



#### BEFORE AND AFTER

*Peter K. was suffering from suicidal phantasies; he drew pictures like the one at the top. After treatment and emotional improvement, his pictures were very different, like that at the bottom.*

known as the sodium salt of N-Methyl-C.-C.-cyclohexenyl - methyl - barbituric acid.

The anesthetic, injected directly into the blood stream through a vein in the arm, produces a deep, normal sleep within thirty seconds. The operation can be started immediately. After the operation the patient awakens easily and gradually without any unpleasant after-effects. In Dr. Miller's experience, evipan is more effective if morphine or a similar drug is given first.

"If further investigation confirms my present experience," he concludes, "this drug may become as valuable to the surgeon as ether or novocaine for suitably chosen operations."

*Science News Letter, January 6, 1934*

## Dr. Thorndike Honored

See Front Cover

Dr. Edward L. Thorndike, psychologist and educator of Teachers College, Columbia University, was elected president of the American Association for the Advancement of Science. Dr. Thorndike, whose picture is reproduced on the cover, has been associated with Teachers College since before the turn of the century and is known to all students of education for his theories of learning and habit formation.

*Science News Letter, January 6, 1934*

#### PSYCHIATRY

# Emotional Difficulties of Children Revealed in Play

## Puppets of Hated Elders Torn Apart to Relieve Strain; Drawings Reveal Thoughts That Fill the Young Mind

**T**HE PLAY of children, if observed scientifically, gives an excellent clue to what is hidden in their minds, members of the American Psychoanalytic Association, meeting in Washington, learned from a report of Dr. Edward Liss, school psychiatrist of New York City.

Dolls and puppets used in dramatic plays and games in which the children act out a story, as well as story-telling and artistic composition in clay modeling, soap sculpture, and drawing, all reveal significant matters which the child is not able to put into words even if he were willing, Dr. Liss found in attempting the psychoanalysis of children.

One toy, used by Dr. Liss to bring out the suppressed hatred which children sometimes feel toward others, is a doll which can be taken apart merely by tugging at its many ball-and-socket joints. The child will pretend that the doll is the governess, or father, or whoever is resented, and then will yank off the arm or head with great energy. This serves to work off the child's emotional tension, as well as to reveal to the psychoanalyst the source of his trouble.

Peter K., a nine-year-old who was referred to Dr. Liss for examination because he was suffering from depression and suicidal phantasies, was allowed to make drawings without any direction. These drawings were full of action and showed the thoughts that were filling Pete's young mind. Scenes of physical violence and fires and other exciting catastrophes were the subjects he selected. Very different were the pictures drawn after he had been under treatment and had improved emotionally. These were the peaceful landscapes more commonly drawn by children.

Adults, too, betray their emotional condition through their creative efforts and creative play. Dr. Liss exhibited to the scientists two paintings made by a promising young artist. He came to Dr.

Liss for treatment, not because he was having difficulty with his art, but because he was a delinquent with kleptomanic tendencies.

The first picture, painted when his troubles were at their height, is very peculiar in style, eccentric in the use of color as well as in the composition. The second, done after he had gotten well, was in an entirely different style and shows that the boy has real talent when his emotional state does not interfere with its expression.

*Science News Letter, January 6, 1934*

#### ARCHAEOLOGY

## Egypt Keeps Rank As Civilization Pioneer

**E**GYPT is still the land of "first things." Despite recent discoveries of antiquity in other lands, Egypt still holds her place as the country which led and pioneered in civilization, Dr. George S. Duncan of the American University told the Archaeological Institute of America meeting in Washington.

Egypt reached a higher quality of civilization for the same given periods, than did either India or Mesopotamia, Dr. Duncan pointed out.

The oldest artifacts in the world have been discovered in Egypt, he said, citing numerous instances of Egypt being "first." Stone tools found in the old Nile Bed, the oldest Egyptian hammers and first hatchets are pronounced several hundred thousand years old at least.

The first large organized government in the world's history, so far as is known today, was established in Egypt by 3400 B.C. with one ruler, the Pharaoh, at its head, Dr. Duncan continued. Other lands had city states with a king or local ruler over each. In Babylonia, the first union of states did not take place until 2000 B.C.

The earliest known physician, Imhotep, served an Egyptian pharaoh of the Old Kingdom, 2980-2475 B.C.