

## ROSETTA STONE

It was July, 1799. The invading army of Napoleon was digging in for a long stay, after its conquest of Egypt. One of the sites selected for fortification was the old Mameluke ruins of Fort Rashid in the delta region of the Nile. The foundations were to be extended, and a new Fort Julian erected on them. Nearby, at Rosetta, a branch of the Nile could be used for bringing in supplies from the Mediterranean.

As the French soldiers dug, they came across a black basalt stone which seemed quite unusual in that three different styles of writing were carved into the surface. The engineering officer, Pierre Francois Xavier Bouchard, realizing that the stone might have more significance than first met the eye, reported its discovery to his commander, General Manou, who in turn ordered it to be brought to Alexandria. Gradually the realization began to grow that the three forms of writing might actually say the same thing, so that knowledge of one language would give clues to the unknown features of the other two. It remained to see if this theory were true.

Napoleon was shown the writing. He was so impressed by the carvings that he brought two printers from Paris to Cairo, just to pull proof copies. They inked the stone, placed paper on it, and rubbed. Good im-

pressions resulted. These were sent to scholars in many parts of Europe, so that they could be studied.

Meanwhile, as the proofs underwent a long period of examination, the French fortunes waned in Egypt. By 1801 the English forces had defeated them, and in the surrender, the Rosetta Stone passed to the victor's hands. In due course the stone was transported to the British Museum in London, where it still holds an honored position for all visitors to see.

This ancient stone is 39" high, 24½" wide, and 11" thick. It is but part of a larger piece, estimated to have been five or six feet high originally. The missing parts have never been found.

On the Rosetta Stone are two languages, Greek and Egyptian. The Egyptian portion is written in two forms:

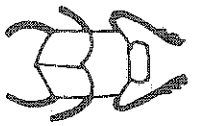
A. *Hieroglyphic*. This is topmost of the writings. This writing style was used throughout Egyptian history for nearly all documents and monuments intended for public viewing where the mantle of formal presentation was desirable. This type of writing corresponds to our present printing, particularly where Old English letters might be used to make the document or wording seem especially impressive.

B. *Demotic*. This was the middle group, being a highly abbreviated "handwritten" form of the hieroglyphs. Actually, this was the principal and popular writing form of the time when the stone was carved.

C. *Greek*. This was the language shown at the bottom. Therefore the implication of the writing was that the stone was carved after the arrival of Alexander the Great in 332 B.C.

Since a large section of the stone was missing, the problem of finding the matching portions of the three scripts that said the same thing was all the more difficult. Most of the Greek text and all of the demotic were preserved, but a large portion of the hieroglyphic text was absent. Therefore when the scholars worked to translate the stone and decipher the languages, they worked mainly from the demotic and Greek-letter portions.

That the job was eventually done successfully attests to the hard work and skill of the scholars. A large portion of the missing hieroglyphic text was found in a duplicate monument in 1898, and on a copy of the text carved on a temple wall at Philae, now underwater behind the Aswan Dam.



Scarab or dung beetle.  
Trilateral for "bring  
to pass; to become."  
Pronounced "kheper"

## THE DECIPHERERS

When copies of the Rosetta Stone texts reached Europe, scholars went to work on it immediately. The Greek text was translated by 1802. Results from the first studies of the demotic portion were achieved the same year by Akerblad, a Swedish diplomat. He identified all of the proper names in the demotic section which occurred in the Greek section, plus a few other words. All of these were written alphabetically. Brilliant as was his work, it led him to the assumption that the rest of the demotic text was alphabetic. This was to prove in error, but it would take 12 years before the erroneous premise was set aside. The mistaken assumption also existed that some of the signs were vowels, which caused other false starts.

It was not until 1814 that the scientist Thomas Young deduced that the demotic writing was not entirely alphabetic. By 1816 he had developed a vocabulary of 86 words associating the Greek with the demotic. He then found that the groups of hieroglyphs with ovals around them, or cartouches as they are better known, contain royal names. Using several hieroglyphic texts, he recognized the names of Cleopatra and Berenice, and that of Ptolemy.

This breakthrough by Young helped pave the way for the work of Jean Francois Champollion of France, who had been laboring independently on the decipherment and was coming to similar conclusions. By the time he had reached the year of his death in 1832, Champollion had corrected and greatly enlarged Young's list of hieroglyphs, and deciphered the names and titles of most of the Roman emperors who had ruled Egypt. He also formulated a system for understanding the Egyptian grammar and evolved a method of decipherment which became the



Jean Francois Champollion

foundation for all the later progress by Egyptologists in the study of hieroglyphs.

Although the Rosetta Stone showed the way to interpreting the royal names in the hieroglyphs and obtaining the phonetic equivalent of many signs, the language could not have been understood without a knowledge of Coptic. This late stage of the ancient Egyptian language using Greek letters and a few signs derived from demotic, was in a language that had never been lost. The Copts used their much-changed version of the ancient Egyptian language, employing Greek script, for translations of the Bible, liturgies, and other writings of Christianity. Champollion realized the importance of knowing Coptic if he were ever to understand the hieroglyphs, and as a result he had learned the language as a youth. His work enabled him to achieve the success which made him famous, when he bridged the gap between the Greek letters and the uninterpreted hieroglyphs.

The work of Champollion was but a small beginning. In the next hundred years the knowledge of Egyptian writing was immensely broadened. A tremendous amount was achieved by the 1920's. In 1927, compilation was completed on an exhaustive file of 1½ million reference slips by scholars throughout the world, begun in 1897. It formed a collection of all words in all the known Egyptian inscriptions and manuscripts, the file being the Berlin Woerterbuch. This material is being gradually brought together in a series of books, and the work is still in progress. Many words have been added since 1927. An additional index was published in 1963, supplementing the volumes already produced.