

## ETHNOLOGY

# Strange Trances Grip Small Group of Balkan Women

**A** REMARKABLE state of trance which occurs among Rumanian women of Duboka, a village in eastern Serbia, and the ceremonial employed for its cure have been observed and described to the Folklore Society of London by R. P. Brown and Mrs. E. C. Brown.

The phenomenon occurs once a year, during a fair held on the village green on Whitsunday. Peasants crowd in from the countryside to attend. The trances are confined to women of the Vlach race and to those who belong to certain families. While a woman is in a trance she is gifted with "second sight" and prophecies. One young woman predicted the war and named those who would return from it. Sometimes the patient sings.

## Prophecy While Struggling

When the village green is crowded and all are dancing or feasting, a woman sitting with her family will begin to look melancholy, cry, and then fall unconscious. She is laid on a blanket, some of her relatives kneeling by to hold her when she begins to struggle. Music and dancers are sent for, and it is usually while waiting their arrival that the patient, struggling, though not violently, begins to prophesy, or sings.

The dancers, usually three men and three young girls, line up in a certain order, the man who leads holding an unsheathed knife, the girls flowers, and the man who closes the line either the sheath of the knife or a second knife.

When the music begins they circle round the patient, who now struggles violently, and as the first man passes her head he makes the sign of the cross on her belt. A formula in archaic language is shouted at her.

## Repeated Several Times

After a period the patient is raised and carried, still struggling violently, for some fifty yards where the performance is repeated. Usually the cure is effected at the third or fourth station; but sometimes as many as nine are required. At one or more of the stations a son or other relative chews green garlic and wormwood and spits it over the patient. After the cure, the patient is described

as looking "tired, but reasonably well and pleased with herself."

The trances may be epileptic, due to inbred weakness of a population said to be riddled with syphilis, or they may be an aggravated form of the hysteria which, producing peculiarly violent hiccoughs, is prevalent among women of the Balkans.

*Science News Letter, September 24, 1932*

## MEDICINE

## Claims Micro-Movies Show Germs Have no "Life Cycle"

**M**ICRO-MOTION pictures of germs growing under different conditions show that these tiny organisms have no "life cycle" and no filterable form, as some investigators have claimed, Dr. Ralph W. G. Wyckoff of the Rockefeller Institute for Medical Research here has reported to *Science*.

Chief exponents of the life cycle and filterable phase theory are Dr. Philip Hadley of the University of Michigan and Dr. A. I. Kendall of Northwestern University. These investigators, by using special growth materials and foods, claim to have been able to induce ordinary bacteria or germs to develop in a form that passes through very fine-pored

## PSYCHOLOGY

# Vibrations of Tuning Fork Turn Eye Into Stroboscope

**E**NGINEERS can see the parts of a revolving motor as though they were standing still. Singers can test the pitch of their voices by watching a revolving phonograph disc. And this without any complicated apparatus, Dr. Milton Metfessel, University of Southern California, has reported to the American Psychological Association.

Such effects are produced through the principle of stroboscopy, applications of which already make possible the photography of rapidly whirling objects. A

tuning fork held against the head will vibrate the eye in synchronism with the disc, making the eye function only at the time that the disc reaches a certain position. The whirling disc then appears at a standstill.

filters. They believe that this filterable form of the germ represents a definite stage in its life cycle previously unknown to scientists, but one through which it always passes.

Dr. Wyckoff does not agree with this. His theory, based on his moving picture studies, is that when these germs are given different food and environment, they may have to change their shapes and sizes, but it is only an Alice-in-Wonderland adaptation to their changed circumstances, and not part of their life cycles. As soon as possible, when their food and environment permit, they go back to their original forms.

Likewise, he does not think that the germs have a filterable form distinct from their usual one. His studies led him to the opinion that the change in food and growth material enables the germs to pass through filters, not by changing their forms but by another process which may, for instance, make them more slippery or more compressible. The K medium itself, Dr. Wyckoff pointed out, on which Dr. Kendall was able to grow filterable forms of bacteria, has been found to aid the passage of normal germs through fine filters.

Dr. Wyckoff made 6,000 feet of film covering 600 hours and showing the growth of the Shiga bacilli, which are the cause of one form of dysentery. These are the same germs that Dr. Hadley filtered after growing them on media containing lithium chloride. They are related to the typhoid bacilli, which Dr. Kendall passed through a filter after growing on his special K medium.

*Science News Letter, September 24, 1932*

Singers can learn to cause the eye-blinding vibration with their voices, Dr. Metfessel said. A low or middle C will make the spokes of a disc turning at 80 revolutions per minute appear motionless.

*Science News Letter, September 24, 1932*