

## CHAPTER V.

### RE-ERECTION OF THE VATICAN OBELISK.

BY LIEUTENANT SEATON SCHROEDER, UNITED STATES NAVY.

**I**N the Piazza di San Pietro stands the largest entire obelisk out of Egypt, and the second in size in the world. The one that surpasses it in height is that of Queen Hatasou at Karnak. The tallest ever quarried, that of St. John Lateran, is now in three pieces, having shared the general destruction that befell those monuments in Rome.

Brought from Heliopolis by the Emperor Caligula early in the first century of the Christian era, the Vatican obelisk was originally set up in the Circus of Caligula, afterward named the Circus of Nero, the scene of the Christians' martyrdom. There it remained undisturbed for fifteen centuries, the only one of all those now to be seen in the papal city that escaped being overthrown. It is probable that but for its timely transplantation it would soon have shared the fate of its companions in exile, for when examined by Fontana in 1585, it was found to be leaning toward the neighboring Basilica of St. Peter's, the summit being seventeen inches from the perpendicular.

Standing on a pedestal hidden in rubbish, in a muddy, unfrequented quarter of the city rarely visited by the travellers that flocked annually to Rome, it contributed little to the decoration of the modern capital, and several of the popes entertained the idea of setting it up in some more conspicuous place. Prominent among them was Nicholas V, who also first undertook to replace the Basilica of Constantine the Great by a new and more extensive building, which, in the course of three centuries and a half, became the present magnificent pile designated by Gibbon as "the most glorious structure that ever has been applied to the use of religion." The project was revived at various times, but the obstacles appeared so enormous, that it was as often abandoned. It was reserved for Sixtus V, to display the unconquerable zeal and tenacity of purpose necessary to smooth away all difficulties. Animated by great religious fervor, inspired by a wish to destroy all vestiges of idolatry, and purify the obelisks and all other monuments erected by the pagans in honor of their gods, he determined to begin with this superb shaft, and purge it of its stains by making it serve to support the holy cross. His purpose was to transform the column of Sesostris into a Christian monument, and make it a trophy of Christ.

A commission was convened of distinguished prelates and savants to deliberate upon the most appropriate site, and more particularly upon the best method of effecting its removal. This body met on the 24th of August, 1585, but the members fell to generalizing and discussing vague principles, and came to no conclusion. Nothing daunted by this failure, the pope issued an appeal to the lights and talent of the century, offering a prize for the best plan. Over 500 persons attended this second meeting, which took place on the 18th of September of the same year; Milan, Venice, Florence, Lucca, Sicily, even Rhodes and Greece were represented in the assembly, and every one present had a drawing, a

model, or a written description. Notwithstanding great divergence of opinion in matters of detail, most of the contestants argued that it would be safer, easier, and more prudent to transport it erect than to lower it and raise it again on a new pedestal; some even proposed to move it not only erect, but on its pedestal. Others advocated a middle course—to incline it at an angle of forty-five degrees, and haul it along in that position. There is no written description extant of the various methods proposed, but in Fontana's book<sup>1</sup> there are representations of several, giving early proof of the ingenious workings of the human mind when grappling with the subject of obelisks. In one diagram an immense timber half-wheel is shown, erected with the diameter vertical along a side of the monolith; on being made to roll it would bring the stone horizontal on top of it; the erection to be performed presumably in the same way. In another, wedges alone were to be used for raising it clear of the ground, a heavy scaffolding keeping it steady in an upright position during the removal. According to a third it was to be inclined by means of screws to an angle of forty-five degrees, when a stout cradle would hold it. Another provided an immense lever, rigged as the beam to a scales; the short arm was connected to the obelisk, and power applied to the long arm would raise or lower it at will. In another diagram was a large timber half-wheel, with the diameter horizontal and resting on the ground; the centre of the wheel was close to the foot of the obelisk, and on its circumference were a number of notches or cogs in which supports would rest, and the stone be lowered from one to another. In still another, four immense endless screws are represented in a vertical position, two on each opposite side of the Needle, parallel and nearly equal to it in height; two others, horizontal, were apparently to work in these, and thus raise or lower the shaft. Many of the plans were rather unpractical, but the collection speaks well for the mechanical ingenuity of the sixteenth century.

Among the contestants was Dominicus Fontana, an architect, native of Mili, a village on the border of Lake Como, who advised lowering the obelisk flat, hauling it on rollers to the new site, and raising it again by means of tackles and capstans. He had made a small model of the obelisk in lead, and one of the hoisting apparatus in wood, and illustrated his plan by actual operation on a small scale before his hearers. The assembly were soon won to declare it the best method of all proposed, and the prize was awarded him. At the same time it was decided that such an immense work should be done under the superintendence of two older architects, Ammanati and Jacques de la Porte, skilled in the art of moving heavy weights; Fontana was too young; he was only forty-two. Deeply grieved at such apparent lack of confidence in his ability, our young friend bided his time, and after the works had begun he joined a party of friends going to Monte Cavallo. The pope naturally questioned him about the obelisk, to which he replied that it was impossible for him to reason about that matter. "At present," said he, "but one idea fills my mind and absorbs my intellectual faculties. I am afraid modifications will be introduced into my system that may cause serious accidents, for which I would be held partly responsible. The more I think of it the more convinced I am that injustice has been done me, for no one can carry out a design as well as the designer." The justice of his complaint was evident, and he was directed forthwith to assume charge of all operations. Overjoyed at his success Fontana hastily collected fifty men and ran to the selected site to begin the trench for the foundation; this was on Wednesday, September 25, 1585.

Wishing to hasten and facilitate the work in every possible way, Pope Sixtus gave him authority to demolish all buildings that might interfere with the carrying out of his plans, and to take, in Rome or other cities of the Holy See, all materials, instruments, or provisions necessary, for which an indemnity would be paid the proprietors afterward. All papal employés were likewise enjoined to aid and second Fontana in every possible way, under penalty of incurring the extreme displeasure of the sovereign

<sup>1</sup> *Della Trasportatione dell' obelisco Vaticano, et delle fabbriche di nostro Signore Papa Sisto V. Fatte dal cavallier Domenico Fontana. Roma, 1590.* This work is to be found in the Astor Library, New York. The drawings were reproduced in *Templum Vaticanum et ipsius origo etc. Editum ab equite Carolo Fontana, Romæ, 1694*; also in *Castelli a Ponti, di Maestro Niccola Zabaglia, 1743.*

pontiff. Armed with these full powers, he sent trusted agents to various points to collect the materials necessary. The timber was drawn from the forests of Campo Morto, twenty miles from Rome, immense balks being hewn and drawn to the city in vehicles to which were harnessed seven pairs of oxen. While the materials were being thus collected he personally superintended the manufacture of the rope to be used in raising the monolith. He also tested by actual experiment the power of each capstan and the strength of the rope, and decided what power to apply to each to insure not surpassing the elastic limit of the hemp. Many critics said that it would be impossible to apply an equal power through all the capstans, and that some would therefore bear all the strain; to obviate this he proportioned the capstans so that the full power developed by each would not be great enough to part its tackle. Thus, when the men and horses on a capstan had hove to their utmost, they would simply be unable to heave any farther, and others which might not be bearing a proper strain would then catch up.

The first thing to be done was to ascertain the weight to be lifted. Careful measurements proved the dimensions of the obelisk to be as follows:

	FEEET.	INCHES.		FEEET.	INCHES.
Length of main shaft, $107\frac{1}{2}$ palmi <sup>1</sup>	=	78	8.92	Height of pyramidion, 6 palmi	= 4 4.74
Side of base, $12\frac{1}{2}$ "	=	8	10.21	Total height, $113\frac{1}{2}$ "	= 83 1.66
Side of top, $8\frac{1}{2}$ "	=	5	11.05		

The slight height of the pyramidion struck Fontana as being strange, and on studying it out he concluded that Pliny was right in saying that it had been broken during the erection in the first century. The rule generally adhered to in fixing the proportions of obelisks seems to have been that the height of the pyramidion should be once and a half a side of its base, and Fontana verified this rule at the time by measurements of other obelisks in the city. It is fair to suppose, therefore, that the original height of this pyramidion was eight feet, 10.45 inches, making the entire height eighty-seven feet, 6.30 inches. Mr. Joseph Bonomi gives the height of this obelisk as eighty-eight feet two inches.<sup>2</sup>

Accepting Fontana's figures, the dimensions of the obelisk give a volume of 4,403 cubic feet, and a weight of three hundred and twenty-six English tons, the specific gravity of the stone being 2.66. There being no hieroglyphics on it, this may be regarded as very nearly its exact actual weight. Fontana carefully weighed a cube of the stone measuring precisely one palm, and found it to be eighty-six *libbre* or 64.302 pounds avoirdupois, and deduced  $973,537\frac{3}{8}$  *libbre* or 324.92 tons as the weight of the monolith. To this had to be added a certain allowance for the sheathing and the attachments necessary in handling it.

Having found the weight to be moved and the power capable of being transmitted by each apparatus, it was decided that forty tackles worked by as many capstans, moved by eight hundred men and seventy-five horses, together with five great levers worked by one hundred and six men, and wedges driven under the base, would furnish sufficient power to allow for lack of simultaneity in heaving. So we see that Fontana used all three of the fundamental mechanical applications of power,—the pulley, the lever, and the inclined plane. The capstans were made with four bars; to the first and third bars horses were harnessed, while the other two were worked by men.

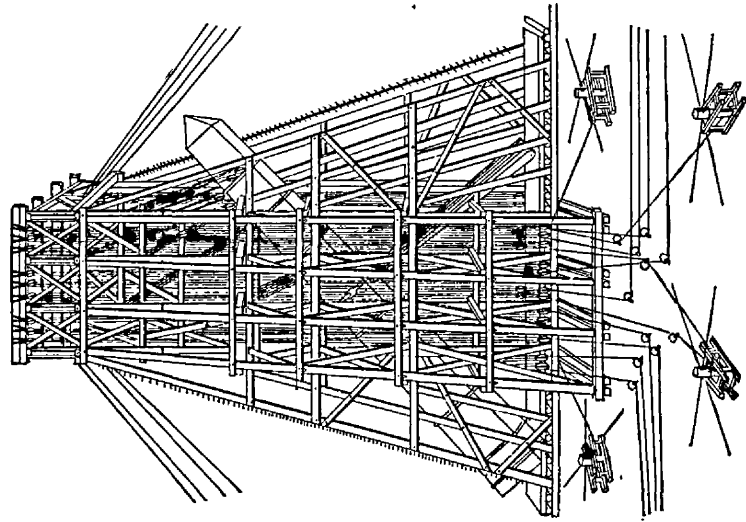
The plan of lowering the obelisk involved first raising it bodily about two feet, in order to introduce underneath it a platform on rollers, on to which it would be lowered, and on which it would be rolled to its new site. As tackles were to be used in hoisting it, it was necessary to provide fixed points for the upper blocks of the pulleys, and for this purpose was built an immense scaffolding ninety feet high, which was universally dubbed Fontana's castle. On Plate xxxviii is a perspective view of this scaffolding, the details of construction being as follows: The principal feature consisted in eight timber

<sup>1</sup> Palmi d' architettura; one palmo = 0.7325 feet, = 8.79 inches.

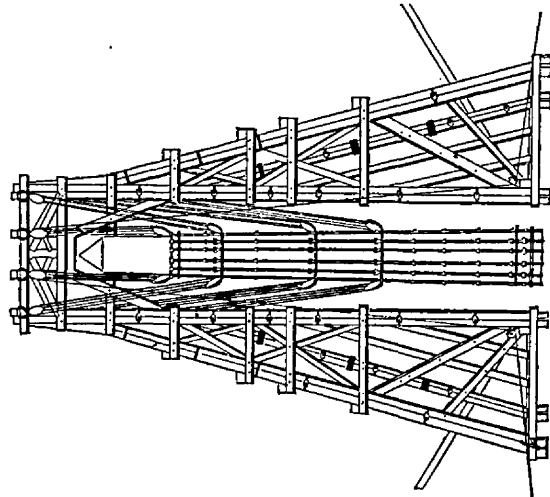
<sup>2</sup> Erasmus Wilson.

*APPARATUS FOR TRANSPORTING AND ERECTING THE VATICAN OBELISK*

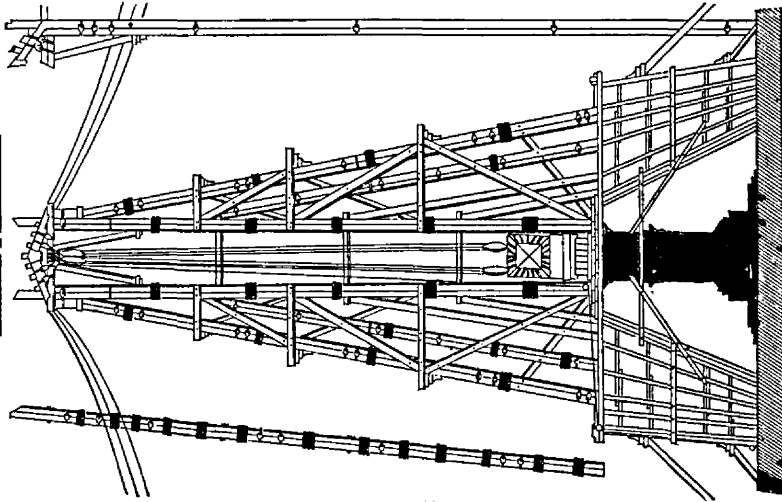
*Perspective view of Structure.*



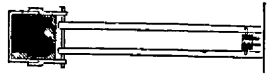
*Perspective view of Structure.*



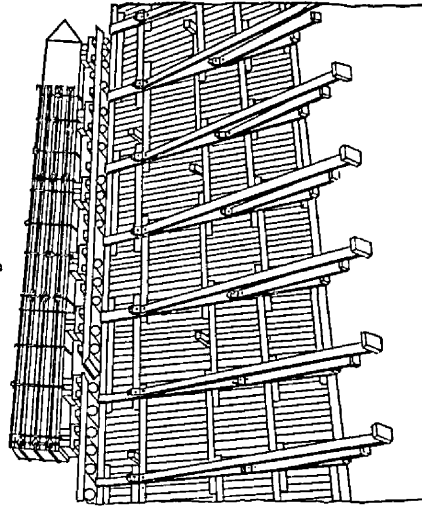
*Section through Structure.*

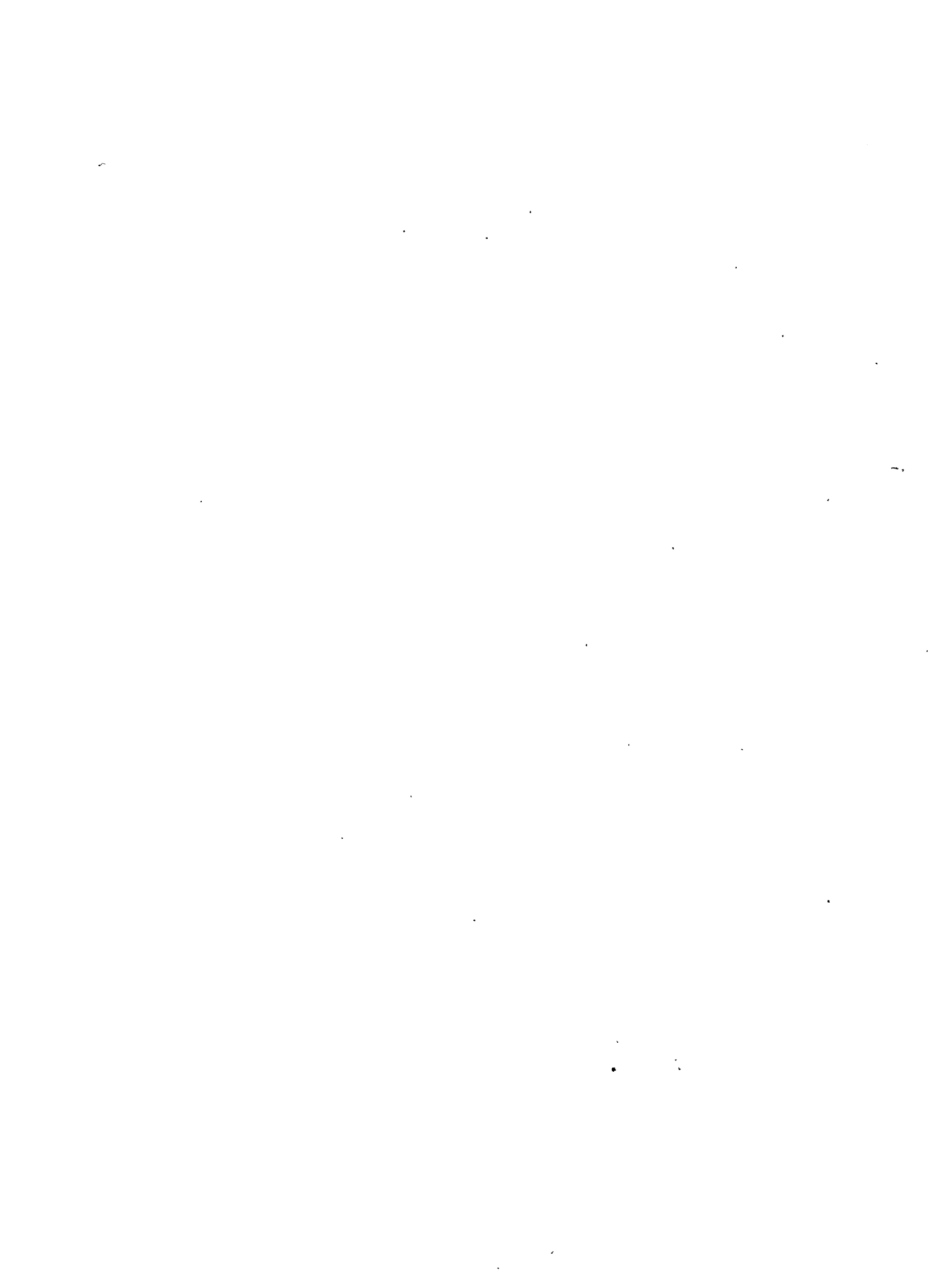


*Section through movable strut.*



*Method of transporting.*





uprights, three and a half feet apart, four on either side of the column. Each upright was forty inches square in section, built of oak and walnut, four beams in thickness; the butts of the pieces were carefully shifted, the various parts put together without tenons or mortises, but secured by key-bolts, iron bands at every nine feet, and rope lashings equally spaced. The latter were tightened by wedges driven between them and the wood. The uprights were sustained in their vertical position by struts, which had also to be fashioned by uniting several pieces of timber; the struts and uprights were secured to each other by cross and diagonal tie-beams, iron bands, and woodings. The tops of the uprights were connected by trusses, as is shown in *section through structure*, Plate xxxviii, the string-pieces running along over these trusses being over two feet square; to these were lashed the upper blocks of the tackles. It was seen that when the pressure was thrown on the uprights, the struts branching out would prevent their buckling outward, but that they were liable to bend inward. To prevent this, horizontal tie-beams were thrown across from upright to upright, bolted to them, and butted against the struts; afterward they had to be removed one at a time as the obelisk was lowered. The entire "castle" rested upon a heavy timber platform, into which the uprights and struts were stepped with tenon and mortise; in the construction of the whole fabric, none but key-bolts, or such as could be easily drawn, were used, to facilitate dismantling it and setting it up again on the new site. Finally, for perfect security, eight heavy shrouds or stays were fitted to the top of the castle, and set up taut to ensure stability.

