

*24* *Journal*

LEBOLD  
REFERENCES

(ITALIAN)

PROF. L. A. BALBONI

**GL' ITALIANI**  
nella Civiltà Egiziana del Secolo XIX°

STORIA - BIOGRAFIE - MONOGRAFIE

OPERA PUBBLICATA  
SOTTO GLI AUSPICI DEL COMITATO ALESSANDRINO  
DELLA  
SOCIETÀ DANTE ALIGHIERI

CON PRAFAZIONE DEL  
COMM. DOTT. FEDERICO BONOLA BEY  
SECRETARIO GENERALE DELLA SOCIETÀ GEOGRAFICA KHEDIVIALE

« L' Egitto è legato all' Italia da tante care memorie che il dimenticarle da chi in esso oggi vi ha dimora riuscirebbe più che biasimevole. »  
GIUSEPPE ZANARDELLI.



VOLUME I

ALESSANDRIA D'EGITTO  
TIPO-LIT. V. PENASSON, A. V. HORN SUCC.  
1906

- THREE VOLUMES  
THE LAST TWO VOLS.  
ARE AFTER 1850 -

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The Two Pharaonic Cubits

A letter to Lebulo - Description of the wooden cubit - The measure given by Newton, Plinio, Le Pere and Girard - The cause of a new mistake - The cubit of "Amen-hotep" found by Nizzoli - Other works - The papyrus

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After returning from Cairo, after the trip of Siwah, Segato was informed that Msara had found a pharaonic cubit made out of wood among the ruins of Memphis, in Sakkara (where he [Msara] after the departure of Minutoli was digging for Drovetti). Segato wrote immediately to his friend Lebulo, that was momentarily in Alessandria, in order to ask him to ask Drovetti for permission to draw the picture and make the description of such a measure in order to publish it as soon as .

LEBULO  
CUBIT - MANY  
DEATHS  
"TAKE CARE OF MY  
FAMILY" (3 wks  
after Marie died)

possible in spite of the difficulties mentioned in the following answer of November 25, 1821:

My Dearest Segato:

..... (1)

After such confession I must tell you, to answer to what you are asking about Mr. Drovetti's measure, that to publish such an important piece means to devaluate it. Be patient and maybe I will be able to second your wish.

In the meantime please take care of my family. . . while with all of my heart I give you an embrace and I am

Your true friend,

P. Lebulo

Lebulo was soon able to fulfill his friend's wish and brought personally the wanted cubit because Drovetti liked Segato's offer, and also requested a copy of the drawing.

We think it is interesting before going further into the matter, to give a description of such a cubit:

Wooden cubit length 0.525 m. with long inscription in white Hieroglyphics containing proscinemi to all the gods of the south and for a character called Amenem-apt. - General Catalogue of the Museums of Antiquities and of art objects collected in Galleries and Libraries of the Kingdom, edited by the Department of Education. First series: Piemonte. Turin Royal Printing - house by G.B. Paravia & Co. (Vigliardi sons) 1888 p. 244.

Paul Pierret in Vocabulaire hieroglyphique (Paris, F. Vieweg Lib. Ed., 1875) says that Amen-em-apt was governor of the South under Seti-Meneptah I and Rameses II, King of the XVIII dynasty who reigned from 1610-1671 before the vulgar age. But since the royal papers that are found in the inscription have the name of Amen-meri and Horemheb, who is Amenhotep IV, in Greek Horos, who was the last king of the XVIII dynasty who made an expedition to Ethiopia, it is therefore without doubt that this personage Amenhotep IV was the governor of Ethiopia and that the cubit was made

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(1) Questa parole di lettera essendo di carattere affatto intimo, il propretario di essa ne ha desiderata l'ommissione.

about 1400 years B.C., the age when that Pharaoh reigned. Other writers like Pietro Bortolotti read this name: Amenemopht and Amonemapt ("Of the original Egyptian cubit and of the geometrical relation to other Egyptians and foreign cubits of measures and weights." Modena, 1878). Bortolotti assigned to this cubit the length of 0.5235 m.

