



#### RECORD-BREAKING KISS

*A Greek kiss held for 2,400 years is revealed in this terra-cotta plaque unearthed in the ruins of Olynthos. Dr. David M. Robinson of the Johns Hopkins University, director of the excavations, pronounces it the oldest known kiss in Greek sculpture. The affectionate figures were an ornament in a house and were buried when Philip of Macedon, father of Alexander the Great, demolished the attractive city in 348 B. C.*

#### PUBLIC HEALTH

## Paralysis Epidemics Linked With Sewage Disposal Method

### Statistical Study Reveals That High Rates Of Infantile Paralysis Occur With Inadequate System

INFANTILE paralysis epidemics and a recent trend in sewage disposal methods, especially in small towns, are linked in research announced by Drs. Albert E. Casey and Branch J. Aymond, Louisiana State University School of Medicine and Louisiana State Board of Health. (*Science*, Jan. 5)

Occurrence of infantile paralysis epidemics in the past few decades, they state specifically, "may have been influenced by the growing tendency of communities to liquefy their excreta without making adequate provision for the disposal of the accumulated fluids."

Infantile paralysis, they found from studying state health department reports for the 10 years 1929-1939, occurred at about the same rate in the only two large cities of Louisiana, in the rural areas and in the towns with populations between 5,000 and 49,999. The rates in these communities were about 30 cases per 100,000

population. In incorporated communities of 100 to 2,999 population, however, the rates were three times those in rural communities and larger towns.

Neither age, sex nor race factors explained the differences in infantile paralysis rates between these different communities. The only factor which could be statistically correlated with the preponderance of infantile paralysis in the small towns was the presence of a water supply system and the absence of an adequate sewage disposal system.

The highest rates of infantile paralysis, 120 cases per 100,000 inhabitants, were found in those towns with water supply but no sewerage system, in which the average daily water supply was from 50 to 89 gallons per capita. Towns without sewerage systems in which the average daily per capita water supply was from 90 to 500 gallons had infantile paralysis rates about the same as the rural and

large town communities. This suggests, Drs. Casey and Aymond state, that large amounts of fluid act as a dilution factor or as a factor increasing the rate of flow.

*Science News Letter, January 20, 1940*

#### MEDICINE

## "Splint Bank" Prevents Crippling from Paralysis

A "SPLINT BANK" which promises to reduce the number of permanent cripples among future victims of infantile paralysis has been established by the National Foundation for Infantile Paralysis.

How the staff of this new kind of bank, themselves victims of infantile paralysis, worked three shifts a day and Sundays to handle a "run" on the bank during the Buffalo infantile paralysis epidemic last summer was told by Dr. George E. Bennett, Johns Hopkins University School of Medicine, at a dinner given by the National Foundation in honor of Mrs. Franklin D. Roosevelt and the women leaders in the 1940 Fight Infantile Paralysis Campaign.

Splints that hold the muscles immovable in a neutral position prevent deformities from contracture or overstretching of any of the muscles involved in infantile paralysis, Dr. Bennett explained. The splints also make the patient more comfortable and hasten recovery of paralyzed muscles. Best results are obtained when they are applied early, but when an epidemic of the disease strikes a community, not enough splints may be available to take care of all the patients.

Such a situation, occurring in Ontario, Canada, three years ago, led to the founding of the splint bank. During this Canadian epidemic the staff of the Hospital for Sick Children of Toronto developed a type of splint "as near ideal as could be produced and yet simple." The splints are so standardized that the doctor needs only to measure his patient and splints of the proper size can be supplied from stock.

A stock of such splints, made with funds supplied by the National Foundation for Infantile Paralysis, has been deposited in the "splint bank," located in the brace shop of the Maryland League for Crippled Children at Baltimore. The bank had 250 splints on hand when the epidemic broke in Buffalo. But this number was insufficient to supply the needs of infantile paralysis victims in that city. So, working three shifts a day and Sundays, for a month and a half, recovered infantile paralysis patients made enough