, matching men to the job, job training, and periodic review of such placements.

\$12,000,000,000 Business

► OPERATIONS of the Army Ordnance Field Service, storing and supplying to the Army the materiel of war, compares in scope with both the wholesale and retail functions of a vertically organized concern manufacturing \$12,000,000,000 worth of goods a year and distributing in both domestic and foreign markets, declared Brig. Gen. E. E. MacMorland at the same meeting.

Vital to the system, he said, were 53 storage depots covering 285,000 acres and employing 100,000 workers. Despite these storage facilities, during the last stages of the war some 35% of the total tonnage of ordnance supplies were shipped directly from manufacturing plants to ports, he said.

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SPEEDY CAMERA—Maj. Gen. Norman T. Kirk, Surgeon General, U. S. Army, and Brig. Gen. Edward L. Munson, Jr., Signal Corps, inspect the new speedy camera for medical photographs. Every phase of the picture-taking except focusing and clicking the shutter is automatic. (See SNL, Nov. 24)

ENGINEERING

Electric Finger Guides Machine Tools in Cutting

► WHAT MIGHT be turned an electric finger, designed to guide machine tools in the cutting of dies and other metal articles at once intricate in shape and precise in dimensions, is the invention on which patent 2,389,594 has been issued to a trio of inventors, S. H. Caldwell of Belmont, Mass., J. J. Jaeger of Cambridge, Mass., and Richard Taylor of Great Neck, N. Y.

A pointed metal rod or stylus slides over the contours of pattern or template. Metal masses connected with its shank move through hollow electromagnets. Every lateral or longitudinal deviation of the finger thus results in a change in one or more magnetic fields, and these changes, suitably relayed, control the action of electric motors that in turn guide the cutting tools.

Patent rights have been assigned to the Niles-Bement-Pond Company of Hartford, Conn.

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