While this scaffolding was being put up, the ground was levelled off, houses that interfered with the efficient working of the capstans torn down, and the obelisk encased in a protective covering of matting and two-inch plank. Twelve iron bars, four inches wide and two inches thick, were passed beneath the heel and up, three along each face; they had shoulders against which butted nine horizontal iron bands, which did the double duty of securing the planking and affording means of attaching the lower blocks of the tackles. The obelisk resting on four bronze blocks made it possible to pass the bars under the base without injuring the pedestal. Not trusting entirely to iron, additional rope lashings were unsparingly provided, and Fontana, estimated the weight of the matting, wood, rope, and iron thus used to be about 23 tons, increasing the entire weight to be handled to about 350 tons. The brass globe surmounting the obelisk was taken down as soon as it could be reached; it had been thought possible that this contained the ashes of one of the Cæsars, but it was found to be a solid casting. There were a number of deep dents in it, which were conjectured to be the marks of arquebuse-shots inflicted possibly during the storming of the ancient Western capital; the dust collected in them certainly bespoke a moderate antiquity.

The excavations at the new site in St. Peter's Square were also continued in search of solid ground, and a number of commemorative medals were deposited in the pit, most of them being contained in two caskets of travertine stone, holding a dozen each. On one face they bore the image of our Saviour, and on the other various symbols among which were the following: a man asleep under a tree, with the motto *Perfecta Securitas*; three mountains of which the right-hand one was surmounted by a cornucopia, the left by a laurel branch, and the middle one by a sword the point of which, turned heavenward, supported a balance, the inscription below being *Fecit in monte convivium pinguium*; St. Francis kneeling before a church in ruins, with the exhortation *Vade Francisce et repara*. On some of the coins was struck the effigy of Pope Sixtus V, with the figures of Religion and Justice on the reverse side.

On the 28th of April, 1586, every thing was ready, and the 30th was appointed for the lowering. On the 29th Fontana received the papal benediction, and before daylight of the 30th he and his assistants took communion; two masses were also held to implore the light of the Holy Spirit. By daybreak the workmen were all at their posts, and every avenue leading to the ground was thronged by dense crowds, which comprised all the most distinguished literary and scientific men of the city;

a great many strangers had also flocked to Rome to witness the operation, and due precautions were taken against disorders liable to be caused by such a gathering. A large surrounding area was fenced off, and a proclamation pronounced a sentence of death on any one that should force his way through the barricade; absolute silence was also commanded under severe penalties.

Fontana first exhorted the workmen to do their duty loyally, and to pay strict attention to orders, and recalled to them the signals to be used. At the first sound of the trumpet the capstans were to heave round together; the signal to stop was a stroke of a bell at the scaffolding. He then visited every part of the enclosure to satisfy himself that all were in their proper places; men and horses were at the capstan-bars; the levers, forty-four feet long, were adjusted, three on the west side and two on the east, with ropes hanging from the ends, some of which were taken to small capstans; the twelve carpenters were in readiness to drive the wood and iron wedges under the obelisk, the object of these being partly to help raise the mass, and partly to form permanent supports for the monolith as it rose from the bronze crabs, so that the weight should at no time be borne wholly by the tackles. The men detailed for this duty were provided with iron helmets as a protection against fragments of wood or iron that might come tumbling from aloft.

The architect then assumed a conspicuous position whence he could be seen by all, and, speaking in a loud voice, recalled the religious motives that prompted the transplantation of the obelisk. "The work that we are about to undertake is in the cause of religion, and for the exaltation of the holy cross. Implore with me the help of God, the sovereign moving power; let us ask for His help, without which all our efforts must be in vain." And all within hearing—noblemen, citizens, priests, strangers—fell on their knees and recited a *pater* and an *ave*. A striking scene must it have been, and typical of that curious age.

A blast of the trumpet set the capstans revolving round their spindles; the tackles assumed the strain, the ends of the levers descended slowly, the hammers were heard ringing against the heads of the wedges, and the majestic shaft, heretofore leaning toward the cathedral, drew itself up to a vertical pose amid a portentous creaking of wood and tackles. A stroke of the bell brought every thing to a standstill. The vibration was only caused by the compression due to lifting bodily a dead weight of three hundred and fifty tons, and no material harm had been done. The topmost iron band was found broken and was immediately replaced by a rope lashing held down by frappings under the heel. Another heave was then ordered, and the obelisk left its metal supports; the signals were repeated a dozen times, and finally, at about four in the afternoon, it had been raised twenty-four inches. This was announced by the firing of a small cannon, and immediately the batteries of the city responded with a joyous salute.

An inspection of the apparatus the next day revealed the fact that most of the horizontal iron bands were broken, twisted, or displaced; disaster had probably been averted only by Fontana's careful foresight in rigging rope preventers. The obelisk now resting on the wedges under the corners, and steadied by the tackles, the blocks that had supported it for fifteen centuries were removed. Two of these gave no trouble, but the others were connected with the pedestal by long dovetailed spurs, solidly leaded in place, and it required four days and four nights to break them out; in the end it was only accomplished by chipping away the stone round the mortises. From a small drawing in one of Fontana's plates, it appears that these blocks were very similar to the crabs which were found under Cleopatra's Needle, and which are now to be seen in the Metropolitan Museum of Art in New York. The two with spurs weighed six hundred pounds each, or about the same as those used by Pontius.

The operations still to be performed required extensive alterations in the various apparatus. The end of the rolling cradle was introduced beneath the obelisk, between the wedges at the corners, from right to left as viewed in the left-hand figure of Plate xxxviii. It was necessary then to change the movable blocks of the tackles from what was to be the under side of the Needle to some other

part. Four tackles were also rigged to pull the cradle along to the left as the monolith was lowered. As a precaution against a possible yielding of the ropes at any time, a heavy movable strut was devised and placed against the Needle, near the middle, the upper end being seized by an iron collar round the shaft, which formed the axis on which it could revolve, the lower end being free to move away to the right when desired. To afford means of checking this movement so as to make it support the weight, a roller was placed between two parts of the strut (see *section through movable strut*, Plate xxxviii); two ropes were wound several times round this roller, and the ends secured to the columns of the scaffolding; the roller revolving permitted the foot of the strut to recede as the obelisk was lowered, but by placing a lever in a mortise cut for the purpose, this rotation could be stopped, and the strut kept steady. As a prop of this kind could only act efficiently at certain favorable angles, several were prepared of different lengths, so that at no period of the descent need the obelisk be left without proper support.

All the preparations for the new work were completed by the 7th of May, and the operations were resumed on that day. The trumpet and the bell were used as before to regulate the capstans. As the lowering tackles were slacked, the cradle and the heel of the monolith were pulled away to the westward. It was Fontana's intention at first to keep the lowering tackles nearly vertical, but as the work progressed that had to be given up; toward the end also the thrust of the obelisk was such as not only to render the four tackles on the heel unnecessary, but to require one from the opposite direction to check it. To prevent all shock in landing it, five tackles were also taken from the point of the Needle to the arch of the sacristy of St. Peter's. The operation was entirely successful, though frequent interruptions were necessary to rig the new tackles, and to remove cross-beams of the scaffolding that were in the way of the descending shaft. By four o'clock the obelisk lay safe and sound on the cradle, and, amid shouts and universal greetings, Fontana was carried home in triumph escorted by drums and trumpets.

The monument had now to be dragged to its new site in St. Peter's Square, a distance of two hundred and seventy-five yards. The level of the ground here was a little more than twenty-nine feet lower than at the old site, but when the height of the pedestal, twenty-seven feet, was considered, it was found that the descent would be only about two feet in the two hundred and seventy-five yards. A roadway of earth was built on that grade, the sides being supported by a wood revetement propped up by struts; the revetement was further supported from within by transverse and diagonal braces. The height of this viaduct increased from zero at the old site to twenty-seven feet at the new, the breadth being seventy-three feet at the bottom and thirty-six and one half at the top. The obelisk was only hauled away clear of the pedestal at first, so as to admit of taking down the scaffolding, and of removing the underlying masonry, which was rebuilt in precisely the same shape at the new site. The foundations required a great deal of labor and expense, as the nature of the ground was not favorable for supporting a heavy weight. An excavation forty-three feet square had been made to a depth of twenty-four feet, and as the soil then reached was not firm enough, oak and chestnut piles eighteen feet long and nine inches in diameter, after being barked, were driven in a solid mass. Over this was laid an immense bed of concrete, reaching nearly to the ground level, made of basalt and a mortar composed of lime and puzzolana.

As Fontana dug down to unearth the old pedestal, he found the various courses laid as follows, beginning with the top. First was a plinth ninety-six and one half inches high, one hundred and seven and one half broad on the east side, one hundred and fourteen and one quarter on the west, and one hundred and sixteen and one half on the north and south; the weight was computed to be fifty-five and one half tons. Under this was found a block thirty-five inches high, one hundred and thirty-two inches broad at the top, and one hundred and fourteen and one quarter at the bottom, weighing twenty-two and one half tons. Then came another plinth one hundred and fourteen and one quarter inches high,



but, strange to say, less broad than the top one, being only one hundred and three and one quarter inches on the east side, and one hundred and fourteen and one quarter on the others. The finish of this block was much less perfect than that of the topmost, and Fontana concluded that the latter might be of more ancient origin, not successfully reproduced by the architect of the other. For this reason he decided to replace them in the same relative positions. The weight of this third block is not given in his account, but, assuming the specific gravity of the material to be 2.75, which was evidently that adopted by him, it is about sixty-three tons.

Next beneath was found white marble, in blocks connected by iron clamps cased in lead; the iron was found to be in a perfect state of preservation although it had been under water apparently for centuries. Last of all were the courses of travertine stone forming three steps, which rested on decomposed concrete.

In rebuilding this substructure, two inches had to be chiselled off the top of the upper plinth to form an even surface, in consequence of its having been chipped away to remove the crabs. Some more medals, similar to those previously deposited in the concrete, were placed within the masonry. Two gold ones, on the upper tier of steps, bore the effigy of the pope on one side, and on the other the images of Religion and Justice. Between the two inferior strata of marble was placed a slab of the same stone, on which were carved in Latin the names of Pope Sixtus V, and of Fontana, and the name of the latter's native town, together with an account of the operations. Finally, eight square holes were made in the travertine slabs to receive the heels of the uprights of the scaffolding; these, in consequence, had to be made some twenty-seven feet longer than before. When all this was done, earth was compactly rammed all around, forming a continuation of the viaduct, which here widened out to ninety-one and one half feet at the bottom and sixty-nine and one half at the top. The scaffolding was then rebuilt, and the obelisk slowly dragged by means of tackles and capstans until the point was over the centre of the pedestal, a commemorative slab having been left to mark the spot where it had stood for so many centuries.

On the 10th of September, 1586, the erection took place, being preceded by the same religious ceremonies as the lowering. As the apex of the shaft rose under the action of forty capstans, worked by one hundred and forty horses and eight hundred men, horizontal tackles pulled the heel and cradle forward, for the purpose of keeping the hoisting gear acting as nearly vertically as possible. At about three o'clock, when an angle of forty-five degrees was reached, a respite was granted for dinner, all having been at work without intermission since daylight; the movable strut was again brought into play and proved itself an efficient auxiliary support. At nearly sunset, thirteen hours after beginning operations, the obelisk was vertical over the pedestal, but separated from it by the cradle. To free the latter, the monolith had to be raised bodily, and this was accomplished, on the following day, with the same combination of apparatus as on the old site,—forty capstans, five levers, and the wedges. Acted upon simultaneously by all these motors the obelisk was lifted a certain distance, and then rested on the wedges, while the cradle was removed and the bronze crabs replaced precisely as they had been found. All this took some time, and it was not until the eighth day after the erection that the tackles were slacked, the levers eased up, the wedges carefully and slowly withdrawn, and the obelisk landed firmly and permanently on its four supports.

There is a very pretty little anecdote related in connection with this operation, which naturally appeals to one's imagination, but which will scarcely stand the test of practical inquiry. It is said that the progress of the work was interrupted, and the process of erection on the eve of failing from the stretching of the ropes, when a sailor named Bresca, regardless of consequences, cried out, "Acqua alle funi!" (wet the ropes!), and that this practical advice being acted upon the weight was lifted. The legend goes on to the effect that not only was Bresca pardoned for violating the strict orders regarding silence, but that the pope conferred upon him and all his posterity the privilege of supplying

St. Peter's with palm leaves on Palm Sunday, as an acknowledgment of his services on that memorable occasion. It seems that there is now a family of that name in Bordighera, possessing that privilege, but, iconoclastic as it may appear, the story of the origin of the grant will not hold water. If the ropes were stretching it was because the elastic limit of the hemp had been exceeded by too severe a strain; wetting the rope would have had the effect of contracting the fibre and, therefore, of increasing the strain. Moreover, the whole weight of the monolith was never allowed to come entirely upon the tackles, except in lowering. Fontana, in speaking of the wedges used in lifting it, carefully explained that their object was mainly to prevent the Needle resting unsupported in air.<sup>1</sup> In describing the preparations for lowering he also weighed upon the similar use of the movable strut, which was again called into requisition in raising the obelisk.

If the anecdote has any foundation in fact, it could only be that the power applied was insufficient, and that the contraction of the ropes by moisture supplied the deficiency. But this theory is also open to serious objections. When a rope is subjected to a strain such as was sustained by these, the fibres are so compressed and the surface of the rope so hard, that it would be impossible for any moisture to penetrate into it for a long time, especially if new rope as this was. Also, if, unfortunately, the moisture had penetrated into any or all of the forty tackles used, an irregularity of contraction would have been produced that in all probability would have led to their successive rupture.

Honor to whom honor is due. There is no valid reason for imputing threatened failure to Fontana, averted only by the timely inspiration of a practical sailor. After computing the weight to be lifted, and supervising personally the making of the rope, he tested the power of every apparatus by actual trial, and, from that, in support of what theory had pointed out, decided upon the number of motors necessary. His subsequent account of it also seems to be so explicit and so frank, that we cannot believe he would have omitted mentioning any such incident. Rewards, pecuniary and honorary, were lavished upon him. The pope made him a Knight of the Golden Spur, and gave him a pension of 2,000 gold *scudi*, reversible to his heirs, besides an immediate present of 5,000 more; also all the wood and other material left from the operations, the value of which was estimated at 20,000 *scudi*. The cost of the removal and erection is stated by Carolo Fontana to have been 36,975 *scudi*, equivalent to about 44,000 dollars.<sup>2</sup>

On the apex of the obelisk was placed a bronze cross seven feet four inches high, which was removed in 1740, when some relics of our Saviour were deposited in a cavity made for the purpose. Bronze lions, gilded, were also placed under the corners and apparently sustain the weight, for they conceal the crabs which really do that duty.

Inscriptions on this obelisk and pedestal are numerous. On the east and west sides of the shaft itself, is still visible in duplicate the original dedication to Augustus and Tiberius, as follows: "Divo. CAES. DIVI. IVLII. F. AVGVSTO. TI. CAES. DIVI. AVG. F. AVGVS. SACRVM." There are also brief modern inscriptions on all faces of the pedestal. On the south side is a simple record of the removal: "Sixtus V. Pont. Max. obeliscum Vaticanum diu gentium impio cultu dedicatum ad Apostolorum limina operoso labore transtulit. Anno MDLXXXVI." On the north side the consecration of the obelisk to the holy cross is commemorated: "Sixtus V. Pont. Max. cruci invictae obeliscum Vaticanum ab impia superstitione expiatum justius et felicius consecravit. Anno MDLXXXVI. Pont. II." On the east side is the pious apostrophe: "Christus vincit. Christus regnat. Christus imperat. Christus ab omni malo plebem suam defendat." On the west side is to be seen the somewhat vainglorious passage: "Ecce Crux Domini fugite partes adversæ vicit Leo de Tribu Juda."

<sup>1</sup> "Acciò che mai non stesse la Guglia in aria sopra le corde."

