

Some of the striking effects of the proper "feeding" of the soil with needed minerals were discussed by R. H. Lush, pasture specialist of the National Fertilizer Association.

Not only does the proper application of minerals to the soil improve the quality of vegetable and animal foods derived from fields and pastures, it greatly increases their quantity as well, the

speaker declared. Liberally fertilized pastures on one farm in Maine produced over 4,000 pounds of milk per acre compared to about 760 pounds of milk on the unfertilized native pasture. In another test, it was found that one pound of properly adjusted fertilizer was responsible for increased grass production sufficient to become eventually 24 pounds of milk or three pounds of beef.

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trial war effort, Dean A. A. Potter of the Purdue University engineering department told the meeting of the American Society of Agricultural Engineers.

This does not mean, however, that we have added a million engineers to our professional ranks. The courses given are to a large extent below college level, are designed specifically for particular ends, and do not lead to degrees.

"It is to be hoped," Dean Potter added, "that the experience which our engineering colleges have gained through the war training programs will be capitalized by them during the post-war period, not only in improving their regular programs of study leading to degrees, but also in establishing a large number of technical institutes all over the country with intensive practical programs closely linked to the needs of the industries in the communities."

There is an extreme need, Dean Potter continued, for fully trained engineers, which is not being met by the present regular programs of the engineering schools. The National Roster of Scientific and Specialized Personnel estimates that 40,000 to 50,000 additional engineers will be needed during 1943 and that the potential college production during the current academic year is only 17,000.

Intensive efforts are being made to close the gap, which the speaker described. Thousands of young men in V-1 and V-7 classifications are being given special courses in a number of colleges, under Navy and Army auspices, and they will be given V-12 classification and assigned to continue their studies on completion of the preliminary courses. By streamlining the professional curricula, and by cutting vacations to a minimum, it is expected that a new supply of well-trained engineers can be brought out in much less than the conventionally required time.

One hitch looms: unless the present Selective Service regulation on deferment is changed to extend the period beyond July 1, 1945, "a serious gap in the continuity of supply of engineers will develop very shortly. In general, the needs of our war industries will not be fully satisfied unless an 'industry reserve' or some other scheme is set up . . . for the purpose of insuring an adequate supply of engineers."

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A New England shipyard with 26,000 employees has among them approximately 2,600 women doing work ordinarily done by men.

AGRICULTURE—ENGINEERING

## Dehydrating Is Work

Housewives are warned that home food dehydration is designed to save food, not to minimize work, and that great care is necessary for success.

► HOUSEWIVES who expect to save labor by home food dehydration will be disappointed for it saves food and not labor, George W. Kable, editor of *Electricity on the Farm*, told the meeting of the American Society of Agricultural Engineers in Lafayette, Indiana.

Both canning and freezing require less labor and equipment. But dehydration is common kitchen talk throughout the country since other methods of food preservation are limited by the war and since dehydrated foods are used by the armed forces.

Dozens of bulletins have been issued and no less than forty manufacturers have indicated that they would like to build home food dehydration equipment. Materials have already been set aside to build 100,000 electric units this year.

Leading commercial food processors are also interested in home dehydration, Mr. Kable pointed out, and with good reason. They have invested more than \$100,000,000 in the industry, it is reported, to dehydrate upwards of two billion pounds of foods for the armed forces and lend-lease this summer.

"When the war is over they expect to sell dehydrated products to the public," he explained, "and they want to see to it how that the public taste for dehydrated foods is not ruined by poor products coming out of kitchen dehydrators."

Some of the well-designed small dehydrators have produced dried foods equal to commercial products in quality, but Mr. Kable warned that the same intelligent care in handling before and during drying is as necessary as with commercial size units.

"Whether housewives are pleased with their home dehydrated products

next winter will depend as much or more on how well they have learned and followed the correct procedures in dehydrating as on the drier they use to remove the moisture."

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### Greater Farm Yield Needed

► IN HIS ADDRESS as president of the American Society of Agricultural Engineers, Prof. H. B. Walker of the University of California Agricultural College expressed satisfaction at the government's policy of permitting more farm equipment to be manufactured, as a means for obtaining higher yields for the furtherance of the war effort.

Greater production, however, does not call for plowing up more acres, the speaker pointed out:

"While the agricultural policies of our nation during a decade or more, based as they were on a program of scarcity, have contributed to some loss in potential productive capacity, and a greater dependency upon food imports, this fact is evident, that at the moment we have no real need for added farm land area. The problem today is to provide the facilities to get the most from the land already available. This is basically a simple problem, even though it may be difficult of attainment in wartime."

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### Engineering Training Given

► MORE than a million young men and women have received special training in engineering, scientific and technical subjects, to fit them for specific tasks in the armed services and in the nation's indus-