



## GERM AGAINST GERM

Key to an important advance in the fight against disease appears in the round glass dish held by Dr. Selman A. Waksman, of the New Jersey Agricultural Experiment Station. Dr. Waksman and his associate, Dr. H. Boyd Woodruff, have discovered, in fresh field and garden soil, germs which destroy disease-producing germs of the gram-negative group, which includes typhoid fever, dysentery and cholera organisms. The cross in the middle of the glass dish or plate is made by disease-producing germs. Originally there was another cross on the plate made by disease-producing germs. Only the outer ends of this cross now show, because the antagonistic soil germs consumed the disease germs originally present at the center of the cross.

Science News Letter, August 17, 1940

known to be susceptible to dandruff.

The germ which has long been suspected of playing a part in causing dandruff, because it is found on dandruffy scalps, is a fungus named *Pityrosporum ovale*. Pitiful may describe the condition of scalps on which *Pityrosporum* is found, but the fungus gets its name from a Greek word meaning "bran." It also travels under the alias of "bottle bacillus," which again may be somewhat misleading to the layman. The alias is merely descriptive of the shape of the fungus, and has nothing to do with any bibulous proclivities on the part of either the fungus or its victim.

The drinking habits of the "bottle bacillus" are unrecorded, but it is known to be choosy about its food. This is what led Dr. Emmons to his investigations. Not until he had found the fatty diet that the fungus would thrive on did he turn to the question of its relation to dandruff.

With due scientific caution he still says that more proof is needed before one can be sure that this fungus is not the cause of dandruff, although the tests and the fact that it is found on the majority of non-dandruffy scalps seems to clear it.

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## MEDICINE

## "Bottle Bacillus" Remains Unconvicted as Dandruff Cause

THE GREAT mystery of the cause of human dandruff is still unsolved, despite the willingness of a human guinea pig, a United States Public Health Service scientist, to allow suspected germs to be rubbed on his scalp.

With a Scotch verdict of "not proven," the indicted fungus, *Pityrosporum ovale*, is relieved of some of its suspicion. The closest scientists can now come to determining the cause of the widespread human scalp affliction is that it is due "to a somewhat abnormal physiological condition."

The tests were made by Dr. C. W. Emmons, U. S. Public Health Service. The "guinea pig" was a staff member of the National Institute of Health, a man who prefers anonymity to the glory attaching to medical experimentation.

He took a chance on getting worse dandruff than he already had by rubbing the suspected germs into his thoroughly cleansed scalp and shoulders. And he did this not just once, but many times.

No dandruff scales appeared on his shoulders. Dandruff did not appear any sooner on the parts of his scalp where the germs had been rubbed than on other parts that had been cleansed and left alone as control areas.

The reason for using a dandruff victim for the tests was that the suspected germ is almost universally present on the human scalp, with or without dandruff. The tests had to be made on someone

## POPULATION

## Farm Population Grows, But on Poorest Land

FARM population in this country is still increasing, estimates of the U. S. Department of Agriculture indicate. As of Jan. 1, 1940, the American farm population was placed at 32,245,000, which is an increase of 186,000 over 1939.

The increase, however, has occurred mainly in areas not well adapted to commercial farming. In the richer, commercial-farming regions there was enough migration away from the farm during the past ten years to have brought about a reduction in farm population.

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