<sup>2</sup> The papal gold *scudo* of the 16th century did not vary in weight materially from fifty grains. A silver *scudo* or more correctly *piastra* of Paul V, 1620, recently tested through the kind offices of a friend in the U. S. Mint, Philadelphia, weighed 482 grains, 913 fine; its original weight, according to Mr. J. Ross Snowden, was 491.89 grains, which would put its value at about \$1.20 United States money.

Fontana also mentions an inscription on the side of the pyramidion facing St. Peter's, the illegibility of which now is easily laid to the charge of three centuries of rain and dust. It read: "Sanctissimæ cruci Sixtus V. Pont. Max. consecravit e priore sede avlsvm et Caess. Aug. ac Tib. S. L. ablatum MDLXXXVI." Still one other remains to be mentioned, carved on the bottom course of the pedestal: "Dominicus Fontana ex pago Mili agri Novocomensis transtulit et erexit." This is shown, not very clearly, in one of the plates illustrating Fontana's book, and Quatrèmère de Quincy<sup>1</sup> mentions it being still discernible in 1830. Recent travellers and guide-books all fail to notice it however.

Three other obelisks were afterward erected by this same architect. One, in the Piazza del Popolo, is of about the same height as that in front of St. Peter's; while another in the Piazza di San Giovanni in Laterano is the largest known, being still one hundred and five feet and seven inches high after having three feet cut or broken off. Both of these, however, are in several pieces, and the chief care was to adapt the fragments so as not to mar the stability or the symmetry of the shafts. The third, now behind the Church of Santa Maria Maggiore, is still monolithic, but much injured and of smaller dimensions, being only forty-eight feet four inches in height; its pedestal, fortunately, being seventeen feet high, lends additional majesty to its presence.

During the remaining four years of the life of Pope Sixtus, Fontana was held in great esteem, and as pontifical architect added materially to the adornment of the city; but soon after the accession of Clement VIII he succumbed to the machinations of jealous enemies, and was degraded from his position. The Count of Miranda, Viceroy of Naples, sent for him, however, and made him architect and first engineer of the kingdom. There he passed the remainder of his life, loaded with riches and honors, and left a number of handsome edifices to bear witness to his skill and taste. Perhaps none of his works, though, will be more lasting than the graceful shaft that rears its tall form in the centre of the Piazza di San Pietro, an austere chronicle of silent ages. A fresco painting on one of the walls of the Vatican library recalls the great feat which lifted him into sudden prominence, and, which, more surely perhaps than any structure in Rome or Naples, will command a tribute of praise for the *young* architect of the sixteenth century.

The Vatican obelisk has no Egyptian hieroglyphs; it is, therefore, impossible to determine with certainty by whom it was originally erected. It is assumed to be identical with one which Pliny describes as having been erected by a certain King Nuncoreus in gratitude for the recovery of his sight. As Nuncoreus does not appear on the lists of Egyptian monarchs, Bunsen thinks that Pliny meant Meneptah I (xix dynasty, B.C. 1322-1302, Lepsius). The Emperor Caius Caligula removed it from Egypt to Rome about A.D. 40, and Claudius erected it on the Spina of the so-called Circus of Nero, where it is believed to have remained until removed by Fontana to its present site.

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<sup>1</sup> "Vie des Architectes."

## CHAPTER VI.

### RECORD OF ALL EGYPTIAN OBELISKS.

#### THE REMAINING OBELISK AT LUXOR.<sup>1</sup>

THE temple at Luxor (Thebes, eastern bank of the Nile) was founded by Amenhotep III, xviii dynasty, who built its sanctuary, colonnade, and propylon. To this original structure Ramses II, xix dynasty, added a great court and a gigantic propylon, in front of which he erected two colossal statues of himself and the two most splendid obelisks of his reign. (See Plate xxxix.)

The present obelisk of Luxor was the eastern one of this pair. Its former companion has been removed, and is to-day the obelisk of Paris. They were quarried at Syene, exquisitely sculptured and highly polished. The dimensions of this pair are not the same.<sup>2</sup> They have one peculiarity that has been the cause of much speculation: the eastern and western faces of both are slightly curved.<sup>3</sup> Wilkinson believed that the object of this curvature was to obviate the shadow thrown by the sun. Donaldson observes that while in each obelisk one face is convex, the opposite face of the same obelisk is concave, and from this concludes that the peculiarity is a defect of quarrying, and not designed for effect.

The pyramidions of the remaining obelisk at Luxor and its mate in Paris are imperfect and unsculptured. The form is not that of a true pyramid, but rather that of a pyramid with curved faces, which is the earliest form. This has led to the conjecture that the Luxor obelisks were originally surmounted by metal caps. Certainly the dedicatory sculptures on them are on the sides of the shaft, instead of on the faces of the pyramidion, and this tends to confirm the conjecture. The artistic perfection of the sculptures on these obelisks is remarkable. The hieroglyphs are deeply cut. The surfaces within the characters of the central column are highly polished, while in the lateral columns they are rough. Champollion states that the name of Ramses II is found only in the central column on the western side. He translates the cartouch on the other sides as Ramses III, and conjectures that this monarch completed the sculptures on the obelisks that his predecessor had erected.

The question, very difficult of solution, is raised by Birch, whether these differing cartouches belong to two monarchs, or to but one (Ramses II). Rosellini, Champollion, and apparently, Birch maintain that two kings are intended; while Rawlinson, Lenormant, and Major Felix conclude, that only Ramses II is named. Lenormant's conclusion is based on the discovery of two cartouches on the bottom of the Paris obelisk when it was lowered, which Champollion had believed to be

<sup>1</sup> "Descrip. de l'Égypte, Antiq.," vol. iii., pl. 3, 6, 11. Lenormant, "Musée," pl. xv, No. 15. Champollion, "Mon.," t. iv., pl. cccxx, cccxxi. [View of the obelisk in Ebers (Philae), p. 311.]

<sup>2</sup> The obelisk now in Paris being shorter than its mate, was mounted at Luxor on a taller pedestal and placed farther from the pylon than the other, so that to the advancing spectator the difference in height would not be apparent.

<sup>3</sup> See Chapter III.

the name of Ramses III. He argued that if the name of Ramses II appeared on the obelisk at all it was erected by him, and the cartouches on the bottom could not have been cut since it was erected. No full translation of the inscriptions on the Luxor obelisk has been made.

A portion of the inscription, which has been translated by Birch, extols the monarch as a builder: he is "the constructor of memorials"; "he has arranged the temple of Amen, placing his name forever in Thebes"; "he has set up two obelisks of granite, placing them for millions of years at the divine residence of Rameses, whom Amen loves, at the house of Amen-Ra."

Plate xxxix conveys some idea of the grandeur of the ancient Egyptian edifices and the labor that was expended on them. The two massive walls that formed the pylons of the temple were covered with sculptures and hieroglyphs, which may still be traced and partly deciphered. Just without the gate, between them, are two colossal statues of the king, that are buried nearly up to the shoulders in the sands that have been accumulating in many centuries. Some idea may be formed of the size of these statues by comparison with the height of the obelisk near by, which rises about sixty feet above the ground, and is buried over twenty feet below.

It is inexplicable that the French archæologists residing in Egypt should have been so earnest and persistent in their efforts to prevent the removal of the New York obelisk from Alexandria, when their countrymen had set the example of modern times in the wanton destruction of the only remaining group of pylon, statues, and obelisks as they had been originally placed by their builders. Before opposing and condemning the removal of the New York obelisk from Alexandria, where it did not belong, and where it was doomed to speedy destruction had it remained, it would have been reasonable to expect from the French servants of the Khedive an effort to restore the Paris obelisk to its ancient home and surroundings. It was an open secret in Egypt that the French and German archæologists in charge of the Boulak Museum ceased their opposition to the Khedive's gift of the Alexandria obelisk to the United States, only in the expressed belief that the foreign residents of Alexandria would resist by force any attempt to remove it. They are in a measure responsible for the difficulties that attended the removal of the New York obelisk, that came so near culminating in bloodshed.

#### OBELISKS OF THOTHMES I. AT KARNAK.

The great temple of Karnak (Thebes, eastern bank) is pronounced by Fergusson<sup>1</sup> to be "the noblest effort of architectural magnificence ever produced by the hand of man." Within its walls are the most ancient obelisks now standing in Egypt, excepting only that at Heliopolis. They are the monuments of Thothmes I, and of his daughter, Queen Hatasou.

Entering at the portal of the first gigantic propylon (three hundred and seventy feet long; one side, or pylon, still standing, one hundred and thirty-five feet high) of Ramses II, xix dynasty, the visitor traverses the vast open court (two hundred and seventy-five by three hundred and twenty-nine feet) of the same monarch. Then passing the ruins of the second great propylon, even more massive than the first, of Seti I, the founder of the xix dynasty, he enters the grand hypostyle hall, or Hall of Columns,<sup>2</sup> also the work of Seti I, and, according to Fergusson, "the greatest of man's architectural works." Then, by the third propylon, that of Amenhotep III, xviii dynasty,—with each massive, portal going still farther back into antiquity,—he enters a long narrow corridor extending across the whole width of the temple. Here, in front of the fourth propylon, the work of Thothmes I [xviii, dynasty, B. C. 1646—1625, Lepsius], are the two obelisks of this monarch; one fallen and broken, the other still standing in its original position; it is the left one on Plate xl.<sup>3</sup> They originally stood in front of the entire temple.<sup>4</sup>

<sup>1</sup> Fergusson, "Hist. of Architecture," vol. i, p. 106.

<sup>2</sup> The central columns are sixty-six feet high, eleven and one half feet in diameter.

<sup>3</sup> "Descr. de l'Égypte, Antiq.," vol. iii, pl. 24. Lepsius, "Denkmäler," vol. v, pl. 6. Rosellini, "Mon. Storici," pl. xxx.

<sup>4</sup> Savary, in Egypt, 1777 (letters, etc., published in 1785), says three obelisks *standing* at Karnak.



ANTI-DTYPE

MARRON & BIERSTADT, N. Y.

THE REMAINING OBELISK AND RUINS OF TEMPLE AT LUXOR.



The pyramidion of the standing obelisk is apparently not sculptured. The absence of the dedicatory sculptures on the shaft indicates that it was sculptured originally. The authorities on Egypt contradict each other and themselves so frequently on this and other important matters that there is little satisfaction in quoting them.<sup>1</sup>

Three columns of hieroglyphs are cut upon each face of the shaft<sup>2</sup>; the central columns bearing the name and titles of Thothmes I; the lateral columns, according to Birch, bear the names of Ramses V or VI. Mariette ("Monuments," pp. 168, 169) states that the side columns show rather confused cartouches, among which are the names of Ramses VI engraved over those of Ramses IV, and adds that upon the many fragments of the fallen obelisk may be seen the name of Thothmes III. The inscriptions record that the king "has built his enduring edifice to his father, Amen-Ra," and "has erected two obelisks before the propylon" (Rosellini, vol. iii, p. 114).

## OBELISKS OF HATASOU, KARNAK.

Still farther within the great temple of Karnak than are the obelisks of Thothmes I—that is, beyond the fourth propylon and within the narrow court of the Osiride figures—are the obelisks of Queen Hatasou.<sup>3</sup> In this court, erected by Thothmes I, his daughter, Hatasou [xviii dynasty, B. C. 1625–1591, Lepsius], set up the loftiest monoliths now remaining in Egypt, and, according to Mariette, the loftiest of all obelisks now existing. Of these, one is fallen; the other (the northern), still standing where it was placed by the queen, is the right one on Plate xl.

Ebers, Verninac St. Maur, and others bestow their highest praises upon this obelisk. Its fine proportions, its exquisite polish, the singularly delicate and perfect execution of its sculptures, the unique richness of its ornamentation, together with its gigantic size, make it, in the opinion of Rosellini, one of the most admirable examples of Egyptian work. A marked entasis, or convexity, of at least one of its faces was observed by Verninac St. Maur.

The pyramidion is unusually acute, and is sculptured with vignettes representing, according to Rosellini, Hatasou, in male attire, kneeling before Amen-Ra, with her face turned from the deity, who has his hand on her. The summit of the pyramidion above the vignettes, it appears from the inscriptions, was originally covered with "pure gold."

A single column of admirably cut hieroglyphs appears upon the centre of each face of the shaft, bearing the name of Hatasou. Thothmes III, her brother and successor, has attempted to erase her cartouch wherever it appeared, and to substitute for it his own, whether impelled, as some say, by hatred of his too domineering sister, or by the desire to appropriate these splendid shafts to himself; but the attempt was not successful, and the feminine grammatical forms still look through the names of Thothmes, to claim the obelisks for their original founder.

Upon either side of the hieroglyphic column of each face are eight vignettes, beginning just below the pyramidion, and descending more than half the distance from the summit to the base, thus enclosing the greater part of the inscription with a richly sculptured bordering, of which this is the only example. All the vignettes which border one side of the hieroglyphic column represent Amen-Ra; opposite the deity, on the other side of the column, stands a sovereign presenting offerings. The sovereign represented is, according to Rosellini, sometimes Hatasou herself, sometimes Thothmes I, her father, and sometimes her husband or her son. Upon the broken obelisk are exactly the same designs as those of the standing shaft. These sculptures have been cut and polished with the

<sup>1</sup> The plates of Lepsius and Rosellini show the pyramidion plain. So also do photographs of more recent dates. There is not even a line to be discovered on the pyramidion in the photographs.

<sup>2</sup> According to Cooper, p. 28, there is but one column on each face; and so, indeed, it is represented in the "Descr. de l'Égypte," pl. 24. But the plates of Lepsius and Rosellini show three columns; so do the photographs.

<sup>3</sup> "Descr. de l'Égypte Antiq.," vol. iii, pl. 21, 24, 27, 30. Lepsius, "Denkmäler," vol. v, pl. 22–24. Rosellini, "Mon. Storici," pl. xxxi–xxxiv. Lenormant, "Musée," pl. xvii, No. 10.



greatest care; those at the summit and farthest from the eye of the spectator just as carefully as those lowest on the shaft ("Descr. de l' Egypte").

Our wonder at the elaborate decoration and perfect execution of these gigantic monuments is increased when we learn from their inscriptions that they were detached from the Assouan quarries, removed to Karnak, sculptured, polished, and erected in the short space of seven months. The engraven record shows that "the queen, the pure gold of monarchs, had dedicated to her father, Amen of Thebes, two obelisks of syenite taken from the quarries of the south. Their upper parts were ornamented with pure gold taken from the chiefs of all nations. Her Majesty gave two gilded obelisks to her father, Amen, that her name should remain permanent, always and forever in this temple. Each was made of a single piece of syenite (Machet stone), without joint or rivet. Her Majesty began the work in the fifteenth year of her reign, the first day of the month Mechir, of the sixteenth year, and finished it on the last day of the month Mesore, making seven months from its commencement in the quarry" (Birch, "Egypt," p. 85).<sup>1</sup>

The low, square pedestal of the standing obelisk is figured in Plate 24 of Lepsius, "Denkmäler"; its sides are covered with hieroglyphs.

#### SMALL OBELISKS, OR STELAE, OF THOTHMES III, KARNAK.<sup>2</sup>

Far within the great temple of Karnak, and in front of its ancient granite sanctuary, are two small shafts of syenite, called by Bonomi and Cooper decorative obelisks, but by Jollois and Rawlinson called stelae. Rawlinson compares them to the "Jachin and Boaz" of the Temple of Solomon. Strictly speaking, they are rather stelae than obelisks; they appear never to have had pyramidions; in their decorations they differ greatly from other monoliths. Jollois conjectures that statues were once placed upon them.

On their north and south sides are sculptured three lotus-flowers (the emblem of immortality, Heeren) in very high relief; the sculptures still show the traces of the brilliant colors with which they were formerly painted. Above the flowers is the royal cartouch. The east and west sides bear three bass-reliefs, representing the king received by the deity. Above these reliefs are a few hieroglyphs. According to Cooper, these inscriptions show the name of Thothmes III, though the shafts may have been erected by his sister Hatasou.

#### HELIOPOLIS OBELISK.

At the former site of the temple of Heliopolis stands the most ancient of all the great obelisks now existing, and the most ancient of all known obelisks (see Plate xli), if we except the small ones found by Lepsius at Memphis, and by Mariette and Villiers Stuart at Drah Abou'l Neggah. In front of the temple, as restored by Amenhat I, xii dynasty, and his son, Usortesen I,<sup>3</sup> and on either side of the great propylon, a pair of obelisks (the "Jachin and Boaz" of the Egyptian sanctuary, Rawlinson's "Egypt," ii, 148), was erected by Usortesen.<sup>4</sup> Of this pair, the present obelisk of Heliopolis alone

<sup>1</sup> The following remarks upon this obelisk are by Mariette ("Monuments," p. 170): "The precision with which it is put on its base is remarkable; it is in the very axis of the temple, and this precision, considering its vast weight, shows the use of mechanical appliances the most exact and powerful. The inscriptions show that the summit of the obelisk was covered with 'pure gold.' Unless this means an apex overlaid with a casing of gilded copper (like the obelisk now at Heliopolis), this possibly refers to the sphere (of gold?) which is represented on certain bass-reliefs at Sakkarah. The obelisk itself was, no doubt, gilded from top to bottom: in examining closely, one may see that the hieroglyphs were carefully polished, and that the plain surface of the monument was left comparatively rugged, from which it may be inferred that the plain surface, having a coating of white stucco (the like of which may be seen in so many Egyptian monuments), alone received this costly embellishment of gilding, the hieroglyphics themselves retaining the original color and actual surface of the granite."

<sup>2</sup> "Descr. de l' Égypte Antiq.," vol. iii, pl. 30, Nos. 7, 8. Lenormant, "Musée," pl. xvii, No. 10. Rawlinson, "Egypt," vol. i, p. 229. Ebers, "Caire Philae," pp. 193, 272.

