

## MEDICINE

**T. B. "Cure" Fails**

The widely acclaimed Spahlinger method of treating tuberculosis, has received little support from a recent investigation in England. Henri Spahlinger of Geneva, Switzerland, developed several years ago a secret remedy for the treatment of tuberculosis, which has attracted considerable attention both in Europe and this country. Spahlinger and his friends have repeatedly attempted to secure government endorsement in England for this remedy and funds for its further development.

The American Medical Association has issued statements from time to time that the method should not in any way be considered established, and now Dr. Thomas Nelson of the staff of St. George's Hospital and the Brompton Hospital in London has just made public the records of ten patients treated by Spahlinger himself during the period between November, 1913, and November, 1914.

After ten years seven of these cases were dead. Two who had types of tuberculosis that are not particularly fatal are still living, and one could not be traced. Only one of the seven now dead was alive as late as 1921. All cases were of the sort, according to medical authorities, in which an arrest of the disease with a return to a reasonable amount of health might have been expected if the method were of value.

The editors of the *Journal of the American Medical Association* point out that "The evidence in favor of the Spahlinger method of treating tuberculosis is not sufficient at this time to warrant an extensive trial. The burden of proof is still on Spahlinger, who should at least show that in a considerable number of cases studied under controlled conditions the remedy will accomplish more than can be accomplished by the method of treatment now practiced in well regulated institutions for the treatment of tuberculosis."

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## ENTOMOLOGY

**Bug-Proof Golf Greens**

Bug-proof golf greens are anticipated with the discovery of a new method of treatment. Arsenate of lead in powder form, mixed with the soil to a depth of three or four inches before seeding, will keep sod and lawn free from ravages of the Japanese beetle, other white grubs, earth worms, and, in fact, anything that feeds in the upper section of soil.

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## PSYCHOLOGY

**Tests Mechanical Skill**

A simple pencil and paper test which measures an individual's mechanical ability is the newest scientific yardstick to help fit the right man, or woman, to the right job. The new test has been devised by Dr. T. W. MacQuarrie, of the University of Southern California.

Details of Dr. MacQuarrie's investigation, just reported to the *Journal of Personnel Research*, show that he has produced a test for general mechanical ability, rather than a test to find out whether an individual would make a good auto repair man or a good steam fitter.

"There are very few mechanics," he says, "who believe that work in one craft is different from work in any other. Most real mechanics feel that they could have learned any other mechanical trade just as easily as the one they selected, and, as a matter of fact, are proficient in two or more lines, and keep employed in one as well as in another."

Hitherto, psychologists have depended on tests with workshop equipment as the most satisfactory means of showing whether or not an individual is good at using his hands. The new test, which requires a lead pencil as its single tool and a school desk as its shop bench, is less expensive than the tests with apparatus. The new test can be given to a large number of people more easily. It is equally fair, Dr. MacQuarrie finds, for the girl with a leaning toward engines and tools but no real experience, and for the man who is used to tinkering with complicated apparatus. And, what is most important, the paper test has stood preliminary tests of its usefulness, and is reported promising as a reliable gauge of mechanical ability.

The test consists of seven parts. In one section, the competitor shows his ability to draw lines quickly without touching other lines. In another part, he shows the speed and precision with which he can use his hands by rapidly putting three dots in each circle along a great many little circles. In another he is given a sheet covered with a network of curving, irregular lines, and told to trace each line across the sheet without losing track of it.

The test is not a mental test, the psychologist explains, but is intended entirely to show what the individual can do with his hands after he is thoroughly familiar with the directions.

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Vulcanized paper fiber is used to make flashlight cases.

## BIOLOGY

**Booze and Rats**

It does an individual no good—and no particular harm, either, apparently—to be the descendant of ten generations of hard-drinking ancestors who could "hold their liquor." At least, this is the case if what is true of mice is true also of men. Results of researches on the grandchildren of ten generations of chronically alcoholic rats, conducted at Washington University in St. Louis by Prof. Frank B. Hanson and Florence Heys, indicate that these animals have no better "heads" for liquor than have other rats whose ancestors have all been rodents of strictest probity and sobriety.

The experimenters tested their animals in groups of ten, five being descendants of rats which for ten generations had been made drunk very frequently by subjecting them to fumes of evaporated alcohol, and five the descendants of ancestors that had never known the drug. They caged the whole ten in a tight box with a plate glass front, soaked the air in it with alcohol fumes, and timed the animals as they became intoxicated and keeled over. They repeated the experiments on successive days, to see how fast the rats built up a resistance to the dizzying vapors. They used six different groups of ten rats, each of the same weight and sex.

When they came to check up their results, they found that the descendants of the drunken rats had no better resistance to alcohol when they first encountered it than had the offspring of the sober ancestry, and that there was no significant difference, either, in the rate at which the two groups built up their resistance on subsequent enforced sprees. In fact, if anything, the sober-ancestored group built up resistance a shade faster than did their companions, but the experimenters do not feel that the difference was great enough to justify any definite conclusion.

The most significant fact about the experiment, in their opinion, is that the negative results they obtained constitute another case in which a character or ability acquired by the parents was not inherited by their offspring—a point which has long been a subject of perennial dispute among students of evolution.

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A hibernating toad can survive cold that would kill a mammal.