ENTOMOLOGY

China's Resources Ample

China, the land of famines, could double her food supply by opening up virgin soil and introducing scientific farming.

Packing plants comparable to those of Chicago located somewhere north of Peking are foreseen by Dr. Shih Tsin Tung, economist, who has recently made a report of the resources of his country to the *Scientific Monthly*. Some of the world's best ranches exist in regions in China that have received but little development, declares Dr. Shih.

The future expansion of the celestial republic will probably not, however, put a large surplus of food on the world market. With the slow reclamation of the huge country from the primitive conditions of the present there will be a gradual rise in the standard of living according to Dr. Shih. Consequently the China of the future will consume her own products and possibly import some. For these imports, Dr. Shih explained, she will pay with the income from natural resources of minerals, coal and water power that are at present comparatively untouched.

Science News-Letter, December 18, 1926

HEALTH

Accidents in Home

Around 17,000 deaths and several millions of injuries occur every year in American homes.

Accidents that endanger life and limb in industry and on the public highways are gradually being reduced by safety engineering and educational propaganda but domestic accidents have remained a problem as yet unattacked.

To repair this gap in protection to human life, Louis I. Dublin, statistician to the Metropolitan Life Insurance Company, has recommended to the National Safety Council that it appoint a committee to investigate facts about the injuries and fatalities that occur in homes so that a constructive program can be arranged on this basis.

More than a third of the deaths are of children under fifteen.

Science News-Letter, December 18, 1926

The Mind Healer of Deal

There was a mind-healer of Deal
Who said: although pain is not real,
When I sit on a pin
And it punctures my skin
I dislike what I fancy I feel.

Science News-Letter, December 18, 1926

-Anonymous.

New Ant Poison

The apartment house dweller who finds himself dispossessed of his costly cubicular domicile by persistent clans of ants should take heart. A poisonous potion of particular deadliness has been concocted at the U. S. Department of Agriculture which spells the end of even the little red kind that feed on arsenic syrup without turning an antenna.

Compounds of thallium, one of the rarer elements, are used in the new "dope" which has been found to be a vicious death dealer to several resistant species of the minute pests, according to C. H. Popenoe, expert in the U.S. Bureau of Entomology. Though thallium is too expensive to be used on a large scale as an insecticide its potential value as an efficient bug killer in apartments and houses is of considerable importance. Householders will await with interest the results of further tests on other insects that are being carried out in the Bureau of Entomology.

Science News-Letter, December 18, 1926

ENGINEERING

High Pressure Locomotives

The use of high steam pressure in reciprocating locomotives brings about greater tractive force and also a decrease in steam consumption and hence a decrease in coal consumption, Edward C. Schmidt and John M. Snodgrass, University of Illinois professors, told the American Society of Mechanical Engineers at its recent meeting. The use of high steam pressure opens the avenue to highest operating efficiency and economy.

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Experiments have been satisfactorily made along this line and a number of railroads both in this country and abroad have appreciably increased the steam pressure in reciprocating locomotives. So far the increase of steam pressure above 300 pounds is extremely rare. Only one locomotive in the service of any American railroad is carrying a boiler pressure higher than this. The reason for this hesitancy to increase the pressure beyond this mark is the necessity of radical changes in boiler designs to cope with the high temperature of high pressure steam. The Delaware and Hudson, the one railroad to use a boiler pressure of over 300 pounds, used a boiler vastly different from the customary design. The experiment was so successful, however, that the railroad is having another locomotive built which will carry a boiler pressure of 400 pounds.

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The reason for this trend toward high pressure, it was stated, lies in the fact that while the total heat to be imparted to a pound of water remains practically the same at all pressures, the heat of vaporization, which is never available as mechanical energy, steadily decreases as the pressure increases. This means that as the pressure rises, a steadily increasing percentage of the heat is available as useful work.

Science News-Letter, December 18, 1926

MEDICINE

No Plagues Last Year

None of the major quarantinable diseases like plague, cholera or yellow fever gained access to our shores this last year, according to the annual report, just issued, of Surgeon General Hugh S. Cumming of the U. S. Public Health Service.

The economic necessity of keeping out epidemics has bitten into the consciousness of all classes, with the result that increased efficiency in quarantine regulations has been accomplished with a minimum of delay and expense to the shipping and traveling public. Constant vigilance at all ports has achieved a freedom from imported diseases in spite of the fact that health conditions in the world at large have been threatening, declares Dr. Cumming.

Typhoid fever unhappily has taken a big upward jump over the great improvement of the last few years, the figures of the report show. Over 9,000 more cases occurred in the United States in 1925 than in 1924. The increase is biggest in the small towns and rural population where milk, water and food supplies are not under such careful control as in large cities. Cities of over 100,000 inhabitants showed a very slight increase over the 1924 figures.

Gourmets with a weakness for ovsters and clams may resume their favorite delicacy with renewed composure. Dr. Cumming reports that measures on which the Bureau of Fisheries and the Bureau of Chemistry have collaborated are now in force to safeguard shellfish from contamination in the states where they are produced. It is expected by health authorities that these regulations will have enhanced the ultimate purity of the oyster as it appears on the table so that its consumption can be approached with less fear and trembling.

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