<sup>3</sup> Various spellings: Usortesen, *Baedeker*; Usortasen, *Rawlinson* "Egypt"; Usirtasen, *Mariette*; Sesortasen, *Rawlinson* ("Anc. Hist."); Asertisen, *Parker*; Osirtasen, *Murray*.

<sup>4</sup> Usortesen I, B. C. 2371-25, Lepsius; 2433-2400, Brugsch. The xii dynasty, B. C. 2380, Lepsius; 2466, Brugsch; 2781, Bunsen; 3064, Mariette; 2080, Wilkinson.



ARTOTYPE

HARROUN & BERSTADT, N. Y.

THE OBELISKS AT KARNAK



remains, still occupying, after the lapse of thousands of years, the pedestal on which it was originally placed.

Both obelisks were originally adorned with copper caps. St. Ephrem Syrus (born about A. D. 308, died about 378), in his commentary on Isaiah, xxiii chapter, says: "The cap which is on the top of each of these columns is of copper, and of the weight of one hundred pounds, and even more."<sup>1</sup> The copper caps are also mentioned by Denys of Telmahre, Patriarch of Antioch, who wrote about A. D. 840.<sup>2</sup> Ebn-Khordadbeh, an Arabian writer of the third century of the Hegira, about the ninth century of our era, is quoted as follows: "At Ain-Schems (Heliopolis) are two columns, the remains of the greater number which were formerly here; at the top of each is a collar of copper. From one of the two the water descends to about midway of the column, which is discolored."<sup>3</sup>

Mohammed ben-Abd-alrahin, who visited Egypt in A. D. 1118, writes as follows: "Upon its summit is a covering of copper, as beautiful as gold, on which is represented the figure of a man seated in a chair and looking to the east."<sup>4</sup> Abd-el-Lateef<sup>5</sup> describes the obelisk thus: "In this town are the two famous obelisks called Pharaoh's Needles; they have a square base, each side of which is ten cubits long, and about as much in height, fixed on a solid foundation in the earth. On this base stands a quadrangular column of pyramidal form, one hundred cubits high, which has a side of about five cubits at the base, and terminates in a point. The top is covered with a kind of copper cap of a funnel shape, which descends to the distance of three cubits from the summit; this copper through the rain and length of time has grown rusty and assumed a green color, part of which has run down along the shaft of the obelisk. I saw one of these obelisks that had fallen down and broken in two, owing to the enormity of the weight. The copper which had covered its head was taken away. Around these obelisks were many others too numerous to count, which are not more than a third, or a half as high as the large ones."<sup>6</sup>

The mate of the present obelisk of Heliopolis fell prostrate about A. D. 1160, and has now entirely disappeared.<sup>7</sup> Its fragments, says Ebers, perhaps lie deep buried in the vicinity of the standing shaft. The foundations of this missing obelisk have lately been discovered (Murray's "Egypt," 1875.)<sup>8</sup>

The obelisk still standing is of the red syenite of Assouan.<sup>9</sup> Its pyramidion is rough and was originally covered with a cap of metal.

The pedestal and bottom of the shaft cannot now be seen, being buried under successive deposits of the mud of the Nile. The pedestal is of sandstone, according to Lenormant, and consists of two broad steps or slabs, each about two feet high, and which seem to have formed part of the paved dromos.<sup>10</sup>

<sup>1</sup> Works of St. Ephrem, vol. ii, p. 144. Quoted in De Sacy's "Abd-el-Lateef," p. 226. <sup>2</sup> De Sacy's "Abd-el-Lateef," p. 503.

<sup>3</sup> De Sacy's "Abd-el-Lateef," p. 225—. This story of water flowing down the obelisk is repeated by another Arabian writer, and has been re-told in our own times by M. de Hammer, who visited Heliopolis in 1801 (De Sacy).

<sup>4</sup> De Sacy's "Abd-el-Lateef," p. 225—. Kodhai, quoted by Donaldson, in Parker, p. 29, says the same. De Sacy adds a note that this figure of a man was engraven on the cap, and not—as had been said in an earlier and erroneous translation of the passage—a statue erected above the cap.

<sup>5</sup> "Abd-el-Lateef." *Relation de l'Égypte*. Traduit par Silvestre de Sacy. Paris, 1810.—Abd-el-Lateef, an Arabian physician from Bagdad, who visited Egypt about A. D. 1190 (Mariette), and wrote in 1201 (De Sacy).

<sup>6</sup> A highly exaggerated estimate of the amount of metal upon these obelisks is given by Mohammed ben-Ibrahim Djezi (or Djezeri) in his chronicle of the year 656 of the Hegira, corresponding to the year 1258 of our era (De Sacy): speaking of the obelisk then fallen, he says that "within it [dans son intérieur, De Sacy's translation] were found nearly twenty thousand pounds [two hundred quintaux] of copper, and from its top the same was taken to the value of ten thousand dinars." De Sacy's "Abd-el-Lateef," p. 225—.

<sup>7</sup> It fell in 1160, and not in 1260 as MaKrizi states (Ebers). For the error of Djezi (Djezeri) and MaKrizi as to this date, see De Sacy's *Abd-el-Lateef*, p. 225—. Abd-el-Lateef saw the obelisk lying prostrate. The notes of Langles upon this point in Norden should be corrected, says De Sacy.

<sup>8</sup> Lenormant says it was overthrown by the Arabs in their search for hidden treasure.

<sup>9</sup> For plates or descriptions of this obelisk see: Kircher, "Œdipus," vol. iii, p. 333. "Descr. de l'Égypte, Antiq.," vol. i, p. 229. Lepsius, "Denkmäler," pt. ii, pl. 118. "Thomas Shaw's Travels," Oxford, 1738, (plate,) p. 412. Lenormant, "Musée," pl. xxix No. 3.

<sup>10</sup> I cannot find the record of the excavation and measurement of this pedestal.

A single column of boldly and simply cut hieroglyphics, repeated on each of the four faces of the shaft, bears the name of Usortesen I, "the loved of the gods of Heliopolis." The inscription on two sides is rendered illegible by the cells of bees filling up the deeply engraved hieroglyphics.

Dean Stanley thus described his impressions at the sight of this venerable shaft: "In these gardens [gardens which partly cover the site of Heliopolis] are two vestiges of the great Temple of the Sun, the high-priest of which was the father-in-law of Joseph, and, in later times, the teacher of Moses.—One is a pool, overhung with willows and aquatic vegetation—the spring of the Sun.—The other, now rising wild amidst garden shrubs, the solitary obelisk, which stood in front of the temple, then in company with another, whose base alone now remains. It has stood for nearly 4,000 years. It was raised about a century before the coming of Joseph: it has looked down on his marriage with Asenath: it has seen the growth of Moses: it is mentioned by Herodotus: Plato sat under its shadow: of all the obelisks which sprang up around it, it alone has kept its first position. One by one it has seen its sons and brothers depart to great destinies elsewhere. This remarkable pillar (for so it looks from a distance) is now almost the only landmark of the great seat of the wisdom of Egypt."

#### LARGE OBELISK OF CONSTANTINOPLE.<sup>1</sup>

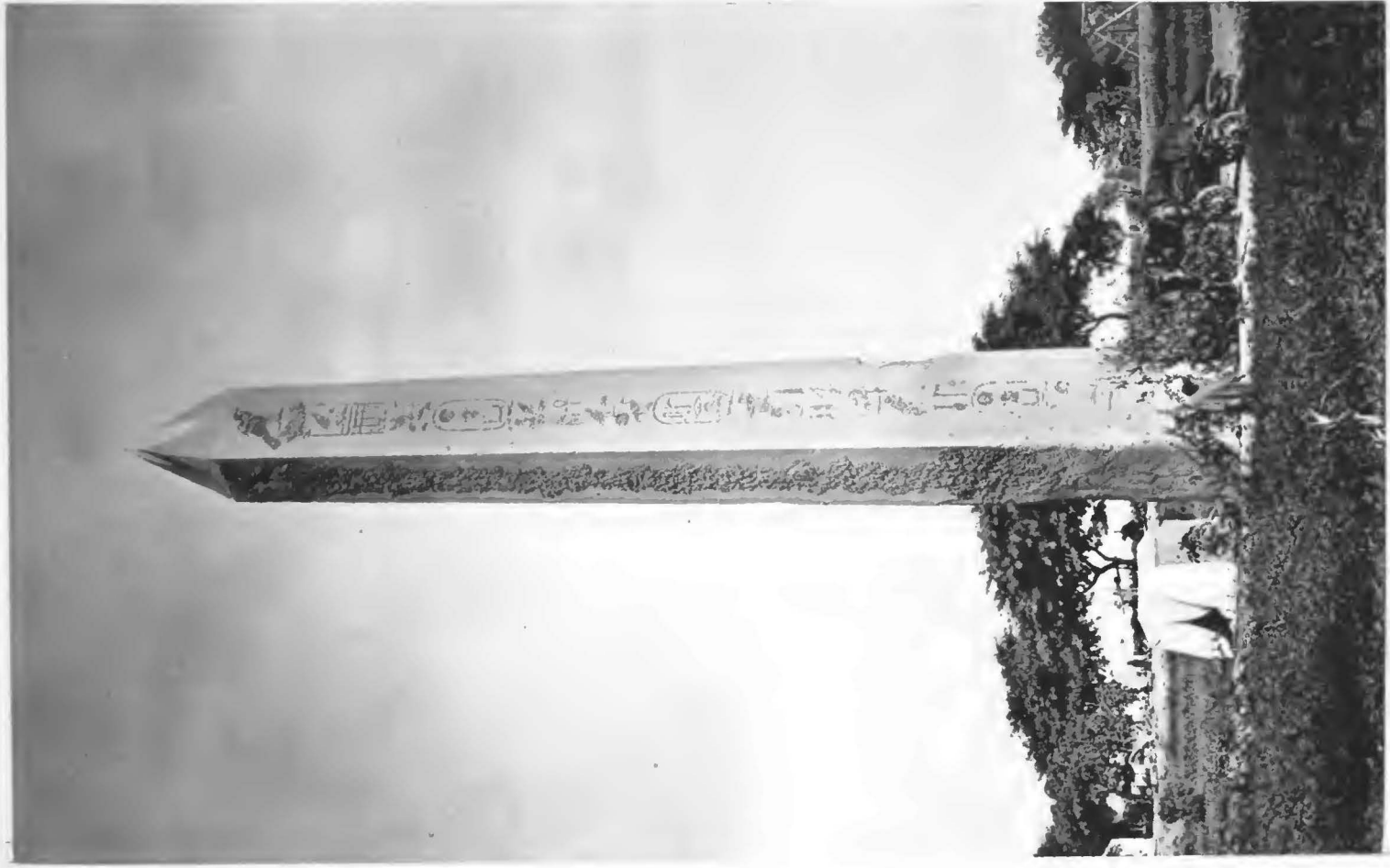
The obelisk now standing in the Atmeidan, the ancient hippodrome at Constantinople, bears the cartouch of Thothmes III, but where he erected it is in doubt; Brugsch states at Heliopolis, Birch at Karnak, and Cooper at Thebes, and between these three opinions the weight of authorities is about equally divided. There is some excuse for the belief that it was originally the companion of the one in Rome now known as the Lateran obelisk. Birch speaks of Bonomi's intention, apparently never carried out, to write a paper on its history. He attributes it to the earliest period of the reign of Thothmes III. It is imperfect, the lower end having been removed or broken off. Ancient Byzantine writers, quoted by Zoega, affirm that the lower part was standing in the Strategium in their time.

It is believed that this obelisk was removed during the reign of Constantine the Great (A. D. 306-337) from its original site to Alexandria. The Emperor Julian (A. D. 360-363), in a letter addressed to the citizens of Alexandria, makes mention of a monolith then lying at that city, and which Constantine had transported thither with the intention of removing it to Constantinople; he urges the citizens to forward the shaft to the place of its destination, and offers, in return for such a service, to present them with his own colossal statue. According to Zoega, the ship which conveyed the obelisk from Alexandria was driven ashore in a storm at some point near Athens, whence the shaft was at last brought to Constantinople in the reign of Theodosius (A. D. 379-395).

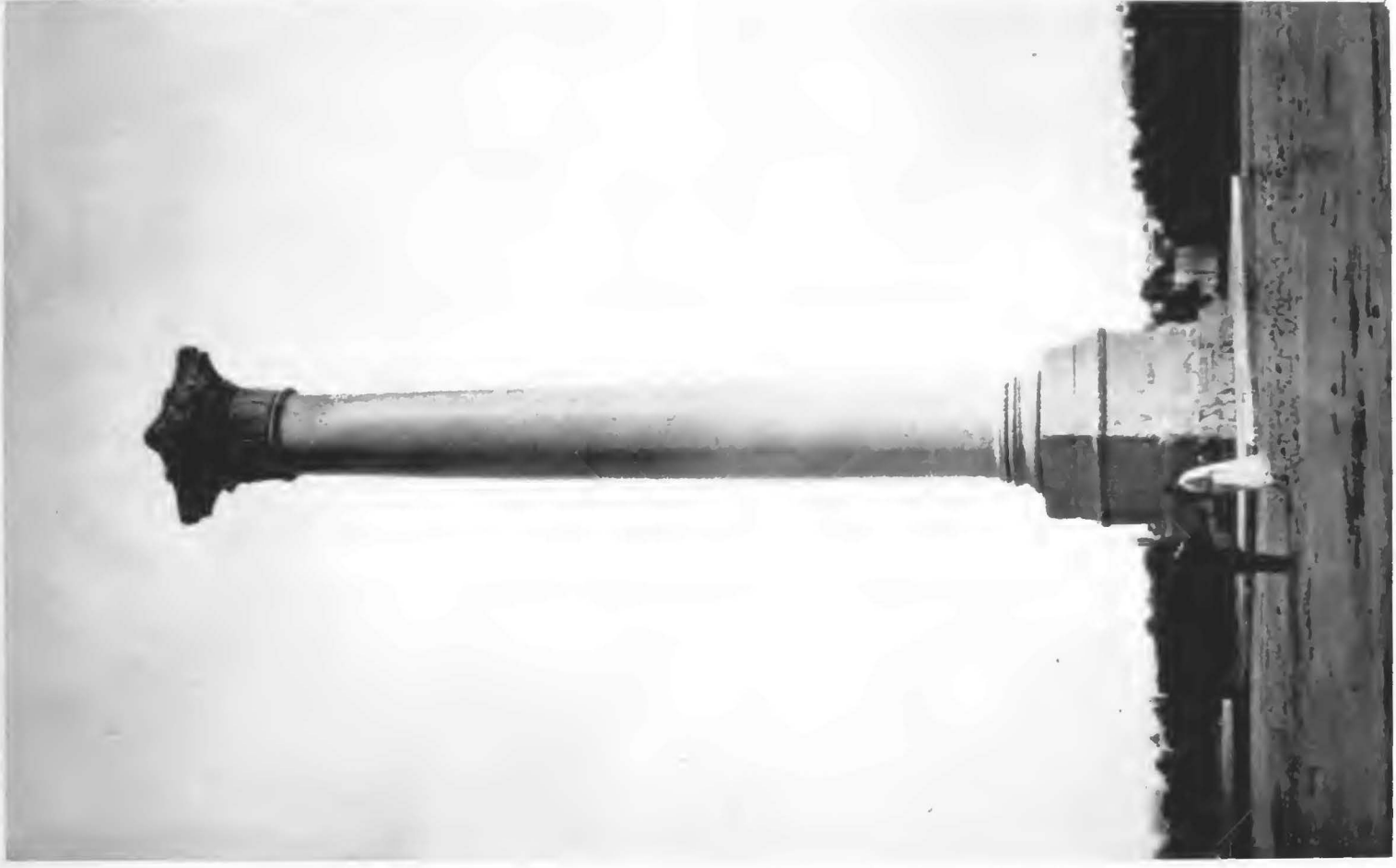
The inscriptions on the pedestal show that the obelisk was set up in its present position by Theodosius about A. D. 399, Cooper; A. D. 390, Zoega.

Birch conjectures that this obelisk at first stood in the fifth quarter of the city. Having been overthrown by an earthquake and broken, it was removed to and re-erected where it now stands. Balt's translation of Petrus Gyllius' "Antiquities of Constantinople" (first edition, published in 1562) describes the obelisk as "supported by four square, broad pieces of brass, each one and one half feet high. From the ground there rise two steps against the pedestal, the lowermost of which is one foot high and of the same breadth. The upper step is two feet high, and projects four feet and four fingers' breadth beyond the pedestal. The steps are not laid within the pedestal, but are joined to it outside, as appears by the cement. Upon the steps stands the pedestal, which is every way twelve feet broad, four feet eight digits in height, and projects beyond the base one and one half feet. Somewhat above one foot higher it is more contracted, and does not project beyond its base; for from the top of the

<sup>1</sup> P. Gyllius, "De Constantinopoleos Topographia," bk. i, c. 11. Kircher, "Œdipus," vol. iii, p. 305. C. Niebuhr, "Reisebeschreibung nach Arabien," vol. i, pl. iv. "Transac. Roy. Soc. Lit.," second series, vol. ii, p. 218. Lepsius, "Denkmäler," vol. v, pl. 60.



ARTOTYPE



HARRISON & BIERSTADT, N. Y.

