

WILL URGE FASTER MAPPING OF WORLD

Nations with large unmapped areas will be urged to hasten their topographical work so that the resources of the world may be more fully understood, in a proposal which the American Geophysical Union will present before the general assembly of the International Geodetic and Geophysical Union at Madrid in October. Geophysical investigations are hampered greatly in countries which have not been mapped topographically. Further international cooperation in determining the configuration of ocean basins will be discussed by the Union. A more accurate knowledge of the bottom of the sea is declared the foundation of all future geophysics in the preliminary outline of the discussion.

HAY-DIGESTING GERM FOUND IN HUMAN BODY

A hitherto unknown member of the bacterial garden that each human being keeps in his digestive tract has been isolated and studied by a woman worker, Madame Khouvine, at the Pasteur Institute. It is of peculiar interest because it possess the power to digest cellulose, the cell-wall material of hay, soft wood, and other "roughage". Cellulose-digesting bacteria have long been known to exist in the intestines of grazing and browsing animals; indeed, it is believed that it is due to a sort of partnership between the bacterium and the host-animal that hoofed animals are able to derive nourishment from hay - and even, in the case of the goat and the camel, from wood and paper. But so far human beings have never been suspected of being even potentially "hay-burners".

It is not suggested in the present instance that the new bacterium will enable man to combat the high cost of living by eating cotton stalks or ensilage. The microbe digests the cellulose pretty thoroughly on its own account, and the by-products of its activities have little or no value as food. They are listed as

"carbon dioxid, hydrogen, alcohol, and acetic and butyric acids". Apparently it must have cellulose for food, for it cannot make use of sugars or starches.

While the new germ apparently does not do us any good, it seems also incapable of harm. Mme. Khouvine states that it is non-pathogenic.

DROWNING OUT RICE-FIELD WEEDS

The dikes of Holland are given credit for the long immunity of that country from invasion by enemies. Would-be conquerors are restrained by the reflection that their armies can be drowned, while the amphibious Dutchmen could live through the floods that they would turn loose. A philosophy of the same sort is at the bottom of a new method of combating the weeds in California rice-fields, worked out at the California Experiment Station at Cortena. The old method of irrigation, which consisted in flooding and draining the land at intervals until the rice was well sprouted, permitted the weeds to get a start as well, and like the corn and the cockle in the parable they grew together until the harvest - with the weeds having decidedly the better of the argument. But rice seed will germinate under water, and weeds will not; so the rice growers of the region are now flooding their land to a depth of from four to eight inches at the very outset and leaving it that way, with the result that the rice thrives and the weeds perish.
