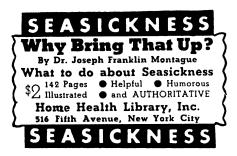
in man's understanding of nature that marks the last century and a half or thereabouts, and has incalculably promoted his material welfare, still falls pitifully short of like promotion of his spiritual welfare.

Two of the most definite qualities of the species that still remain unrecognized as natural are those that have given rise to the idea of the brotherhood of man; and those that have given rise to the idea of mysticism.

The very fact that both of these are recognizable in probably all races of the species and are associated with the most varied doctrines of supernatural beings, of supposed miraculous happenings, and of magic rites, constitutes some of the best evidence that they belong to the nature of the species in the some sense that its upright posture and power of speech belong to its nature.

So far as the idea of brotherhood is concerned, Darwin is explicit in including it in his evolutionary conception of man. As to the other idea, that of mysticism, he is not explicit either for or against such inclusion. But a large mass of sense data and unanswerable reasoning is available today in support of the hypothesis that certain of our sensorymotor responses to nature produce in us emotional experiences and states that have led to the erroneous supposition that something other than our natural selves and something other than the natural external order must be involved in these experiences and states. Insofar as the generally recognized emotional portion of man's religious experiences is conceived to be supernatural and a like conception is allowed to dominate his idea of God, his understanding of his own nature and all the rest of Nature are sadly warped and inadequate. Science News Letter, August 28, 1937

Near Muscle Shoals, Alabama, is a series of ponds that annually disappear into the earth, leaving as many as 230,000 fish stranded in a grassy morass.







## Agriculture Outruns Culture

HEN a "snooty" politician or a scornful journalist jibes at the alleged lack of culture in the great farming areas of the country, he is only taking localized, special and snobbish notice of a phenomenon so general that it might almost be dignified with status as a scientific "law." For in the long course of the world's history, and what we can extrapolate of prehistory, men have always learned how to be farmers before they created cities, built temples and palaces, invented or adopted writing, and in general become "civilized."

Prof. Elmer D. Merrill of Harvard University, who has made a special study of the history and migrations of cultivated plants, has reduced it to three words: agriculture outruns culture.

Prof. Merrill points out as conspicuous examples the ancient agriculture-culture distributions in North America and southeastern Asia. In both regions there was originated an agriculture based on grain—corn in America, rice in Asia. In both, the sections where the agriculture developed earliest and fastest became the centers of elaborately developed civilizations—Maya-Toltec-Aztec in

America, India-Siam-China in Asia.

And in both cases, there was a fringe of less civilized peoples who received the arts of agriculture readily enough from their better-advantaged neighbors, but who lagged in the development of more complex and later-developed cultural features. As far north and east on this continent as corn and pumpkins would grow, Indians grew corn and pumpkins which they had received from the south and southwest. But of stone temples and stone-faced pyramids, of organized religion and empire, they knew nothing.

Similar was the case in the Asian region. Filipinos in ancient days grew rice by Indo-Chinese methods. But in all the Philippine archipelago there is no Angkor Wat.

Science News Letter, August 28, 1937

ENTOMOLOGY

## Epsom Salt Bait Fails To Kill Grasshoppers

OPES that epsom salt could poison grasshoppers wholesale have been dashed by new tests conducted at Kansas State College, by Dr. Roger C. Smith. Standard poison baits, made with compounds of arsenic or fluorine, still remain the best known means for fighting the swarming insect enemies.

Last spring experiments in which grasshoppers died after consuming a bait "dosed" with epsom salt were reported in one of the leading scientific journals and were afterwards broadcast through the press. Prof. Smith, noting that the experiments had been conducted in the fall, suspected that the grasshoppers then used were about ready to die of natural causes anyway, decided to repeat the tests, using young and vigorous early-summer 'hoppers. When he did, he found that the insects throve on the supposed poison, even when used at double strength. Parallel tests, with standard baits of real poisons, worked perfectly.

Science News Letter, August 28, 1937

## • RADIO

August 31, 4:15 p. m., E.S.T.

SOUR WATER—Ralph E. Tarbett of the U. S. Public Health Service.

September 7, 4:15 p.m., E.S.T.

AMONG THE BEDOUINS OF NORTH ARABIA—Henry Field of the Field Museum of Natural History.

In the Science Service series of radio discussions over the Columbia Broadcasting System.

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