

## IRON KNOWN TO PRIMITIVE MAN SAYS HARVARD SCIENTIST

The use of iron was known to the Stone Age man according to Dr. Albert Sauveur of the Harvard School of Engineering. Hammered implements of meteoric iron have been found in the ancient mounds in Ohio.

"So simple was the operation required for extracting a small mass of malleable iron that primeval man may well have discovered it by means of a fire accidentally lighted on ground where iron ore existed near the surface," says Dr. Sauveur.

The first iron furnaces were a single excavation on the side of the hill facing the prevailing wind, with an opening at the bottom for the draft. In this appliance the ore was heated, and in contact with charcoal, a small pasty mass of iron was obtained.

These primitive furnaces were called bloomeries. Very early in the development of the iron industries an artificial blast was introduced. In the south of Europe artificial blast furnaces were used long before the Roman invasion.

It was not until the early part of the twentieth century that steel began to take the place of wrought iron manufactured as it was in the days of Cort in the seventeenth century. With the development of Bessemer steel, although it needed high grade ore, wrought iron was practically rendered obsolete. No improvement in the Bessemer process has been recorded; however, iron ore has been reduced by electricity as a source of heat and carbon as a reducing agent. Manganese steel appeared to startle the metallurgical world some years ago by its extreme resistance. It was not until 1914, however, that stainless steel, an alloy of steel, was announced by its discoverer, Harry Brearly. Its adaptation for the manufacture of cutlery was immediately appreciated and it is now widely used for that purpose.

Dr. Sauveur calls attention to the rich deposits of ore in Chile and prophesies that they will furnish much of the material for American furnaces as the ore is from 65 to 68 per cent. of iron and is of Bessemer grade.

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FREE VERSE HAS OWN FORM

Free verse, the bolshevist of literature, has tamed herself to such an extent that she now falls into a regular classification.

Dr. A. R. Morris, of the University of Michigan, told the American Association for the Advancement of Science that free verse was a distinctive art form with characteristic pitch cadence of prose and the line groups of conventional verse. He pointed out, however, that "the cadence of free verse is more marked, more definite and closer knit than the cadence of prose."

The expression of the impression of an idea is possible in free verse but Dr. Morris thinks that it would be more effective if the printer, rather than the author, arranged the length of line.

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Nearly two thirds of our paper comes from Java and Madura.

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