

PSYCHOLOGY

Army Ready to Start School For Military Psychologists

Twenty-Five Men With Professional Training Will Be Picked from Selectees Each Three Months

THE U. S. Army will soon have for the first time a school for military psychologists.

Following the example set by Germany as long ago as 1937, the U. S. War Department has now approved plans opening the gateway to this new career to a limited number of professionally and personally qualified selectees who want to fit themselves for the specialized task of selecting, classifying and interviewing soldiers.

Every three months, about 25 selectees will be chosen to attend the military psychologist school. Only those will be picked who have satisfactory previous professional training and the personal qualities and stamina considered essential to success as Army officers.

The selection will be made during the 13 weeks in which the selectee is getting his basic military training.

Then he will serve a period of four or five months of training in military psychology comparable to the internship period of the student physician. As an interne, he will assist classification officers and examiners in interviewing, examining, trade-testing and classifying recruits and in following up the work of soldiers who seem in line for re-classifying or transfer.

During his internship, the military psychologist will attend a central school for four weeks. Then he will go to the regular Officers' Training School for three months.

On graduation day, he will receive a commission in the Officers' Reserve Corps, Adjutant General's Section, and then will serve for a year of active duty as a personnel technician officer.

The plans for the military psychologists' school have been worked out by a Committee on Classification of Military Personnel formed in cooperation with the National Research Council, with Dr. Walter V. Bingham as chairman. They are reported in *Science* (June 13).

Details are also revealed of the Army's new "General Classification Test," which supplants the World War "Army Alpha"

psychological examination for the sorting out of soldiers on the basis of their mental ability.

"I.Q.," mental age, school-grade equivalents and other misused and misunderstood terms are blacked out by the new Army testing plans.

Scores on the new classification test will be in terms of standard deviation from the average attained by a representative sample of adult men of military age.

Mental power, and not just seeped intellectual gymnastics will be measured by the new test. Cryptic and puzzle-like questions are banned, as are also any that might look childish, bookish or schoolish to the mature men drafted for the Army.

It is planned to be a practical, sensible test that both officers and men will take seriously with confidence in its fairness and worthwhileness.

Advice of the Committee was followed in all steps in the preparation and use of the test, one form of which saw actual service as early as last November.

Science News Letter, July 5, 1941

NUTRITION

Livestock Feed May Be Made Out of Thin Air

WE MAY all presently be eating beef and drinking milk and wearing real woolen suits, all made out of thin air. This revolutionary suggestion is contained in two communications in the British journal, *Nature*, (May 3 and June 7) which have just been received in the United States. They were prepared respectively by Prof. R. Benesch of the University of Leeds and by Dr. E. C. Owen, Dr. J. A. B. Smith and Dr. N. C. Wright of the Hannah Dairy Research Institute at Kirkhill, Ayr, Scotland.

Fixation of the nitrogen from the air is an old story now. German chemists helped the German war machine to hold out a couple of extra years, in 1914-18, by turning atmospheric nitrogen into nitrates for explosives and fertilizers.

The new World War brings the idea

of feeding synthetic nitrogen compounds directly to livestock, instead of turning them into plant proteins by fertilizing the soil and then feeding the plant proteins to the animals. It is reported that this is already going on in Germany, and the English and Scottish experiments point the way toward doing it in other lands.

Most successful of the synthetics is urea or carbamide, a relatively simple compound containing carbon, oxygen, nitrogen and hydrogen. It is not directly digestible or assimilable by animals, but it seemed possible that the microorganisms living in their digestive tracts could work it up into such shape that it could be absorbed as food. Experiments, both in the stomachs of cattle and in glass laboratory vessels, give evidence that this actually happens.

Urea cannot entirely replace proteins of vegetable origin in livestock feed, but it can be substituted for a considerable part of the more expensive nitrogen of plant proteins. It apparently works most successfully in animals equipped with the special stomach compartment called a rumen, such as cattle, sheep and goats.

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CHEMISTRY

Chemical Treatment Makes Fabrics Mildew Proof

A NEW rot-proofing treatment for fabrics, expected to be useful in defense as well as peacetime applications, has been invented by a woman chemist in the U. S. Department of Agriculture, Helen M. Robinson of the Bureau of Home Economics. Miss Robinson's process is covered by a public service patent, so that it may be used freely by any one, on a non-exclusive basis.

The process consists in immersing the fabric first in a solution of a copper or cadmium salt, then in a solution of morpholine, which is a complex organic compound. The reaction takes place within the fibers of the fabric itself, thoroughly impregnating it and discouraging the growth of mildew and other rot-causing fungi. The goods is stiff at first, but regains its pliability upon drying. Color and texture are not affected.

Army officers have shown interest in the new process as means of lengthening the useful life of tents, tarpaulins and sandbags. Possible peacetime uses include treatment of shower curtains, awnings, sails and other materials attacked by rot fungi.

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