THE OBELISK AT HELIOPOLIS AND POMPEY'S PILLAR AT ALEXANDRIA



pedestal there is a flushing on the four sides of the obelisk, which is cut out of the same stone of which the pedestal is made, and is one foot thirteen digits high. The corners of the top of the pedestal are worn and defaced, but are repaired by four stones of Thebaic porphyry marble, each of them one and one half feet high; for all the fluted part of the pedestal that lies between these four angular stones, together with the upper part of it, supports the base, which is seven feet thirteen digits high, and projects one and one half feet beyond the bottom of the shaft of the obelisk, to the breadth of nine feet nine digits. It is also carved on all sides, as is also the pedestal, which is carved with curious statues cut in *basso-rilievo*." John Sanderson, who was at Constantinople in 1594, has the following: "In the midst of the Atmeidan is to be seen, raised upon four dice of fine metal, a very fair pyramid of mingled stone, all of one piece, fifty cubits high, carved with heroical letters; resembling the Agulia of Rome. Its foot is double; in the first foundation, which is two cubits high, is carved the manner and the way which they took to set up this pyramid or obelisk; in the second foundation, which is four cubits high, are carved the tyrants conquered by Theodosius, who bring presents and render obedience on every side to the said emperor, he also being carved in the midst."

The faces of the pyramidion are sculptured with square vignettes, in which is Thothmes III standing before the divinity Amen. On each face of the shaft, just below the pyramidion, is another square vignette, in which Thothmes is kneeling before the enthroned god and presenting offerings.

A single column of large and finely chiselled hieroglyphs appears on each face of the obelisk. The inscriptions have a certain historical importance, as they are among the earliest Egyptian records which mention Naharana, or Mesopotamia. This country is here termed the frontier of the Egyptian realm: the first attack upon it by Egypt had taken place in the reign of Thothmes I.

The following is Chabas' translation of the inscriptions in two vignettes and on the four sides.

OVER THE KING SITTING DOWN.

Amen Lord of the thrones of the two lands,  
 Dwelling (in Thebes), great god,  
 He gives all life, all happiness, all stability.

OVER THE KNEELING PHARAOH.

The good God, Lord of the earth,  
 Master of making things,  
 The king of upper and lower Egypt  
 Ra-men-kheper, son of the sun,  
 Thothmes, giving all life like the sun, for ever.

WEST SIDE.

The heaven, the kingly Horus,  
 Strong bull, swaying through truth,  
 The king of upper and lower Egypt,  
 Ra-men Kheper-iri-em-Ra,  
 Who has gone through the great circuit of  
 Naharana,  
 In strength and victory, at the head of his  
 troops,  
 Making a great slaughter. . . .

SOUTH SIDE.

The heaven  
 The kingly Horus,  
 The strong bull swaying through  
 Truth,

The Lord of diadems  
 Enlarging royalty,  
 Like the sun on high,  
 The golden hawk,  
 Of hallowed diadems,  
 Warlike dominator,  
 King of upper and lower Egypt,  
 Ra-men-Kheper-Sotep-en-Ra,  
 He made (the obelisk) in  
 His monuments to his father,  
 Amen-Ra, Lord of the thrones of  
 The two lands.  
 He erected . . . .

EAST SIDE.

The heaven  
 The kingly Horus,  
 Uplifting the white crown,  
 Beloved by the sun,  
 King of upper and lower Egypt,  
 Lord of diadems,  
 Swaying through truth  
 The love of the two lands:  
 Ra-men-Kheper, son of the sun,  
 Lord of victory,  
 Chastiser of the whole earth,  
 Who has set his boundary  
 At the horn of the earth,  
 At the extremities of Naharana<sup>1</sup>  
 . . . .

<sup>1</sup> Here the term, horn of the earth, refers to the southern mountains; and the extremities of Naharana, to the northern limit of Egypt at the time.



## NORTH SIDE.

The heavens,  
The kingly Horus,  
Strong bull,  
Beloved by the sun,  
The king of upper and lower Egypt,  
Ra-men-Kheper, whom Kheper-Ra has magnified,  
Nursling of Tum,

Foster child  
In the arms of Neith, the  
Divine mother;  
As a king;  
He has conquered all lands.  
Protracted (is) his life;  
Lord of feasts of thirty years.

## SMALL OBELISK AT CONSTANTINOPLE, OR PRIOLI OBELISK.

The syenite obelisk now standing, according to Long, in the gardens of the Sultan at Constantinople, is so little known—its inscriptions never having been published—that it is impossible to decide upon its history, or properly to describe it.<sup>1</sup> Long identifies it with the smaller obelisk of Constantinople, mentioned by Peter Gyllius, whose description of that city was published in 1632. The words of Gyllius are as follows: "When first I arrived in Constantinople I saw two obelisks: one in the Circus Maximus; another in the Imperial Precinct, standing on the north side of the first hill. It was of a square figure, and erected near the houses of the Grand Seignor's glaziers. A little time after, I saw it lying prostrate without the precinct, and found it to be thirty-five feet in length. Each of its sides, if I mistake not, was six feet broad, and the whole was eight yards in compass. It was purchased by Antonius Priolus, a nobleman of Venice, who sent it thither, and placed it in St. Stephen's Market." Long, however, states that it was never removed from Constantinople.

Cooper concludes from its dimensions that it is probably a monument of the Middle Empire; but Parker assigns it to Nectanebo I, B. C. 378-360, xxx dynasty,—one of the three independent dynasties given by Manetho as interrupting the rule of the Persian power in Egypt. Nectanebo, while bravely contending against these foreign foes, yet found opportunity for some additions to the buildings at Thebes, and built a small temple to the goddess Hathor at Philae.

## OBELISKS IN ROME.

## SANTA MARIA MAGGIORE AND MONTE CAVALLO.

The obelisks now standing in the piazza of the basilica of Santa Maria Maggiore and before the Quirinal Palace in Rome appear to have been formerly companions. Both are without hieroglyphical inscriptions, and, therefore, there is no means of determining where and by whom they were originally erected. Tradition ascribes them to a king of the vi dynasty, variously designated Pepi Merira, Papa Maire, Phiops, and Apappus, who reigned, according to Lepsius, B. C. 2714.<sup>2</sup> Zoega conjectures that they were erected at Heliopolis: one by a certain Smarres, B. C. 1050; the other by Phius or Phaseus, B. C. 1000. Kircher agrees with Zoega as to the former (Santa Maria Maggiore), but assigns the latter to Apries (Uhabra or Hophra), xxvi dynasty. Parker conjectures that the obelisk of Monte Cavallo was erected by Psammetik II,<sup>3</sup> xxvi dynasty. All of which goes to show that nothing definite is known of the origin of these two obelisks.

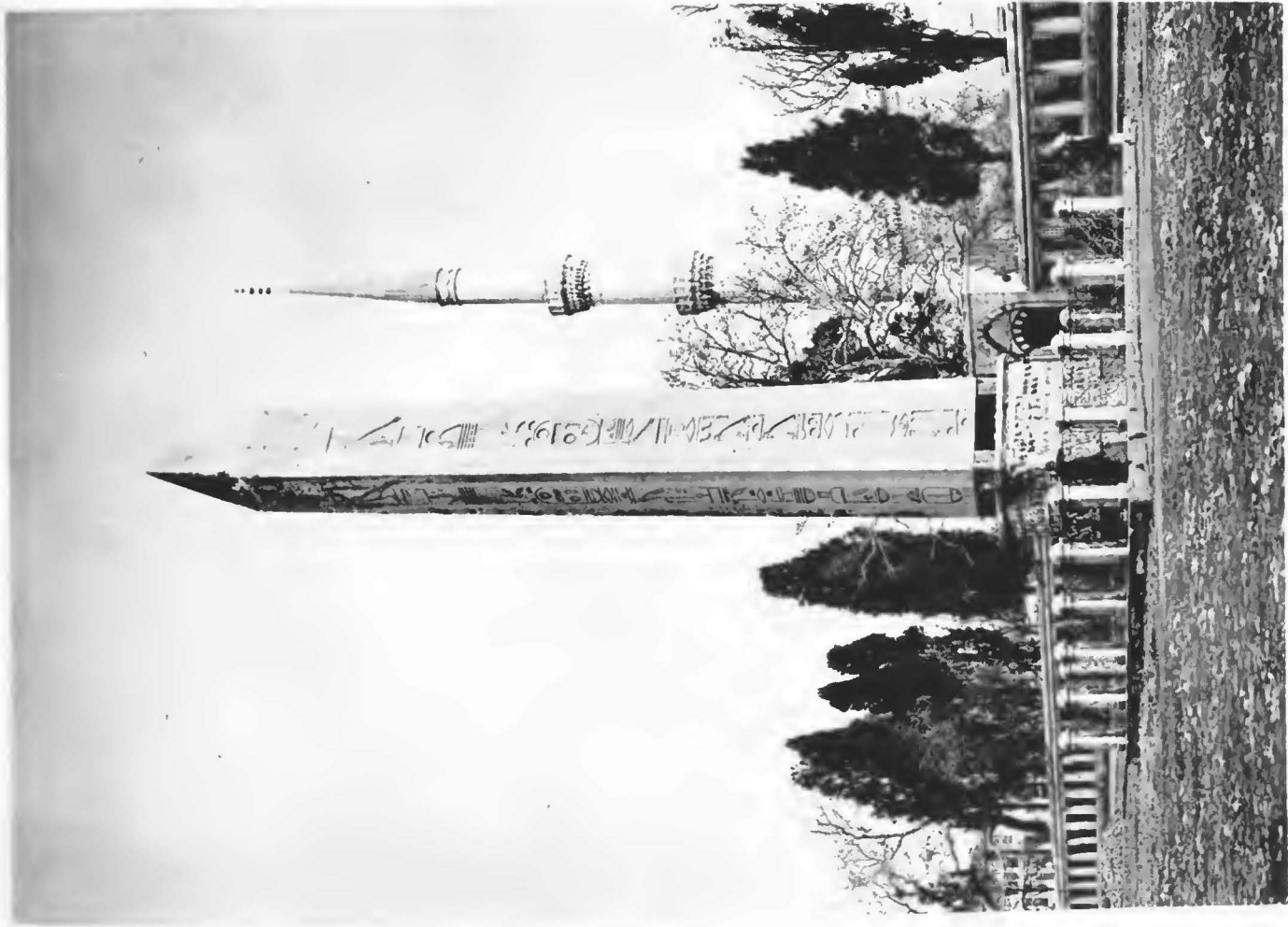
It is believed that they were removed from Egypt to Rome during the reign of the Emperor Claudius, A. D. 41-54.<sup>4</sup> They were subsequently erected before the mausoleum of Augustus, Zoega thinks by Vespasian or Titus about A. D. 79. When they were overthrown is not known. Some authorities assert by Robert Guiscard, who died A. D. 1085, who is supposed to have devastated this mausoleum. They were long afterward found in fragments. That of Santa Maria Maggiore

<sup>1</sup> Peter Gyllius, "Antiq. of Constantinople," Ball's translation, p. 104. Long, "Egyptian Antiquities," vol. i, p. 332.

<sup>2</sup> Kircher, "Œdipus," vol. iii, p. 368.

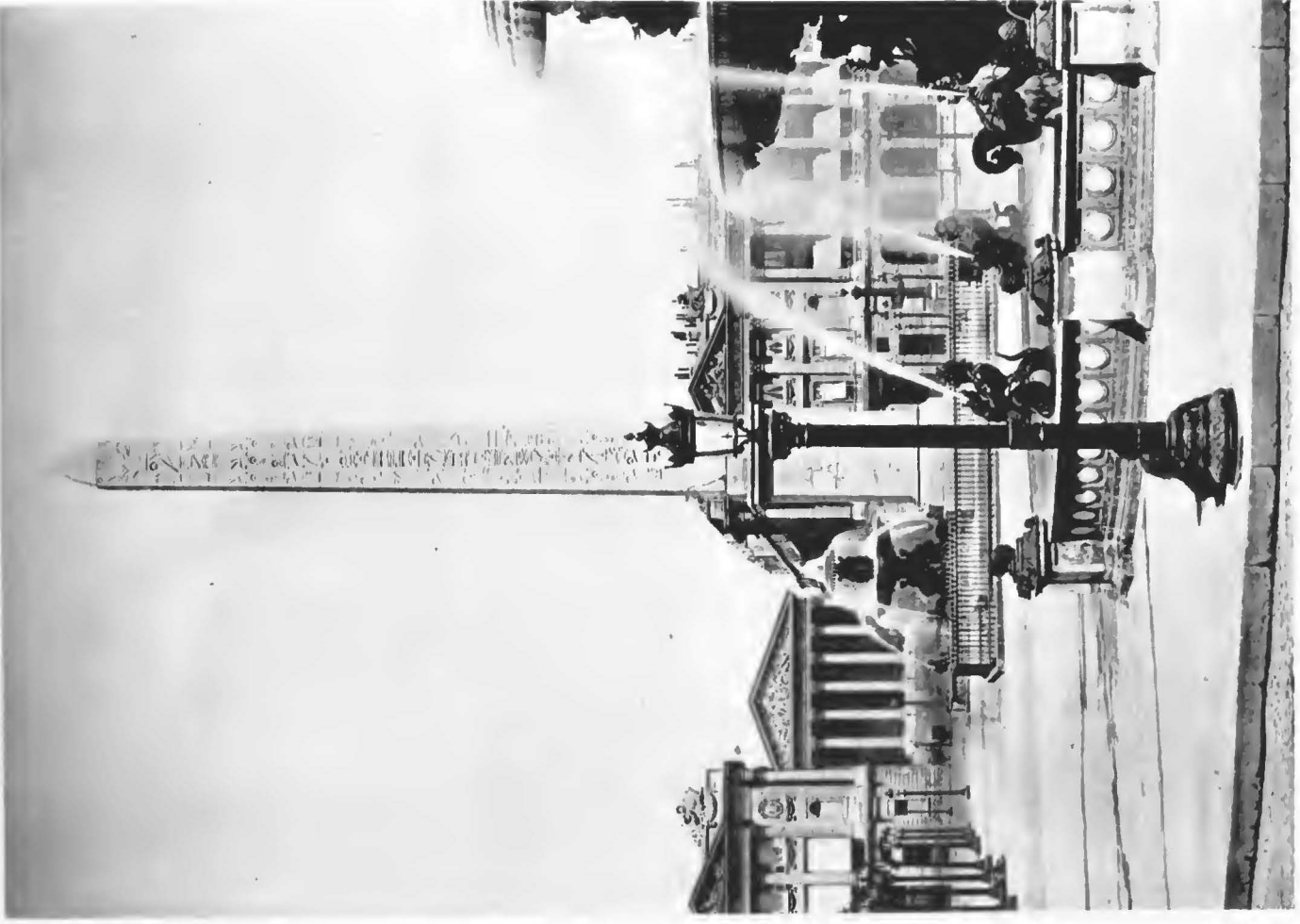
<sup>3</sup> Parker contradicts himself; on his p. 1 he says, "both perhaps by Popi"; on his pl. vi, "Cavallo by Psammetik II"; also, "brought by Augustus and set up as gnomon."

<sup>4</sup> Cooper and Murray state that Claudius removed these obelisks A. D. 57. Claudius died A. D. 54.



ARTOTYPE

THE CONSTANTINOPLE OBELISK.



BM 187 ADT. N. Y.

THE PARIS OBELISK



was unearthed during the pontificate of Sixtus V, in three pieces and without its pyramidion. Fontana restored and placed it on its present site in 1587. That of Monte Cavallo was not disinterred until 1789. It was found without a pyramidion and in two pieces, and re-erected where it now stands, by order of Pius VI, in the same year. The famous "Horse Tamers" discovered in the baths of Constantine in Rome are placed on either side of its pedestal.

THE LATERAN OBELISK.

The obelisk now standing in front of the basilica of S. Giovanni in Laterno was the largest of all known obelisks. The sculptures and hieroglyphs on it prove that it originally stood at Thebes.<sup>1</sup> Thothmes III ordered it to be made, but his successor, Thothmes IV, finished and placed it in position thirty-five years afterward. About A. D. 330 it was removed from Thebes<sup>2</sup> to Alexandria during the reign of Constantine the Great, who designed transporting it to Byzantium. About 357 Constantius, his son, removed it to Rome and caused it to be erected in the Circus Maximus. There is no record of its fall. But during the pontificate of Sixtus V it was found buried among the ruins of the circus, broken into three pieces. Fontana restored and placed it in its present position in 1588.

The inscription<sup>3</sup> is engraved on the four sides. It bears the cartouches of Thothmes III, Thothmes IV of the xviii dynasty, and Ramses II of the xix, who restored and set it up again. It has a certain chronological interest from mention of thirty-five years between Thothmes III and Thothmes IV. The translation of those lines which relate to the kings of the xviii dynasty only is given. Next to the chronological data one of the most interesting notices found in the inscription is that of the barge of the god Amen-Ra, which was made of cedar, cut down in the land of Rutennu or Syria. These barges each had different names and that of Thothmes III is mentioned in the inscription of Amenhat. It will be observed that in the reign of Thothmes IV Egypt is mentioned as dominant over foreign nations and not undertaking further campaigns.

The text and a translation have been published by Ungarelli, "Interpretatio Obeliscorum," fo., Rom., 1842, tab. i; the text only, by Zoega, "De Usu et Origine Obeliscorum," fo., Rom., 1797; and also by Kircher, "Œdipus," iii, 164. The latter part, owing to an incorrect joining of the fragments, is confused and unintelligible.

NORTH SIDE.

*Scene on the pyramidion*<sup>4</sup>: THOTHMES III adoring AMEN-RA, and the inscription,

"The good god RA-MEN-KHEPER like the Sun."

"AMEN, TUM."<sup>4</sup>

THOTHMES III kneeling to AMEN-RA seated on his throne.

"The King of the Upper and Lower country, RA-MEN-KHEPER, Son of the Sun, THOTHMES like the Sun, Immortal."

"AMEN-RA, Lord of the seats of Upper and Lower countries, gives all life, stability, and power."

ON THE OBELISK.

