



Bell Telephone Laboratories
LOUD SPEAKER

And this is not a misnomer, for power equal to five million voices can be radiated from this apparatus, one of three used in the demonstration transmission of symphony orchestra music from Philadelphia to Washington. (SNL, Apr. 22, '33, p. 243). The multi-channel horns make possible adequate distribution of high frequency sound over a large area.

ARCHAEOLOGY

Unknown Pueblo Periods Turned Into Dated Eras

ARCHAEOLOGISTS are rapidly nearing their goal of turning prehistory into history in the Southwest, declared J. C. McGregor of the Museum of Northern Arizona.

Since so many sites have been definitely dated by the Douglass tree-ring calendar, the time is approaching when archaeologists can talk about ancient Southwest happenings in exact dates.

The Museum of Northern Arizona has been working for three years to establish dates for the periods of prehistory now vaguely called Pueblo I, II and III, Mr. McGregor reported.

"Pueblo I gives every appearance of ending about 700 A.D.," he said. "Pueblo II extended to about 1000 A.D.; Pueblo III to about 1300 A.D.; Pueblo IV to about 1600 A.D., while another division in Pueblo V runs to roughly 1900."

Besides dating these periods, it has been possible to show the dates when different types of houses developed in the Southwest. The time when about 60 different types of pottery were made has also been dated.

Science News Letter, May 13, 1933

MEDICINE

Sex Hormone Injected to Cure Common Infection of Children

Novel Treatment May Solve Distressing Medical Problem and Point Way to New Methods of Therapy

SUCCESSFUL treatment of a bacterial disease by a sex hormone has recently been announced by Dr. Robert Lewis of New Haven.

A well-known infection of children, caused by the germ *Neisseria intracellularis*, is the condition which has been alleviated by the injection of theelin, the newly crystalized female sex hormone. From a practical standpoint this treatment may solve a distressing problem for many doctors and patients and from a scientific point of view it may point the way to new lines of therapy.

The use of various glandular extracts in the treatment of different metabolic disturbances has become well established in the past decade. Diseases of the thyroid gland in which there is a deficiency of secretion are routinely treated with the hormone, thyroxin from the thyroid gland.

But Dr. Lewis has used the sex hormone to alter the normal development of certain structures of the individual so that a bacterial infection is no longer able to thrive.

The disease (gonococcal vaginitis) he treated is found in young girls. It is highly contagious and so constitutes an important problem in schools and institutions where it is difficult to isolate infected individuals. None of the many antiseptic treatments which have been in use for many years has been satisfactory. Usually the condition disappears at puberty.

Dr. Lewis studied the structure of the part usually affected by the *Neisseria intracellularis* and found that it changed with age, being only a few layers of cells thick in the infant and many layers thick in the adolescent. And by adolescence the infection is usually gone. Assuredly there might be the possibility of a correlation between the thickness of the cellular wall and the disappearance of the infection.

Then Dr. Lewis remembered that Dr. E. Allen of St. Louis had found that the injection of theelin, the female sex hormone, causes a thickening of the

lining of the vagina in immature female monkeys. Believing that such a layer of cells might produce an environment which was unfavorable for the growth of bacteria and that he might thus protect children from the disease, Dr. Lewis proceeded cautiously to give injections of theelin to his patients. And just as in the monkeys in Dr. Allen's laboratories, the lining of the wall thickened and at the same time the infection cleared up. He asked Dr. J. R. Miller of Hartford to try some on his patients and again another group of doctors in the Johns Hopkins Hospital. And in all three places the infections treated with theelin have disappeared.

Whether this "cure" is permanent or not, Dr. Lewis is not willing to say. One case apparently had a second attack, which, however, again disappeared with another set of theelin treatments. The others have been under observation six months without recurrence, so that Dr. Lewis hopes his treatment may be of great help, though he emphasizes that until further work is done theelin must be used with great caution.

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PSYCHOLOGY

Isolated Chicks Tried To Chum With Mice

THE IDEA that "Birds of a feather flock together" because of some in-born social instinct failed of confirmation in experiments reported by Frank A. Pattie, Jr., of Rice Institute.

Although chicks brought up in the usual manner do have a tendency to associate with others of their own kind, chicks that have been hatched and raised in isolation show no such preference for chick society, he found. When placed in a pen separated by glass windows from chicks on one side and from white mice on the other, the isolated chicks spent just about as much time trying to reach the mice as they did trying to join their brother chicks.

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