

first, fifth and ninth days. A careful physical examination, including a spinal fluid test, is made when the patients enter the hospital.

The aim of this venereal disease campaign is to stop the spread of syphilis and gonorrhea by finding every infectious case and treating it to eradicate the infection. Late cases of syphilis which are non-infectious are not treated. How much of the venereal disease reservoir can be dried up by this mass attack will not be known until after the final tests are run.

Hundreds of thousands of men, women, boys and girls are being brought face to face, every day, on the streets, cars and buses, with the fact that syphilis and gonorrhea are crippling diseases. They are hearing it every 30 minutes on their radios. They are learning first-hand about the blood test for syphilis. Thousands of them are learning for the first time what these diseases are, the symptoms and effects, how they are caught and how quickly they can be treated and even cured in many cases. The hope is that this knowledge will arm them to some extent against future attacks of venereal disease.

Science News Letter, June 23, 1945

ENGINEERING

Light-Weight Concrete Is Termite-Proof, Cheap

► LIGHT-WEIGHT concrete material suitable for building construction, that is fire resistant, insulates against heat and cold, is non-rotting and termite-proof, and cheap to make, has been subjected to laboratory tests during the past year at the University of Michigan and found particularly satisfactory for farm structures where the raw materials are easily obtained. It is made from ordinary portland cement, organic and inorganic fibers, and a small quantity of certain inexpensive chemicals.

The cement in the mixture is the binder; the fibers, obtained from farm wastes, contribute the lightness and bulk, and the insulation properties; the chemicals lessen the amount of cement required, prevent harmful shrinking, and increase the strength. For fiber material, peanut hulls, cotton stalks, rice and wheat straw, cornstalks, flax shives and sawdust can be used. Among the best fibers are materials obtained from the northern jack pine, and winter-cut popple or aspen. Processing these woods is a simple grinding operation.

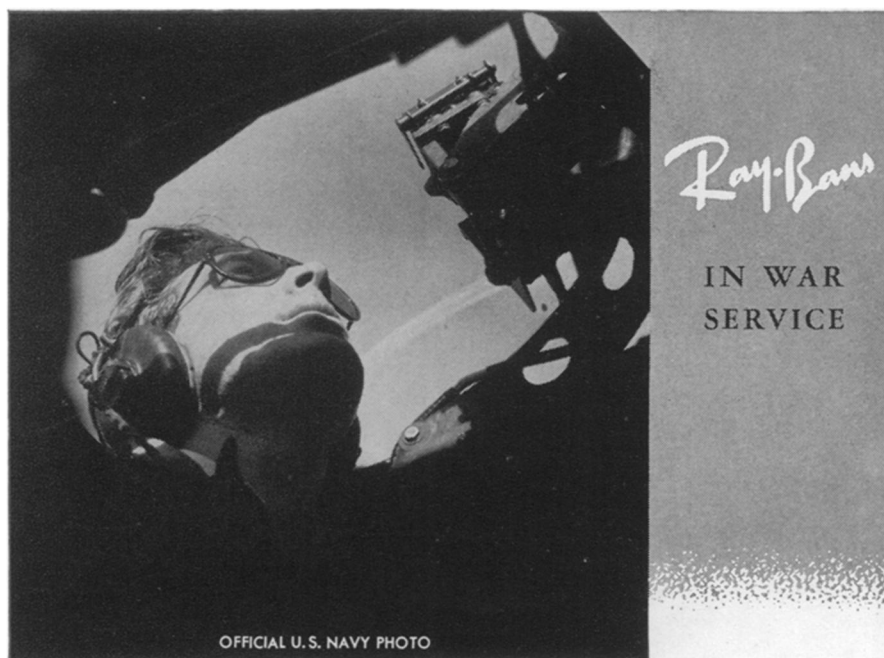
One of the disadvantages of this so-

called insulative concrete is that the fibers require special preparation to remove harmful juices. The juices in ordinary farm wastes, such as straw and cornstalks, usually contain substances that are harmful to the set of the cement. It is not difficult to remove them, but the special treatment requires a certain amount of time.

Proper mixing is also important. Ex-

isting concrete mixers are made to mix heavy ingredients and are not entirely suitable for mixing this bulky light-weight material. They can be used, however, by using slightly more water than is ordinarily considered desirable in cement mixing to obtain the best results.

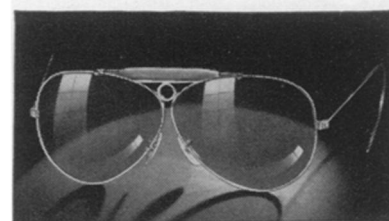
The insulative concretes vary in weight from one-third to one-half that of ordinary gravel concrete, depending upon the



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mix. Insulative concrete at half the weight of ordinary concrete is more crack-resistant, and at one-third the weight has ample strength for building construction. Two-inch boards of the new material showed, in the tests here, almost as great insulation value as two layers of celotex between facings of plywood and having a total thickness of slightly over two inches.

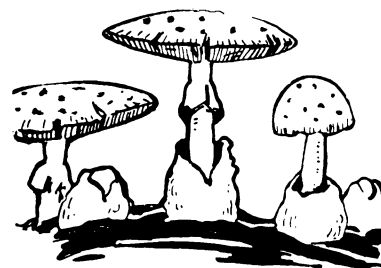
Slabs of insulative concrete will not support combustion, but will char when exposed to an intense heat such as a blow-

torch flame. In use the new material will probably usually be cast into slabs and fastened over the building frame.

Science News Letter, June 23, 1945

The lower estimates of the temperature of the centers of stars are in the tens of millions of degrees.

Bull *moose* have been found that stand seven and one-half feet high at the shoulders, weigh over 1,800 pounds, and with antlers spreading six feet or more.



Pass the Mushrooms!

➤ MUSHROOMS are unusually abundant this year, largely as a consequence of the persistently wet weather that has prevailed over the greater part of the country. In moist woodlands and wet meadows where they can commonly be found they are thicker and bigger than ever, and they are very apt to spring up in places where they have never been before—even in your own back yard.

Most people fail to benefit by such abundance because they are afraid of wild mushrooms. They will pay fancy prices for a little basket of the common field agaric from the store, and ignore or kick to pieces a clump of exactly the same species that springs up on the lawn. And certain wild species, like the inky-cap and the morel, which are far better than any "boughten" mushroom ever could be, they shun with a double dread simply because they are unfamiliar.

There is some justification for this attitude. To enjoy wild mushrooms with confidence and safety, you have to know them, species by species. There is no dependable rule-of-thumb test. All the supposed tests, like the blackening of a silver spoon or peeling the skin off the cap, are simply worthless. You've simply got to know your mushrooms.

One supposedly infallible test, which condemns mushrooms as poisonous if they are black underneath, runs exactly contrary to fact. The ordinary mushroom that you buy in the market, the only kind that the great majority of us ever get to eat, is black underneath when it is mature. So is that most delicious of all wild mushrooms, the inky-cap—as its name indicates.

On the contrary, the deadliest of all poisonous mushrooms, the Amanitas or death-cups, are innocently white under-

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