

and deep, and occasionally quite symmetrical in shape.<sup>4</sup> In the vicinity of large mounds such excavations are common. The earth and stone composing these works are sometimes foreign to the locality which they occupy, and must have been brought from considerable distances.

**Regular in Outline**

A large, perhaps the larger, portion of these enclosures are regular in outline, the square and the circle predominating. Some are parallelograms, some ellipses, others polygons, regular or irregular. The regular works are almost invariably erected on level river-terraces, great care having evidently been taken to select those least broken. The irregular works are those which partake most of the character of defences, and are usually made to conform to the nature of the ground upon which they are situated,—running along the brows of hills, or cutting off the approaches to strong natural positions. The square and the circle often occur in combination, frequently communicating with each other or with irregular works directly, or by avenues consisting of parallel lines of embankment. Detached parallels are numerous. The mounds are usually simple cones in form; but they are sometimes truncated, and occasionally terraced, with graded or winding ascents to their summits. Some are elliptical, others pear-shaped, and others squares or parallelograms, with flanking terraces. Besides these, there are others already alluded to, most common in the extreme north-west,

<sup>4</sup>These are the "wells" of Mr. Arwater and other writers on American antiquities. It is barely possible that a few were really wells, or secondarily designed for reservoirs.

which assume the forms of animals and reptiles. Another variety of remains are the causeways or "roads," and the graded descents to rivers and streams, or from one terrace to another. These several classes of works will be described at length, under appropriate heads.

As already remarked, these remains occur mainly in the valleys of the Western rivers and streams. The alluvial terraces, or "river-bottoms," as they are popularly termed, were the favorite sites of the builders. The principal monuments are found where these "bottoms" are most extended, and where the soil is most fertile and easy of cultivation. At the junction of streams, where the valleys are usually broadest and most favorable for their erection, some of the largest and most singular remains are found. The works at Marietta; at the junction of the Muskingum with the Ohio; at the mouth of Grave Creek; at Portsmouth, the mouth of the Scioto; and at the mouth of the Great Miami, are instances in point. Occasional works are found on the hill tops, overlooking the valleys, or at a little distance from them; but these are manifestly, in most instances, works of defence or last resort, or in some way connected with warlike purposes. And it is worthy of remark, that the sites selected for settlements, towns, and cities, by the invading Europeans, are often those which were the especial favorites of the mound-builders, and the seats of their heaviest population.

*Science News Letter, September 12, 1931*

One fine residence excavated in the ruins of Pompeii contained at least 40 rooms.



**PUT ON WEIGHT**

That is what the "T" rail has done during the century of its development. On the left is shown a cross-section of the first "T" shaped rail used by an American railroad. Contrasted with it, is the largest rail ever made for standard use, which has recently been designed and is now being laid on portions of the Pennsylvania system. The old rail, laid in 1831, weighs only 36 pounds per yard. The new rail, however, tips the scales at 152 pounds per yard and is built to stand satisfactorily 100,000 pound axle pressure loads at a speed of 100 miles an hour.

**MEDICINE**

**Infantile Paralysis Breaks Out in Middle West**

WITH INFANTILE paralysis increasing in the New York area, a second epidemic center of the disease has appeared in the Middle West, according to reports received by the U. S. Public Health Service. The new outbreak is in Michigan, Wisconsin, and Minnesota.

The two outbreaks are probably not related, health officials believe. The total number of cases for 44 states according to the latest report was 1,264.

Figures from individual states having large numbers of cases are as follows: New York City, 432; New York state outside the city, 180; Massachusetts, 135; Connecticut, 134; New Jersey, 103; Michigan, 76; Wisconsin, 61; Minnesota, 39; and West Virginia, 10.

Health officials pointed out that the epidemic in the East has spread from New York, but apparently will not spread across the continent, for in nearby Pennsylvania, the number of cases continues to be low. This state reported only 9 cases for the week of August 29.

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