

## HISTORY

**Scholar Wants to Know About "Marvelous Mule"**

**W**HAT was the "marvelous mule" for which, in the year 1025, Bishop Leo of Vercelli, in Italy, asked Duke William V of Poitiers-Aquitaine? This is the query that Loren C. McKinney, of the University of North Carolina, proposes. (*Isis*).

It seems that in the course of a serious correspondence, the Bishop ended a letter with the request that the Duke send him "the marvelous mule for which I have been asking for six years." To this the Duke replied, in the course of a longer letter, that he could not find in his neighborhood a horned mule, nor one with three tails or five feet. However, he added, he would send him a carpet if he had not forgotten the length and width desired.

The passage is interesting from the point of view of medieval humor, says Mr. McKinney, and also, perhaps, of folklore. There are known references to asses without tails, ears, etc., but not to mules, so he asks other scholars if they can enlighten him. Of course, it might have been some private joke between the Bishop and the Duke, which even their contemporaries might not have appreciated.

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## NUTRITION

**All Staple Foods May Be Brought Into Defense Line**

**A**T the close of the National Nutrition Conference for Defense which President Roosevelt called for May 26, 27 and 28, the signs point to a revamping of many staple foods to bring them into what might be called the vitamin defense line.

Food will not be food, it appears, unless it is supervitaminated.

First step in this direction was taken when bakers, millers and nutrition authorities collaborated to make available enriched bread and flour so that the staff of life would contain extra amounts of morale vitamin B<sub>1</sub>, pellagra-preventing nicotinic acid, and a third important B vitamin called riboflavin.

Many nutritionists and doctors gathered for the conference think this is only one step of many that must be taken to make sure that all people in the United States will be able to get the vitamins and other essential nutrients

they need to build health, strength and courage for national defense and for the difficult tasks that lie ahead.

Sugar and fats are next on the list for vitamin enrichment. Sugar, fats and plain white flour have for years been making up two-thirds of the calories in the diet of large numbers of people. It is almost hopeless to try to get the vitamins and minerals needed for health from the remaining one-third of food calories. Even if all the flour or bread taken is in the form of enriched bread and flour, it will not supply all the needed vitamins and minerals. It is only being enriched, with some exceptions, with certain of the B vitamins and iron.

This leaves vitamins A, D and C, and the minerals, calcium and phosphorus, to be supplied by other articles of daily diet. The place to put vitamins A and D, it is urged, is in fats. Butter is a good source of vitamin A but many cannot afford butter. Some margarines have vitamin A added, but nutrition authorities claim that all margarines and also lard and other edible fats should have vitamins A and D added. Vitamin D is the well-known anti-rickets vitamin. Vitamin A is needed for growth and general health and, important in defense planning, to prevent night blindness. If black-outs become a feature of our defense, we need particularly to be protected against night blindness.

Large supplies of bone and tooth building calcium and phosphorus as well as proteins are fed to the pigs or thrown away altogether each year in skim milk. Americans do not like to drink skim milk and they are not cheese eaters to any extent, but they do like sugar. So it has been suggested that sugar be enriched with dried milk solids, which would provide extra amounts of minerals and of proteins. Technical difficulties exist because the crystals of ordinary granulated sugar would not mix smoothly with powdered milk. A number of suggestions have, however, been made for overcoming this difficulty.

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## AGRICULTURE

**Planting Treated Sticks Feeds Vitamin to Plants**

**V**ITAMIN B-1 is conveniently supplied to plants by sticks of green wood, impregnated with the vitamin. These are thrust into the soil close to the roots. Every time the plant is watered, the vitamin is released.

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**IN SCIEN**

## RESOURCES

**Chromite Deposits of Alaska May Be Worked**

**C**HROMITE, source of chromium needed in highgrade steels and for plating metals, may be mined on the Kenai peninsula in Alaska, to replace imports from Turkey if the latter are cut off by Nazi conquest. Presence of the chromite deposits in the northern territory has been known for 30 years, and one of the ore bodies was worked in a small way during the first World War, but it was not until the summer of 1940 that a systematic survey of all deposits in sight was made by the U. S. Geological Survey.

A preliminary report on the Kenai chromite bodies has just been made by the Department of the Interior. Estimates of the quantities in sight total 150,000 tons. Of this about 70,000 tons is of shipping grade. The remainder is low-grade ore, requiring concentration on the spot before shipping would be economically practicable. There is good deep-water anchorage for ships, but short roads would have to be built over rugged country.

Last year's chromite requirements in this country were 660,000 tons, of which less than one per cent was produced within the continental United States. Turkey's share of our imports was 70,000 tons. Other overseas sources of chromite imports are Africa, Cuba, British India, New Caledonia and the Philippine Islands. Greece and the USSR used to be in the picture in a minor way, but they are of course sending us nothing now.