*Central line of hieroglyphs*: THOTHMES IV adoring the hawk of HAR-EM-AKHU.<sup>5</sup>

The good god, RA-MEN-KHEPERU Lord of the World, gives incense that he may be made a giver of life.

*Central line*: "The HARMACHIS, the living Sun, the strong Bull beloved of the Sun, Lord of Diadems very terrible in all lands, the Golden Hawk the very powerful, the Smiter of the Libyans, the King RA-MEN-KHEPER,

<sup>1</sup> Although the inscriptions repeatedly mention Thebes, yet Bonomi, Murray, Parker (p. 2), and Cooper (pp. 3 and 35) state that it was erected at Heliopolis. Kircher ("Œdipus," vol. iii. p. 162), Zoega (p. 591), Rawlinson (vol. ii, p. 241), Brugsch (vol. i, p. 404), and Birch (in "Records of the Past," vol. iv, p. 9) pronounce this to be a Theban obelisk. Ammianus Marcellinus (bk. xvii, ch. iv) speaks of the obelisk removed by Constantine, which has been identified as the Lateran obelisk, as "especially dedicated to the sun god and set up within the precincts of his magnificent temple," which would be as applicable to Thebes as to Heliopolis.

<sup>2</sup> "Records of the Past," vol. iv, p. 9.

<sup>4</sup> Titles of the god Amen-Ra.

<sup>3</sup> The apex of the obelisk.

<sup>5</sup> Harmachis, or sun in the horizon.

the son of AMEN-RA, of his loins, whom his mother MUT gave birth to in Asher, one flesh<sup>1</sup> with him who created him, the Son of the Sun, THOTHMES (III) the Uniter of Creation, beloved of AMEN-RA, Lord of the thrones of the Upper and Lower country, giver of life like the Sun for ever."

## SOUTH SIDE.

*Pyramidion, upper line:* "The King RA-MEN-KHEPERU (THOTHMES IV), giver of life, beloved of AMEN-RA, Lord of the thrones of the two countries."

THOTHMES III adoring AMEN-RA.

"The Son of the Sun, THOTHMES (III), giver of life like the Sun for ever."

THOTHMES III kneeling, offering wine to AMEN-RA seated on a throne.

"The King RA-MEN-KHEPER, Son of the Sun, THOTHMES (III), giver of life like the Sun for ever."

The goddess UAT<sup>2</sup> gives a good life, AMEN-RA, Lord of the seats of the Upper and Lower country, gives life, power, and stability.

THOTHMES IV seated on a throne adoring the hawk of HARMACHIS.

"The good god RA-MEN-KHEPERU, giver of life like the Sun."

AMEN-RA, King of the gods, (says) "Thou has received life in thy nostril."

*Central line:* "The HAR-EM-AKHU, the living Sun, the strong Bull, crowned in Thebes, Lord of diadems, augmenting his kingdom like the Sun in heaven, the Hawk of Gold, the Arranger of diadems, very valiant, the King RA-MEN-KHEPER, approved of the Sun, Son of the Sun, THOTHMES (III), has made his memorial to his father, AMEN-RA, Lord of the seats of the Upper and Lower countries, has erected an obelisk to him at the gateway of the temple before Thebes, setting up at first an obelisk in Thebes to be made a giver of life."

## EAST SIDE.

*Pyramidion:* THOTHMES III taken in hand by AMEN-RA.

"The good god, RA-MEN-KHEPER, giver of life like the Sun."

THOTHMES III kneeling and offering wine to AMEN-RA seated on a throne.

"The King RA-MEN-KHEPER, Son of the Sun, THOTHMES, giver of life like the Sun, gives water."

"Amen-Ra, King of the gods, gives life, stability, and power."

THOTHMES III standing, offering a pyramidal cake to the hawk of HAR-EM-AKHU.<sup>3</sup>

"The good god, RA-MEN-KHEPER, giver of life, gives a pyramidal cake of white bread that he may become a giver of life."

*Central line:* The HAR-EM-AKHU, the living Sun, beloved of the Sun, having the tall crown of the Upper region, the Lord of diadems, celebrating the festivals in Truth, beloved on earth, the Golden Hawk prevailing by strength, the King of the Upper and Lower country, RA-MEN-KHEPER, beloved of the Sun, giving memorials to AMEN in Thebes, augmenting his memorials, making them as they were before so that each should be as at first; never was the like done in former times for AMEN in the house of his fathers, he made it the Son of the Sun, THOTHMES (III), Ruler of AN,<sup>4</sup> giver of life.

## WEST SIDE.

*Pyramidion:* THOTHMES III received by AMEN-RA.

"AMEN, TUM."

"The good god, RA-MEN-KHEPER, giver of life like the Sun, immortal."

THOTHMES III kneeling to AMEN-RA seated on a throne.

"The King RA-MEN-KHEPER, Son of the Sun, THOTHMES (III), like the Sun, immortal, gives wine."

"UAT<sup>5</sup> gives life, duration, and health."

"AMEN-Ra, Lord of the seats of the Upper and Lower countries, King of the gods, Ruler of AN."

THOTHMES IV offering flowers to the hawk of HAR-EM-AKHU.

"The good god, the Lord of doing things, RA-MEN-KHEPERU, giver of life like the Sun, gives incense that he may be made giver of life."

*Central line:* "The HAR-EM-AKHU, the living Sun, the strong Bull, crowned by Truth, RA-MEN-KHEPER, who adores the splendor of AMEN in Thebes, AMEN welcomes him in . . . his heart dilates at the memorials of his Son, increasing his kingdom as he wishes, he gives stability and cycles to his Lord, making millions of festivals of thirty years, the Son of the Sun, THOTHMES (III), uniting existence (giver of life).

## NORTH SIDE.

*Right line:* "The good god, the Image of diadems, establishing the kingdom like TUM, powerful in force,

<sup>1</sup> Or "substance."

<sup>2</sup> Buto, goddess of Northern Egypt.

<sup>3</sup> Harmachis, or the sun in the horizon, a title translated by Hermapion, "Apollo."

<sup>4</sup> Heliopolis.

<sup>5</sup> The goddess Buto.



1. LATERAN



2. MONTE CITORIO



3. PIAZZA DELLA MINERVA



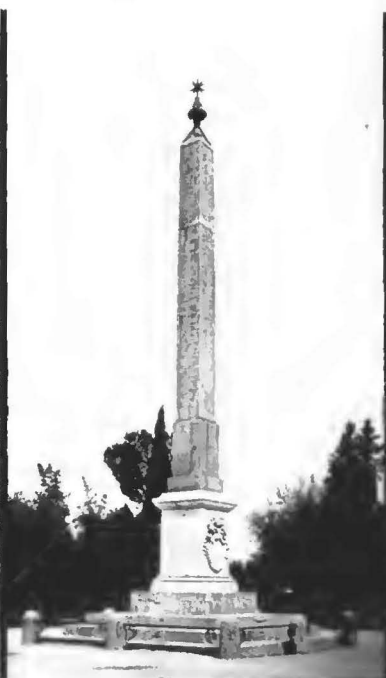
4. PIAZZA NAVONA



5. PIAZZA DEL POPOLO



6. MONTE CAVALLO



7. MONTE PINCIO



8. VILLA LELIVONTANA



9. SANTA MARIA MAGGIORE



10. TRINITA DEI MONTI



11. PANTHEON



12. VATICAN



expeller of the Nine bow foreigners, the King of the Upper and Lower country, RA-MEN-KHEPER, taking by his strength like the Lord of Thebes, very glorious like MENTU<sup>1</sup> whom AMEN has given strength against all countries; the lands came in numbers, the fear of him was in their bellies, the Son of the Sun, Thothmes (IV) Diadem of Diadems, beloved of AMEN-RA, the Bull of his mother."

*Left side:* "The King of the Upper and Lower country, beloved of the gods, adorer of the circle of the gods, welcomed by the Sun in the barge, and by TUM in the ark, the Lord of the Upper and Lower countries, RA-MEN-KHEPERU, who has ornamented Thebes for ever, making memorials in Thebes, the circle of gods of the house of AMEN delight at what he has done, the Son of the god TUM, of his loins, produced on his throne, THOTHMES (IV), Diadem of Diadems."

SOUTH SIDE.

*Right line:* "The Son of the Sun, THOTHMES (IV), Diadem of Diadems, set it up in Thebes, he capped it with gold, its beauty illuminates Thebes; sculptured in the name of his father, the good god RA-MEN-KHEPER (Thothmes III), the King of the Upper and Lower country, Lord of the two countries, RA-MEN-KHEPERU (Thothmes IV), did it wishing that the name of his father should remain fixed in the house of AMEN. The Son of the Sun, THOTHMES (IV), giver of life, did it."

*Left line:* "The King of the Upper and Lower country, the Lord of doing things, RA-MEN-KHEPERU, made by the Sun, beloved of AMEN. His Majesty ordered that a very great obelisk should be completed which had been brought by his father RA-MEN-KHEPER (Thothmes III), after His Majesty died. This obelisk remained thirty-five years and upwards in its place in the hands of the workmen at the southern quarters of Thebes. My father ordered it should be set up. I his son seconded him."

EAST SIDE.

*Right line:* "RA-MEN-KHEPERU (Thothmes IV) multiplying memorials in Thebes of gold, lapis lazuli, and jewelry, and the great barge on the river (named) AMEN-USER-TA, hewn out of cedar wood which His Majesty cut down in the land of Ruten,<sup>2</sup> inlaid with gold throughout, and all the decorations renewed, to receive the beauty of his father AMEN-RA (when) he is conducted along the river. The Son of the Sun, THOTHMES (IV), Diadem of Diadems, did it."

*Left line:* "The good god, the powerful blade, the Prince taking captive by his power, who strikes terror into the Mena,<sup>3</sup> whose roarings are in the Anu.<sup>4</sup> His father AMEN brought him up, making his rule extended, the Chiefs of all countries are attentive to the spirits of His Majesty, to the words of his mouth, the acts of his hands, all that has been ordered has been done. The King of the Upper and Lower country RA-MEN-KHEPERU, whose name is established in Thebes, giver of life."

WEST SIDE.

*Right line:* "The King of the Upper and Lower country, the Lord of the upper and lower world, RA-MEN-KHEPERU son . . . it making peaceful years, Lord of the gods, who knew how to frame his plans and bring them to a good end, who subdued the Nine bow foreigners under his sandals, the King of the Upper and Lower country . . . watched to beautify the monuments, the King himself gave directions for the work, like him who is Southern Rampart,<sup>5</sup> he set it up, it remained for a while, his heart wished to create it, the Son of the Sun, Thothmes (IV), Diadem of Diadems."

*Left line:* "The King of the Upper and Lower countries, RA-MEN-KHEPERU (THOTHMES IV), approved of AMEN, dwelling amongst the Chiefs, born in . . . him than every king, rejoicing at seeing the beauty of his greatness: his heart desired to place it. He gave him the North and South submissive to his spirits, he made his monuments to his father AMEN-RA, he set up a great obelisk to him at the upper gate of Thebes facing Western Thebes. The Son of the Sun whom he loves (THOTHMES IV), Diadem of Diadems, giver of life, did it."

At the base is a scene, RA seated.

"AMEN-RA, HOR; Lord of heaven."

"RA-USER-MA, approved of the Sun, RAMESES (II), Beloved of AMEN, giver of life like the Sun."

The winged disk HUT, RA again.

"AMEN-RA, lord of the seats of the Upper and Lower countries, HAR-EM-AKHU, great god, Lord of the heaven."

"The King of Upper and Lower Egypt, Lord of the two countries, RA-USER-MA, approved of the Sun, RAMESES (II), beloved of AMEN."

<sup>1</sup> A form of Ra or the Sun; an Egyptian Mars.

<sup>2</sup> Syria.

<sup>3</sup> Asiatic shepherds.

<sup>4</sup> Title of the god Ptah or Vulcan, the eponymous deity of Memphis.

<sup>5</sup> Libyans.



## PIAZZA DEL POPOLO, OR FLAMINIAN OBELISK.

Bonomi considers this obelisk to be that which Pliny<sup>1</sup> mentions as the work of Sesostris; Kircher identifies it with that which Pliny ascribes to Semensperteus; and Zoega calls it an obelisk of Ramses.\* From the sculptures and inscriptions it appears to have been erected at Heliopolis by Seti I (xix dynasty, B. C. 1439-1388, Lepsius). Augustus caused it to be removed to Rome about B. C. 20 and re-erected in the Circus Maximus. The next record of this obelisk is that it was prostrate during the reign of Valentian, A. D. 364-375. In the pontificate of Sixtus V it was found in three pieces, removed to its present site, restored, and re-erected by Fontana A. D. 1589.

Deep holes in the upper part, similar to those in the Lateran obelisk, are supposed by Bonomi to have been the work of the Roman engineer to facilitate the work of erecting it.

The first attempt to decipher the ancient Egyptian hieroglyphics in "modern" times was made by an Egypto-Grecian priest, named Hermapion, in the fourth century after Christ. Ammianus Marcellinus<sup>3</sup> has preserved to us the professed translation of Hermapion, which is believed to have been of the characters engraved on this obelisk, although some authorities regard it as relating to obelisks generally, and others as relating to the Luxor, and others to the Lateran obelisks. Hermapion's translation has been sneered at by more modern Egyptologists as a shrewd effort on his part to please his masters and gain notoriety by professing a knowledge he was not possessed of. But an impartial judge may find it as satisfactory as the professed translations of his severest critics.

Hermapion's translation is as follows :

This says Helios to King Rhamestes;  
 We have given to thee all the world to reign  
 over with joy,  
 Thee whom Helios loves and Apollo:  
 The strong, truth-loving son of Heron,  
 Born of the gods, the founder of the world  
 Whom Helios has chosen, strong in war, King  
 Rhamestes,  
 To whom the whole earth is subdued  
 With strength and courage:  
 King Rhamestes of eternal life.

Apollo the strong, he who stands upon truth,  
 The Lord of the diadem, who possesses Egypt in  
 glory,  
 Who has adorned the city of the sun,  
 And founded the rest of the world,  
 And has greatly honored the gods established in  
 the city of Helios.  
 Whom Helios loves.

Apollo the mighty, the blazing son of Helios,  
 Whom Helios has chosen, and Ares the valiant  
 has favored;  
 Whose good things last forever, whom Ammon  
 loves;  
 Who fills the temple of the Phœnix with good  
 things,  
 To whom the gods have given length of life;  
 Apollo the mighty, the son of Heron,  
 To Rhamestes the king of the world,  
 Who has protected Egypt by conquering foreign-  
 ers;

Whom Helios loves, to whom the gods have given  
 long life,  
 The Lord of the world, Rhamestes of eternal life.  
 Helios, the great god, the Lord of the heaven,  
 I have given to thee life free from sorrow,  
 Apollo the mighty, the Lord of the diadem, the  
 incomparable,  
 To whom the Lord of Egypt has erected statues  
 in this royal town,  
 And has adorned the city of Helios,  
 And Helios himself, the Lord of the heavens.  
 He has completed his noble work,  
 The son of Helios, the ever living king.

Helios, the Lord of the heavens:  
 To King Rhamestes have I given might and  
 power;  
 Whom Apollo loves, the Lord of the times,  
 Whom Hephæstus the father of the gods has  
 chosen through Ares,  
 The noble king; the son of Helios, by Helios  
 beloved.

The great god of the city of Helios,  
 The heavenly, Apollo the mighty, the son of  
 Heron,(?)  
 Whom Helios loves, whom the gods honor,  
 Who rules the whole earth, whom Helios chose,  
 The king mighty through Ares, whom Ammon  
 loves;  
 And the bright burning king for ever.

<sup>1</sup>"Nat. His.," bk. xxxvi, ch. 14.

<sup>2</sup>"Œdipus," vol. iii, p. 213. Ungarelli, "Interp. Obelisc.," tab. ii. G. Tomlinson in "Trans. Roy. Soc. Lit.," second series, vol. i, p. 176. Parker, pl. v.

<sup>3</sup>Bk. xvii, ch. iv.

The Rev. G. Tomlinson's translation is as follows :

EAST SIDE.

*Centre Column.*

The Horus, the powerful, beloved of justice,  
King Pharaoh, guardian of justice, approved of the sun,  
Amen-Mai Rameses,  
He erected edifices like the stars of heaven,  
He has made his deeds to resound above the heaven,  
Scattering the rays of the sun, rejoicing over them in his house of millions of years.  
In the . . . year of His Majesty,  
He has made good this edifice of his father, whom he loved,  
Giving stability to his name in the abode of the sun.  
He who has done this is the son of the sun,  
Amen-Mai Rameses,  
The beloved of Tum, the Lord of Heliopolis, giving life for ever.

*Left-hand Column.*

The Horus, the powerful, the beloved of justice,  
The resplendent Horus,  
The director of the years, the great one of victories,  
The king, Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, has adorned Heliopolis with great edifices, honoring the gods  
By (placing) their statues in the great temple.  
He, the Lord of the world,  
Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, giving life for ever.

*Right-hand Column.*

The Horus, the powerful,  
The beloved of the sun, the Ra,  
The offspring of the gods, the subjugator of the world,  
The king, the Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses,  
Who gives joy to the region of Heliopolis,  
When it beholds the radiance of the solar mountain.  
He who does this is the Lord of the world,  
The Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, giving life like the sun.

NORTH SIDE.

*Centre.*

The Horus, the powerful,  
Sanctified by truth,  
Lord of diadems, Lord of upper and lower Egypt,  
Mouth of the world, possessor (?) of Egypt,

The resplendent Horus, the Osiris (?), the divine priest of Totanen,  
The king, Pharaoh, the establisher of justice,  
Who renders illustrious the everlasting edifices of Heliopolis,  
By foundations (fit) for the support of the heaven,  
Who has established, honored, and adorned the temple of the sun,  
And of the rest of the gods,  
Which have been sanctified by him, the son of the sun,  
Menephtha-Sethai the beloved of the spirits of Heliopolis,  
Eternal like the sun.

