he initial success of Napoleon’s invasion of Egypt had Parisians walking like Egyptians in a national Egyptian craze. But back in Egypt, Napoleon’s troops soon found themselves under attack from the Turkish army and the British Mediterranean fleet.

So the French dug in at various sites, one of them near the town of Rashid (French Rosette; English Rosetta). There, the spade of a soldier digging a trench unearthed a polished basalt slab — the slab which was to unlock the still undeciphered mysteries of Egyptian hieroglyphics, the second oldest form of writing in the world after Sumerian.

The Greek text on the slab stated that the same message was repeated in the three languages on the stone: hieroglyphics, Coptic and Greek. After the French surrender of Egypt in 1801, the British brought the stone as war booty to London, where it still resides in the British Museum.

English physicist Thomas Young made the first tentative breakthrough by determining that a cartouch (an oval figure enclosing hieroglyphics) represented the name Ptolemy.

But the person actually responsible for finally unlocking the stone’s mysteries was the brilliant French Egyptologist Jean Francois Champollion, who even as a boy had the idea fixe of wanting to be the first to decipher hieroglyphics. His crucial, and surprisingly simple, breakthrough: he counted the Greek words and the hieroglyphic signs and found three times as many hieroglyphics as Greek words. But since the two texts contained the same message, some hieroglyphics had to be sounds, not just single words. Hieroglyphics was thus a phonetic alphabet.

Champollion turned to the cartouche Young had discovered was Ptolemy. It contained seven different signs. Champollion assumed that each represented a different sound. Cleopatra, Champollion realized, contained many of the same letters as Ptolemy. When he checked the cartouche for Cleopatra, he found, exactly as he had expected, that symbols matched those in Ptolemy. And so, by applying phonetic values to names he found in dozens of Egyptian inscriptions, not just on the stone, but on obelisks and papyri, he was able to decipher the meaning of hieroglyphics.

One surprising discovery: Champollion found that although hieroglyphics were phonetic, the symbols were different from alphabetic letters; used in combinations that varied from word to word and from text to text, they made hieroglyphic writing a hodgepodge of consonants, syllables and symbols that serve to clarify word meanings.<<