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## INVENTION

**Headlight Screwdriver Has Battery in Handle**

**A** SCREWDRIVER with a headlight was patented the other day. In the handle is a one-cell battery, and a lamp, which is aimed toward the business end. The shank is curved, so that the point is in line with the light. (*John V. White, Niles, Ohio.*)

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# CIE FIELDS

## MEDICINE

### Pneumonia Drug Found Effective in Malaria

**A** DRUG originally developed as a pneumonia remedy may become a successor to quinine for treatment of malaria, it appears from use of the drug in bird malaria reported by Dr. Robert Hegner, Evaline West, Mary Ray and Marian Dobler of the Johns Hopkins School of Hygiene.

The drug is a quinine derivative with the long name of hydroxyethylapocupreine dihydrochloride. Dr. W. W. G. Maclachlan and co-workers in Pittsburgh used with good results in treatment of pneumonia.

The effects of the drug are similar to those of quinine hydrochloride in treating malaria in ducks, pigeons and canaries, Dr. Hegner and associates report to the *American Journal of Hygiene*. The new drug has the advantage of being less toxic than quinine hydrochloride. Consequently larger doses can be given without harm to the malaria sufferer.

"Since malaria parasites in birds have been found to react to drugs similarly to those in man, it seems probable," Dr. Hegner suggests, "that hydroxyethylapocupreine dihydrochloride will be as effective against human malaria as it is against bird malaria."

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## LANGUAGE

### Spanish Schoolbooks For Young Indians

**A** NEW tool to build friendship between the United States and Latin America is at hand—and all because Papago Indians of the Southwest asked Uncle Sam for schoolbooks translated into three languages, including Spanish.

Possibility that Indian schoolbooks, now being translated and printed in bilingual English-Spanish version, will offer a lively and attractive introduction for white children to the Spanish language is seen by Dr. Willard W. Beatty, U. S. Office of Indian Affairs director of education. First of the new books comes off the press in June.

Dr. Beatty holds the educational theory that a "pony" need not hide in the back of a language book to be consulted only when teacher is not looking. In some of the Indian Office's newest schoolbooks for young Indians, English and Indian language text march side by side down the page. The same educational approach will be used in primers and readers turned out in English-Spanish form for Southwestern tribes that want them.

"If you put a dozen of these books into a school for white children in New Mexico," said Dr. Beatty in an interview, "the children would begin to use Spanish words and interest in Spanish would grow."

The Office of Indian Affairs, he stated, is taking as much trouble to obtain Spanish translation for Indian pupils as it takes in making school books written in Indian languages correctly Indian in literary style.

First Spanish lesson book will be for Pueblo children, a story of New Mexican mountain country by Ann Nolan Clark, entitled "Young Hunter of Picuris."

The Spanish book Papago parents asked for is now being translated. Young Papagos will learn Spanish by reading "Desert People," which Dr. Ruth Underhill, ethnologist of the Indian Office staff, wrote originally in English to give the tribe its first history book of its own past.

Also new in Indian education is a series of study books to teach Indian children about their own tribes. For Papago pupils, Dr. Underhill has produced one of the first of these books, to teach the children what the social customs and handicrafts of their forefathers were like, in the Arizona desert where they live.

Paradoxical as it seems, young Indians today have to get such information from white men and women—scientific experts. Tribes differ in the amount of instruction about tribal culture that they give to their young people, Dr. Underhill emphasizes. But older Indians who recall the facts accurately are dying off.

When young Indians take interest in learning basketry or other arts, there is danger that the children will copy poor designs—or even modern advertisements—in their efforts to produce Indian work. To give them the finest art standards, from the "old-masters" of their tribe, is just one of the goals of the Indian schoolbooks that tell Indians about Indians.

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## ARCHITECTURE

### Vanishing Altar a Feature Of Army's New Chapel

**A** VANISHING altar, which slides silently into the church wall like a secret panel, is a new feature of the 555 chapels that the Quartermaster Corps has started to build in the nation's Army camps.

The movable altar is the Army's own invention.

The new chapels, all to be constructed alike, are so planned that they can be converted quickly into church or synagogue, explained Chaplain Arhey Lev of the office of the Chief of Chaplains, U. S. Army.

For Jewish services and some Protestant church services, the paneled-front altar retires invisibly into the paneled wood wall. Above the altar, wall paneling has an additional invisible compartment, which can be opened at Jewish services to form an Ark holding the Torah, or holy scroll, of Jewish faith. For Catholic services, and Protestant services when wanted, the altar is moved forward.

No religious symbols will be built into the Army's new chapels, Chaplain Lev stated. The chapel will stand out on the post landscape, marked chiefly by a steeple on its gabled roof, steeples having been associated from early times with man's efforts to reach up to heaven. The Office of Chaplains hopes to equip each chapel with a set of ecclesiastical ware, including a cross, crucifix, pair of candlesticks and pair of vases.

The chapels, which will replace improvised buildings of many types, are to be completed in three to six months from the start of work at the first chapel at Arlington Cantonment, where Sunday ground-breaking ceremonies were held May 4.

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## FORESTRY

### Forest Fires in April Destroyed 1,300,000 Acres

**F**OREST fires during the month of April swept over more than 1,300,000 acres of timber land, principally in the South and East, figures compiled by the National Wildlife Federation indicate. Translated into terms of lumber, the destruction comes close to 300 million board feet, or enough to build barracks for nearly 200,000 soldiers.

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