*Left.*

The Horus, the powerful, the son of Set,  
The resplendent Horus,  
The director of the years, the great one of victories,  
The king, Pharaoh, the guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses,  
Who fills the temple of the phoenix with splendid objects,  
The Lord of the world, Pharaoh, the guardian of justice,  
Approved of the sun, the son of the sun,  
Amen-Mai Rameses, giving life forever.

*Right.*

The Horus, the powerful the beloved of the sun,  
The Ra, begotten of the gods,  
The subjugator of the world,  
The king, Pharaoh, approved of the sun,  
Son of the sun, Amen-Mai Rameses,  
Who magnifies his name in every region  
By the greatness of his victories,  
The Lord of the world,  
Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, giving life like the sun.

SOUTH SIDE.

*Centre.*

The Horus, the powerful,  
The piercer of foreign countries by his victories;  
The Lord of diadems, Lord of upper and lower Egypt,  
The establisher of everlasting edifices;  
The resplendent Horus,  
Making his sanctuary in the sun who loves him;  
The king, Pharaoh, establisher of justice,  
The adorer of Heliopolis,  
Who makes libations to the sun,  
And the rest of the Lords of the heavenly world,  
Who gives delight by his rejoicings and by his eyes.

He does it, the son of the sun, Menephtha-Sethai,  
Beloved of Horus, the Lord of the two worlds.

*Left.*

The Horus, the powerful, the beloved of justice,  
Lord of the panegyries.  
Like his father Ptah-Totanen; the king,  
Pharaoh, guardian of justice, approved of the sun,  
Son of the sun, Amen-Mai Rameses,  
Begotten and educated by the gods,  
Builder of their temples, Lord of the world;  
Pharaoh, guardian of justice, approved of the sun,  
son of the sun,  
Amen-Mai Rameses, giving life like the sun.

*Right.*

The Horus, the powerful, the son of Ptah Totanen,  
Lord of diadems, Lord of upper and lower Egypt,  
Possessor of Egypt, chastiser of foreign countries,  
The King, Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, who causes rejoicing in  
Heliopolis  
By displaying his royal attributes,  
Lord of the world, Pharaoh, guardian of justice,  
Approved of the sun, son of the sun,  
Amen-Mai Rameses, giving life forever.

## WEST SIDE.

*Centre.*

The Horus, the powerful,  
The beloved of the sun and of justice,  
Lord of diadems, Lord of upper and lower  
Egypt,  
Source of foreign countries, piercer of the Shepherds,  
The resplendent Horus,

Beloved of the sun, whose name is magnified;  
The king, Pharaoh, establisher of justice,  
Who fills Heliopolis with obelisks,  
To illustrate with (their) rays the temple of the  
sun;  
Who, like the phoenix,  
Fills with good things the great temple of the  
gods,  
Inundating (?) it with rejoicings.  
He does it, who is the son of the sun,  
Menephtha-Sethai, beloved of the rest of the  
gods  
Who inhabit the great temple giving life.

*Left.*

The Horus, the powerful, the beloved of the sun,  
Lord of panegyries like his father Ptah-Totanen,  
The king, Pharaoh, guardian of justice,  
Approved of the sun, son of the sun, Amen-Mai  
Rameses,  
Lord of diadems, possessor of Egypt,  
Chastiser of foreign countries, Lord of the world;  
Pharaoh, guardian of justice, approved of the  
sun, son of the sun,  
Amen-Mai Rameses, son of Totanen, giving life.

*Right.*

The Horus, the powerful, the son of Tum,  
The Ra, offspring of the gods, subjugator of the  
world;  
The king, Pharaoh, guardian of justice approved  
of the sun,  
The son of the sun, Amen-Mai Rameses,  
The resplendent Horus, the director of years,  
The great one of victories, the Lord of the  
world,  
Pharaoh, guardian of justice, approved of the sun,  
the son of the sun,  
Amen-Mai Rameses, the son of Totanen, eternal.

The hieroglyphs on the central columns are deeper and better cut than those of the lateral columns, and the surfaces within them were carefully polished, while those of the lateral columns were apparently left rough.

The dedicatory sculptures on the north, south, and west faces of the pyramidion represent Seti I, those of the east face, Ramses II, both in the form of a sphinx presenting offerings to the gods. At the summit of the shaft, just below the pyramidion, and also at the bottom, are other dedicatory sculptures in which the kings are in human form. The central columns of hieroglyphs on the north, south, and west sides refer to Seti I, all others to Ramses II.

Bonomi has noticed that the figure of the god Set has been cut out by Ramses from the cartouch of his father, and the figure of Ra engraved in its place. The obliteration, however, could not be made perfect, and the long, erect ears of Set still appear above the hawk's head of Ra. This substitution by Ramses may indicate a change of religious opinion.<sup>1</sup>

<sup>1</sup> The fortunes of Set (Typhon) in Egyptian worship were extremely varied. Under the early monarchy, he appears to have had a party in his favor. The Hyksos made him the sole Egyptian deity. At their expulsion, he naturally fell back into an inferior position in the national esteem. But at the rise of the xix dynasty, he was again made prominent. Ramses I, in naming his son Seti, seems to have placed the prince under Set's protection. At a later period, though it is not known exactly when, the worship of this deity entirely ceased, and his name was erased from all monuments. Cf. Rawlinson's "Egypt," vol. i, p. 390; vol. ii, 347-350.

## MONTE CITORIO OBELISK.

Zoega considered this obelisk to have been originally the most beautiful of all, and the best specimen of Egyptian workmanship. Evidences of these qualities still exist in spite of the grievous injuries it has sustained. Bonomi identifies it with the obelisk that Pliny ascribes to Semempsterteus, although it is generally identified with the one he ascribes to Sesostris. Birch ascribes it to Psammetik II (xxvi dynasty, B. C. 596–591, Lepsius).<sup>1</sup> The inscription by Pius VI attributes it to Sesostris. There is no doubt that it originally stood at Heliopolis whence it was removed to Rome during the reign of Augustus, about B. C. 20, and re-erected in the Campus Martius. Zoega believed that it was overthrown during the invasion of Robert Guiscard, A. D. 1084, and discovered near the church of S. Lorenzo in Lucina during the pontificate of Julius II, A. D. 1503–1513. Cooper, however, states that it was not discovered until 1748. It was found in five pieces, the lower part so much damaged that it could not be used in the restoration. The pieces were removed to the present site by Antinori in 1792, by order of Pius VI. Fragments of a column of Antoninus Pius were used to repair the shaft, and for a pedestal.

The dedicatory sculptures on the pyramidion represent the king as a sphinx adoring Ra and Tum. One peculiarity of this obelisk is that it had two instead of one or three columns of hieroglyphs upon each face. All but three of the eight columns have been effaced, and those that remain are very much injured.

Pliny thus describes the use to which this obelisk was put by the Romans<sup>2</sup>:

The one that has been erected in the Campus Martius has been applied to a singular purpose by the late Emperor Augustus; that of marking the shadows projected by the sun, and so measuring the length of the days and nights. With this object, a stone pavement was laid, the extreme length of which corresponded exactly with the length of the shadow thrown by the obelisk at the sixth hour [noon] on the day of the winter solstice. After this period, the shadow would go on, day by day, gradually decreasing, and then again would as gradually increase, correspondingly with certain lines of brass that were inserted in the stone; a device well deserving to be known, and due to the ingenuity of Facundus Novus,<sup>3</sup> the mathematician. Upon the apex of the obelisk he placed a gilded ball, in order that the shadow of the summit might be condensed and agglomerated, and so prevent the shadow of the apex itself from running to a fine point of enormous extent; the plan being first suggested to him, it is said, by the shadow that is projected by the human head. For nearly the last thirty years, however, the observations derived from this dial have been found not to agree: whether it is that the sun itself has changed its course in consequence of some derangement of the heavenly system; or whether that the whole earth has been in some degree displaced from its centre,—a thing that, I have heard say, has been remarked in other places as well; or whether that some earthquake, confined to this city only, has wrenched the dial from its original position; or whether it is that in consequence of the inundations of the Tiber, the foundations of the mass have subsided, in spite of the general assertion that they are sunk as deep into the earth as the obelisk erected upon them is high.

## OBELISK IN THE PIAZZA DELLA MINERVA.

The small obelisk of the Piazza della Minerva<sup>4</sup> is, according to Rawlinson and Parker, the work of Uhabra (Apries, Hophra, xxvi dynasty, B. C. 591–570, Lepsius); Cooper, however, ascribes it to Psammetik II, also of the xxvi dynasty. It was probably originally erected at Saïs, the favored city of this dynasty; being dedicated to “Tum, who dwells in Saïs,” and to Neith, the local deity.

The pyramidion is without sculptures. Each face bears a single column of hieroglyphs. The characters are more narrow and slender than is usual, and show imperfections of execution (Zoega). The sides are more inclined than those of other obelisks.

It is one of two obelisks (the other now stands before the Pantheon) which were removed from

<sup>1</sup> Cooper, p. 20, states that this obelisk was erected by Seti Menepthah I, and on p. 96 by Psammetik I. See Bandini, “Dell’obelisco di Cesaro Augusto,” Roma, 1750. Ungarelli, “Interp. Ob.,” tab. iii. Zoega (plates at end). Parker, pl. ii.

<sup>2</sup> Pliny, “Nat. Hist.,” bk. xxxvi, ch. 15. Translation of Bostock and Riley.

<sup>3</sup> The name of Facundus Novus is omitted in Le Maire’s edition.

<sup>4</sup> Kircher, “Ob. Minerveus,” Ungarelli, “Interp. Ob.,” tab. iii. Parker, pl. iii.

Egypt by the Romans, and used as a pair to adorn the temple of Isis and Serapis in the Campus Martius; perhaps in the time of Domitian, when the worship of the Egyptian deities became more prevalent at Rome.

It was found, together with that now before the Pantheon, in 1665, among the ruins of this temple, in a spot now occupied by the convent of the Minerva. At the direction of Alexander VII, it was erected on its present site by Bernini, in 1667. The architect placed it, most inappropriately, upon the back of a marble elephant.

PANTHEON, OR MAHUTEAN OBELISK.

The small obelisk now standing in front of the celebrated Pantheon is a monument of Ramses II,<sup>1</sup> xix dynasty, B. C. 1388–1322, Lepsius. It was originally erected, according to Birch, before one of the portals of the Temple of the Sun at Heliopolis.

Nothing but the cartouches of Ramses II appear on the pyramidion. Zoega says that the pyramidion was left obtuse, and is in form rather like a long cone than a pyramid. A single column of hieroglyphs is engraved upon each of the four sides of the shaft, bearing the titles of this monarch, and recording that he has "made many gifts to the house of the Sun." According to Cooper, the name of Psammetik II is also cut upon the shaft.

It is one of two obelisks (the other is that of the Piazza della Minerva) which, on their removal to Rome, were erected before the temple of Isis and Serapis in the Campus Martius; perhaps in the time of Domitian, A. D. 81–96.

It was found in 1665, together with that of the Piazza della Minerva, among the ruins of the above-named temple. The shaft had been broken<sup>2</sup>; the lower portion of unknown length, says Bonomi, is lacking. It was erected on its present site, by order of Clement XI, in 1711.<sup>3</sup>

OBELISK OF THE VILLA MATTEI, ROME.

Another small obelisk in the grounds of the Villa Mattei (now called Villa Celimontana), on the Cœlian Hill, belongs to the time of Ramses II (xix dynasty, B. C. 1388–1322, Lepsius). It is but the upper portion of the original shaft; the lower portion, as at present erected, being of modern workmanship. The place of its erection in Egypt is unknown, as is also the time of its removal to Rome; Parker (Descr. of pl. viii) says it was removed by Augustus.<sup>4</sup>

The inscriptions, according to Birch, are unimportant, giving only the titles of Ramses II. Cooper states that the cartouch of Psammetik II has been added.

It was found among the ruins of the ancient temple of Isis. According to Zoega, it was formerly erected in the gardens of the Convent of Ara Cœli; was presented by the Roman senate and people to Cyriacus Matthæius, and by him erected in his gardens on Monte Cœlio, in 1582. The ordinary statement, however, is that it was placed in its present position by Sixtus V, in 1590. The story is told that, at the time of its erection, the architect directing the work thoughtlessly laid his hand on the pedestal at the moment that the shaft was let fall into its place; there was no resource but to amputate the hand, leaving its crushed fingers beneath the obelisk,—where, to the eye of Roman imagination, they are still to be seen.

<sup>1</sup> See Kircher, "Œdipus," vol. iii, p. 327. Ungarelli, "Interp. Ob.," tab. iii. (No plate in Parker). Called Mahutean from the Church of St. Mahutaëus, near which it was formerly erected.—Zoega.

<sup>2</sup> Zoega says, "apparently broken in two pieces, of which the lower is lost." Birch says, "a truncated shaft, the lower part imperfect."

<sup>3</sup> According to Parker, p. 8, before its erection by Clement XI in 1711, it had been removed from the site of the Circus Maximus (Rawlinson, ii, 489, says both Minerva and Pantheon before the temple of Isis) and set up earlier in the Piazza di S. Martino, by Paul V (1605–1621). This is contradictory to the date 1665 given above. Zoega says nothing of this.

<sup>4</sup> Kircher, "Œdipus," vol. iii, p. 322. Ungarelli, "Interp. Ob.," tab. iii. Parker, pl. viii.

LA TRINITA DEI MONTI, OR SALUSTIAN OBELISK.

The obelisk standing opposite the church of La Trinita dei Monti is believed to have been cut from the quarry of Syene by one of the Roman emperors. Birch thinks that it stood originally in the circus of Sallust.<sup>1</sup>

The pyramidion is unsculptured. Three columns of hieroglyphs appear on each of the four faces; the central columns bearing the name of Seti I, and the lateral columns that of Ramses II. So little, however, does the cutting of its inscriptions resemble genuine Egyptian work, that it is the opinion of the best Egyptologists that these hieroglyphic columns are only an old Roman copy from the obelisk of the Piazza del Popolo, and are not worth the attempt to fully translate them. In the opinion of Zoega and of Birch, its rude and incomplete characters show that, though quarried in Egypt, it was brought to Rome uninscribed, and its hieroglyphs cut there Zoega says, about the time of Alexander Severus, A. D. 222-235.<sup>2</sup>

Clement XII (1730-1740) intended to erect it at the Lateran, but did not carry out this intention (Zoega). It was placed in its present position by the architect Antinori, in 1789, at the direction of Pius VI, whose inscription is seen on the base.

PIAZZA NAVONA, OR PAMPHILIAN OBELISK.

The obelisk standing in the Piazza Navona, although cut from the quarry of Syene, is not an Egyptian obelisk. It was executed by order of Domitian, A. D. 81-96. Rawlinson thinks that it was first erected in Egypt. According to Birch, Domitian built a Serapeum and Iseum in the Campus Martius, appointed a choir of priests with offerings of Nile water, and erected there this obelisk. He certainly revived in Rome the worship of Isis and Serapis, which had been introduced under the republic and continued under the empire but without meeting with popular favor.

In the pontificate of Innocent X this obelisk was found broken in six pieces, lying in the Circus of Romulus, sometimes called the Circus of Caracalla, but no record can be found, by the author, of how it came there. It was restored and erected in its present position by Bernini, in 1651, by order of Innocent X.

The dedicatory sculptures of the pyramidion represent Domitian adoring the gods. A single column of badly cut and shallow hieroglyphs appears on each side of the shaft, in which Domitian assumes the titles of the Egyptian monarchs and records his fame from his own standpoint.<sup>3</sup>

MONTE PINCIO, OR BARBERINI OBELISK.

The small obelisk of Monte Pincio was cut in Egypt by the order of the Emperor Hadrian (A. D. 118-138).<sup>4</sup> An oracle had foretold that the happiness of this emperor could be secured only by the sacrifice of whatever was dearest to him. His chief favorite, Antinoüs, who had accompanied Hadrian in a visit to Egypt, conceived that the sacrifice of his own life might avert the threatenings of fate, and drowned himself in the Nile. The emperor, in grief at this loss, and in memory of this self-sacrificing affection, built on the banks of the Nile, near the spot where Antinoüs had perished, a city which he called Antinoë, or Antinoöpolis. Here he raised a temple, where divine honors should be paid to the deceased favorite.

This obelisk was erected, according to Birch, about A. D. 122 by Hadrian in Rome, as he infers from the inscription, which shows that the ashes of Antinoüs were deposited in a sepulchre at Rome.

<sup>1</sup> Parker (p. 40) ascribes it to Seti I; (p. 2) says it bears the name of Ramses II.

<sup>2</sup> See Ungarelli, "Int. Obelisc.," tab. vi. Zoega (plates at end). (No plate in Parker) Kircher, "Ædipus," vol. iii, p. 257.

<sup>3</sup> Ungarelli, "Interp. Ob.," tab. iv. Parker, pl. iv. Kircher, "Obeliscus Pamphilius."

<sup>4</sup> See Kircher, "Ædipus," vol. iii, p. 271. Zoega (plates at end). Ungarelli, "Interp. Ob.," tab. vi. Parker, pl. vii. Sometimes called the Veranian obelisk, from the Circus Varianus, in which it was once erected; the Barberini obelisk, from Urban VIII (Barberini), in whose time it was discovered; or the Ob. della Passeggiata, from the promenade on which it now stands.

On the other hand, Cooper thinks it probable that the shaft was one of a pair originally placed before the temple at Antinoë.