Consequently Segato's desired to make known to the scholars that the Drovetti cubit is a very noble thing because the discovery of the ancient measure, unknown until then, was for science really of great importance because it resolved many questions concerning geography, astronomy and geology. The information left by Jewish, Greek and Roman writers were very general and confused and modern scientists were unable to know the Egyptian's exact units of measure, not even the pharaonic constructions were of any help in order to solve the problem because they lacked precision. Newton studying the size of the funeral chamber in the pyramid of Cheops in Giza, previously found in 1638 by John Graves who was professor of astronomy at Oxford, guessed that the room should be 20 cubits in length and 10 cubits wide and he came to the conclusion that the Egyptian cubit must be 1.719 English feet, equal to 0.52395 m.<sup>(1)</sup> But how could anyone be sure of that idea?

As a matter of fact, architect Le Pere and Coutelle, members of the Institute of Egypt, using the size of the above mentioned chamber, measured by them in 1799, obtained the length of the cubit as 0.525 m. Being unsatisfied with this result, they measured the base of the great pyramid from the northern side and dividing its length of 232.6678 m. by 83 feet indicated by Plinio, they obtained a cubit of 0.527 m. Mr. Pietro Simone Girard, a civil engineer, while studying the Nilometer discovered by him in 1800 on the Elephantine isle by the first cataracts, came to the same conclusion. He measured the last seven steps over the level of the Nile, which were marked with the Greek number 18-24 and made of 24 flutings, he obtained 0.527 m. per cubit.

Things were at this point when

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(2) Isaaci Newton: *Equitis aurati opuscola mathematica, philosophica et philologica etc.* Tomus tertius continens philologica. Lausannae et Genevae apud Marcum-Michaelem Bousquet et socios, MDCCXLIV.

the cubit of Amen-om apt, made out of wood of Meroe, and 0.5235 m. in length was found in Sakkara. Segato, being precise as usual, made two drawings of the cubit, one for himself and one for Drovetti, but he thought it unnecessary to write the size in modern numbers and this omission caused a serious drawback that delayed for 7 or 8 years the doubts about the Egyptians ancient metric system. Drovetti sent Segato's drawings to his friend Edmondo Jomard in Paris. The long trip on the sea and the multiple folding to which the drawing was subject caused the drawing to shrink of few millimeters, therefore Jomard in his "Description d'un e'talou metrique," (Description of a standard meter) published in the Scholars' Journal of Paris (1) assigned to the cubit 0.520 m. and advocated a new metric system that caused him to err. Segato who wrote a brief summary of this new system in his Atlas.

A few months later, in April 1812, in the digging done by Giuseppe Nizzoli in Sakkara the marble cubit of Amenhotep was discovered. Segato found a great difference in the inscriptions found on this cubit and he did not stop to trouble his friend until he obtained permission to draw the pieces found and later he obtained the same permission from Drovetti. Now it is important to know that this last cubit was broken in eight pieces, and Nizzoli was able to keep only 5 of them, 2 others were stolen and later sold by the Arabs to Drovetti, one disappeared and was never found again.

We owe to Segato's care that the remaining pieces were gathered first in the drawing and later the cubit itself, because Drovetti sent to Florence the pieces belonging to him when he found out that the Great Duke of Tuscany had bought Nizzoli's complete collection. Segato, notwithstanding the adverse circumstances in which he drew did not allow doubts or necessitation to come in his way and gave the cubit a measure of 28 inches equal to 0.520 m. and gave to the missing piece the measure of 4 1/2 inches which is 100 mm.

Since the inscriptions and the drawings on the cubits were particularly fine, Segato himself wanted to do the engraving in order to keep their exactness.

Of him we have "Letters to Count Vidua of Conzano, published by Cesare Balbo." Torino, 1834, 3 volumes in 8<sup>o</sup> with pictures and Atlas.

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(1) Anno 1822. Fascicoli Novembre e Dicembre, pag. 664 e 744. Scrisse inoltre la Lettre a M. Abel Remusat sur une nouvelle mesure de coudee trouvee a Memphis, Paris, 1827.

P. Lebulo

(.....?-1825?)

Count Vidua mentions this fellow country-man in a letter written to Cav. Drovetti from Milan where Vidua was staying. The letter is dated February 10, 1823:

Here is an extract:

"I saw Mr. Lebulo who told me about the death of many. . . and of the insanity of Frediani. ."

In 1820 Lebulo was a collector of antiquities in Egypt. Doctor Burkardt bought from Lebulo a rich collection of antiquities for the imperial cabinet of Vienna. We know of this detail through Lady Amalia Nizzoli that records it in her "Memories on Egypt." In the "Segato" we have found a letter written by Lebulo himself to Segato about the Drovetti cubit.