The sculptures on the north side of the summit of the shaft represent Hadrian standing before Ra; the other sides, Antinoüs presenting offerings to the deities.<sup>1</sup>

Two columns of hieroglyphs appear on each face; the engraving is shallow and not sharply cut at the edges. The inscriptions call Hadrian "the Pharaoh, the ever living, the beloved of the Nile," and mention the empress, Sabina. The most important inscription, says Birch, is this: "The divine Antinoüs, who is at rest in this city, which is in the midst of the fields [probably the Campus Martius] of the district of the powerful lord of Harama (Rome). He is recognized for a god in the divine city which is in Egypt: temples have been built to him."

At a later period, the obelisk was standing, it is said, in the Circus Varianus, having been removed thither, according to Birch, from some other position; Parker says it was erected there by Helio-gabalus about A. D. 220.

Under the pontificate of Urban VIII (1623-1644) the obelisk was found near the Church of S. Croce in Gerusalemme, on the site of the Circus Varianus. It was broken into three pieces, and the apex was injured. In 1822 it was removed to its present position, by order of Pius VII, but by what architect or engineer does not appear from any record the author can find.

#### ESMEADE OBELISKS.

Besides the well-known twelve Egyptian obelisks in Rome, there is, according to Parker (Descrip. of pl. viii), yet another obelisk, in the garden of Mr. Esmeade, close to the Porta del Popolo, on the site of the Villa of the Domitii, the burial-place of Nero. Probably, adds Parker, this obelisk is a rude imitation of the eighteenth century.

#### FRAGMENTS IN ROME.

In the time of Kircher (born 1601, died 1680) there were to be seen, near the church of S. Ignazio, three fragments of obelisks, each fragment showing two columns of hieroglyphs. One of these fragments (length not given) was built into a wall; another, seven palms long, had been made the corner-stone of a building; a third, six palms long, was removed in Kircher's time to the museum which he founded, and which is now contained in the Collegio Romano. This third fragment, according to Birch, is a portion of an obelisk of Ramses II, containing his name and titles.

A fourth fragment was to be seen in front of the church of S. Bartolommeo, on the island of the Tiber. On this spot, according to Publius Victor, an obelisk was formerly erected; it is supposed, before a temple of Esculapius. The whole island was anciently faced with walls of travertine, giving it the form of a ship; the obelisk was so placed as to represent the mast. From the remains of the foundations of this shaft, discovered by Bellori in 1676, the monolith is supposed to have been of large size. The fragment described by Kircher, and afterward by Pococke, appears from the plates to be the sculptured summit of the shaft, immediately below the pyramidion. It was long preserved in the Villa Albani, but afterward removed to Urbino, and there erected.<sup>2</sup>

#### OTHER EGYPTIAN OBELISKS IN EUROPE.

##### OBELISK OF BENEVENTO, ITALY.

In the ancient city of Benevento is a small broken obelisk of syenite, now standing in the Cathedral Square. It was found in four fragments, the pyramidion and lower part gone. It was erected in its

<sup>1</sup> Zoega's plate shows the apex plain. Cooper (112) says the apex is *plain*. Birch says it is *sculptured*.

<sup>2</sup> Kircher, "Ædipus," vol. iii, pp. 379-383. Pococke, "Descrip. of the East," pl. xcl.

present position in 1698 (Zoega). A fragment of another obelisk is imbedded in the wall of the episcopal palace.<sup>1</sup>

The two, according to Birch, were a pair originally erected before the temple of Isis in Beneventum, by the Emperor Domitian (A. D. 81-96).

A single column of hieroglyphs was inscribed on each face of these shafts, bearing the cartouch of Domitian. The inscriptions also mention the name of Lucilius Lupus as the founder of the temple.

BORGIAN OR ALBANI OBELISK, NAPLES.

The small Borgian obelisk, once in the Borgian Museum at Velletri, is now preserved in the Museo Nazionale at Naples.<sup>2</sup> It was found in 1791, in four pieces, among the ruins of Præneste, now Palestrina. The upper portion of the shaft is lacking. A single column of hieroglyphs appears on each of the four faces. The characters are rather rudely and hastily done (Zoega). The much injured inscriptions afford little information; they bear the Roman names Tacitus, Sextus, and Africanus. According to Birch, this shaft was once, in all probability, the companion of the Albani<sup>3</sup> obelisk, and the two were erected about the time of Domitian. The Albani obelisk has disappeared. Cooper thinks it is at Munich.

OBELISKS IN THE MUSEUM AT FLORENCE.

Two very small syenite obelisks are mentioned by Cooper as now in the Egyptian Museum at Florence; the smallest examples existing, if we except that found by Lepsius. Their history, he adds, is unknown. Zoega speaks of but one obelisk, of which he says that it is uncertain at what time, or from what place, it was brought to Florence. Zoega states that the pyramidion is plain, and two columns of hieroglyphs are inscribed upon each face of the shaft.<sup>4</sup>

OBELISK IN THE BOBOLI GARDENS, FLORENCE.

The small obelisk now in the Boboli Gardens, Florence, is, according to Birch, a monument of Ramses II, and was formerly erected at Heliopolis. It was removed to Rome, and there set up by the Emperor Claudius, Kircher, in the Circus of Flora. In Kircher's time (early part seventeenth century) it had been transferred to the grounds of the Villa Medici, Rome. At what time it was removed to Florence and erected in its present position, the writer is unable to state.

On the pyramidion are sculptured the name and prenomen of Ramses II; above these is engraved a winged scarabæus. A single column of hieroglyphs is cut upon each face. The inscriptions speak of the king as "powerful in all countries, beloved of Tum and Ra."<sup>5</sup>

THE ALNWICK OBELISK, ENGLAND.

The small syenite obelisk which, according to Bonomi, is in the museum of Alnwick Castle, a seat of the Duke of Northumberland, is a monument of Amenhotep (Amenophis) II (xviii dynasty, B. C. 1565-1555, Lepsius).<sup>6</sup> It is the only obelisk of this dynasty after the time of Thothmes II. Its original site is not known. It was found in a village of the Thebaid in 1838; was presented by the Pacha of Egypt to Lord Prudhoe, afterward Duke of Northumberland, and was removed to England in 1840.

Its apex is broken. Immediately under the pyramidion is a vignette in which Amenhotep II is represented as kneeling and offering a conical cake to Num-Ra, the sun of the lower world; especially

<sup>1</sup> Ungarelli, "Interp. Ob.," tab. v. Champollion, "Précis," p. 95. Zoega, p. 644.

<sup>2</sup> Zoega, p. 192. Champollion, "Précis," p. 98.

<sup>3</sup> Kircher, "Œdipus, vol. iii, p. 348."

<sup>4</sup> Kircher, "Ob. Minervæ," p. 176.

<sup>5</sup> Kircher, "Œdipus," vol. iii, pp. 317, 325.

<sup>6</sup> Bonomi, in "Trans. Roy. Soc. Lit.," Second Series, vol. i, p. 170. M. Prisse, in "Rev. Arch.," vol. iii, p. 731. Sharpe, "Egypt. Inscriptions," Second Series, pl. 69.



worshipped in Elephantine. Only one face of the shaft is inscribed, and that with a single column of hieroglyphs.

Bonomi remarks upon a peculiarity in the cutting of the hieroglyphs: viz., that the surface within their contour is nearly flat,—a style of cutting which, as he says, is elsewhere found only in tombs and on stelæ, generally of the age of Psammetik, xxvi dynasty. According to Birch, the name of Amenhotep has been at some time obliterated; perhaps under Amenhotep IV, who attempted to restore a ruder and more ancient worship of the sun. At a later period the monarch's name was again inserted; but, by error or by design, the name of Amenhotep III was substituted for that of the original erector.

The following is the full translation by Chabas, as given by Cooper:

VERTICAL COLUMN.

The heaven,  
The Horus, King of the two lands, sun of life,  
Strong bull,  
Very valiant,  
King of upper and lower Egypt,  
Ra-aa-Kheperou (Sun, the greatest of existences),  
Son of the sun,  
Amen-hotep-hik-An (the peace of Amen, sovereign  
of Heliopolis),  
He made (the obelisk)

In his monuments to his father Num-Ra;  
Making to him two obelisks . . . with  
the food of Ra.  
He made it,  
The vivifier, for ever.

AT THE APEX OF THE OBELISK.

The heaven,  
Homage to Num,  
He gives all life and bliss,  
(To) Amen-hotep, the vivifier, for ever.

THE SION HOUSE OBELISK, ENGLAND.

According to Birch (*"Egypt from the Earliest Times,"* p. 107), there is at Sion House, a seat of the Duke of Northumberland, a small obelisk which was originally erected in front of a temple of Khnum, built at Elephantine in the time of Thothmes III. No further particulars can be learned. It is not mentioned by Bonomi. Cooper mentions it only to say that it has not yet been published. Rawlinson (*"Egypt,"* vol. i, p. 350) strangely says that it "was to be seen at Sion House until its demolition in 1875"; presumably referring to the demolition of Northumberland House.

This obelisk is probably identical with the preceding.

THE OBELISKS OF AMYRTÆUS, BRITISH MUSEUM.<sup>1</sup>

The last of the Pharaonic obelisks, according to Birch, unless the Prioli obelisk, at Constantinople, should be considered later, are the two small, broken examples now in the British Museum. Excepting the sandstone shafts of Philæ, other obelisks are of the red syenite, which best typified the creating light and heat of the sun; but these shafts of Amyrtæus are, by exception, of dark green basalt. The upper portions of both obelisks are missing: one has been broken into two pieces; the other, into four pieces.

A single column of finely cut hieroglyphs appears on the four faces of each shaft, bearing the name of Amyrtæus (Cooper and Parker), a descendant of a princely Egyptian family, who, about B. C. 465, the period of Artaxerxes I, revolted against the Persian domination over his native land. Birch (in Parker, p. 54) ascribes the obelisks to Nectanebo I, B. C. 378–364, and adds that they were dedicated to Thoth (Trismegist Hermes), the god of measures, of numbers, and of the sciences and arts, and were originally erected before some small temple of that deity at or near Memphis. According to Birch, the inscriptions on both declare that the king is "beloved of Thoth, the lord of hieroglyphs"; he has "set up an obelisk in his house of basalt; it is capped with black metal (iron)." The portion of the

<sup>1</sup> Brit. Museum, Nos. 523, 524. *"Descr. de l'Égypte, Antiq.,"* vol. v, pls. 21, 22. Lenormant, *"Musée,"* pl. xxviii, Nos. 4, 6. Sharpe, *"Egypt. Antiq.,"* p. 107. Bp. of Gibraltar, in *"Transac. Roy. Soc. Lit.,"* vol. ii, p. 457. Long, *"Egypt. Antiq.,"* vol. i, p. 50.

inscription given by Cooper is as follows: "Amyrtæus, the living, like Ra, beloved of Thoth, the great lord of Eshmunayn."

These obelisks were found at Cairo: one, noticed by Pococke, had been used as part of the framework of a window in the castle; the other was first remarked by Niebuhr, who found one of its fragments forming part of the portal of a mosque, and the other fragment used as a common doorstep. The shafts were removed by the French to Alexandria, but fell into the possession of the English in 1801, at the withdrawal of the French from Egypt.

## FRAGMENT AT WANSTED, ESSEX, ENGLAND.

Zoega, whose work was published in 1797, records that the fragment of an obelisk existed at that time in Wansted, England.<sup>1</sup> It is not mentioned by Cooper, and no information respecting it, later than that of Zoega, can be found at present.

The fragment, as described by Zoega, was a pyramidion of pale syenite, broken from its shaft, and probably not quite complete. Its dimensions were two and one half feet in height, and nearly three feet in width. Upon each face was sculptured a vignette, representing an enthroned deity, before another figure, presumably a king, was kneeling. The deities represented were, according to Zoega, Osiris and Horus.

The fragment was brought from Alexandria to England in 1722, and placed in the grounds of Sir J. T. Long, at Wansted, Essex.

## OBELISK OF CORFE CASTLE, ENGLAND.

In the sacred island of Philæ, beyond the sandstone shafts at the landing-place (see obelisk of Philæ), there were anciently in front of the temple of Isis two lions in stone, crouching as if to guard the approach to the shrine, and beyond them two obelisks of red syenite standing on either side of the portal. At Philæ to-day the lions are broken in pieces, and of the two obelisks there remains but a fragment of one; the other has been removed to England and is now the obelisk of Corfe Castle.<sup>2</sup> It is a monument of a Macedonian ruler of Egypt, Ptolemy Euergetes II, B. C. 170-117.

In 1815 this monolith was found by Belzoni in front of the ancient temple of Isis. By his energy and perseverance against many obstacles it was removed from Philæ in 1819 and transferred, together with its pedestal, to its purchaser, Mr. W. J. Bankes, who transported it to England and re-erected it in front of his residence, Kingston Hall, Dorset. It is now, according to Cooper, in the possession of Mr. J. W. Bankes, of Corfe Castle.

From the plate of Lepsius it appears that the pyramidion is broken and was unsculptured. A single column of carefully cut hieroglyphs is cut on each of its faces, bearing the cartouches of Ptolemy Euergetes II and his wife Cleopatra. According to Birch, the inscriptions, though filled with religious phrases, state hardly more than that the king has erected this obelisk to his mother Isis. By a singular exception to the usual rule, the hieroglyphs which relate to the monarch face in an opposite direction from that of the hieroglyphs which relate to the deity.

The pedestal is of sandstone, and is five feet nine inches high. Upon it are three Greek inscriptions of great interest: the lowest of these was cut in the stone, and is a petition to the king from the priests of the temple of Isis, to be relieved from certain taxes laid upon them by the different public officers. The two inscriptions above this are, according to Long, only painted in red letters; Cooper states that they were originally written in letters of gold. They consist of the king's reply to the petition, and of the royal order to Lochus, governor of the Thebaid; they appear from the plate of Lepsius to be much defaced, but have been restored by M. Letronne.

<sup>1</sup> Zoega, p. 108.

<sup>2</sup> "Descrip. de l'Égypte, Antiq.," vol. i, pl. 5. Lepsius, "Auswahl," tab. xvii. Letronne, "Éclaircissements sur une inscription grecque contenant une pétition des prêtres d'Isis dans l'île de Philæ." Belzoni, "Narrative," p. 105. W. J. Bankes, "Geometrical Plan of the Obelisk discovered at Philæ."

These Greek inscriptions have played an important part in the interpretation of Egyptian hieroglyphs. It was from their publication, together with the hieroglyphic columns of the shaft, that Champollion was enabled to decipher the cartouches of Ptolemy and Cleopatra, thus verifying the conclusions which had been previously drawn from a study of the celebrated Rosetta Stone.

The following is the original Greek inscription and its translation.

ΒΑΣΙΛΕΥΣ ΠΤΟΛΕΜΑΙΩΚΑΙ ΒΑΣΙΛΙΣΣΗ ΚΛΕΟΠΑΤΡΑΙ  
 ΘΙΑ ΔΕΛΦΙΚΑΙ ΒΑΣΙΛΙΣΣΗ ΚΛΕΟΠΑΤΡΑΙ ΤΗ ΠΥΓΝΑΙ  
 ΚΙΘΕΟΙΣ ΕΥΕΡΓΕΤΑΙΣ ΧΑΙΡΕΙΝΟΙ ΠΕΡΕΙΣ ΤΗΣ ΕΝ ΤΩ ΙΑΒΑ  
 ΤΩΚΑΙ ΕΝ ΦΙΛΑΙΣΙ ΔΙΟΣ ΘΕΑΣ ΜΕΡΙΣ ΤΗΣ ΕΠΕΙ ΟΙ ΠΑΡΕΠΙ  
 ΔΗΜΟΥΝΤΕΣ ΕΙΣ ΤΑΣ ΦΙΛΑΣΣΤΡΑΤΗΓΟΙΚΑΙ ΕΠΙΣΤΑΤΑΙ  
 ΚΑΙ ΘΗΒΑΡΧΑΙΚΑΙ ΒΑΣΙΛΙΚΟΙ ΓΡΑΜΜΑΤΕΙΣ ΚΑΙ ΕΠΙΣΤΑΤΑΙ ΦΥ  
 ΛΑΚΙ ΤΩΝ ΚΑΙ ΟΙ ΑΛΛΟΙ ΓΡΑΜΜΑΤΙΚΟΙ ΠΑΝΤΕΣ ΚΑΙ ΑΙΑ  
 ΚΟΛΟΘΟΥΣ ΑΙ ΔΥΝΑΜΕΙΣ ΚΑΙ Η ΑΟΙ ΗΥ ΠΕΡΕΣΙΑ ΑΝΑΓΚΑ  
 ΤΟΥΣ ΙΗΜΑΣ ΠΑΡΟΥΣΙΑΣ ΑΥΤΟΙΣ ΠΟΙΕΙΣ ΘΑΙ ΟΥΚ ΕΚΟΝΤΑΣ  
 ΚΑΙ ΕΚ ΤΟΥΤΟ ΟΥΤΟ ΤΟΥΣ ΤΜΒΑΙΝΕΙ ΕΛΑΤΤΟΥΣ ΘΑΙ ΤΟΙΕΡΟΝ ΚΑΙ  
 ΚΙ ΔΥΝΕΥΕΙΝ ΗΜΑΣ ΤΟΥ ΜΗ ΕΧΕΙΝ ΤΑΝ ΟΜΙΤΟΜΕΝΑ ΠΡΟΣ ΤΑΣ  
 ΓΙΝΟΜΕΝΑΣ ΤΗΡΕΤΕ ΜΩΝ ΚΑΙ ΤΩΝ ΤΕΚΝΩΝ ΘΥΣΙΑΣ  
 ΚΑΙ ΣΠΟΝΔΑΣ ΔΕ ΟΜΕΘΥ ΜΩΝ ΘΕΩΝ ΜΕΡΙΣ ΤΩΝ ΕΑΝ  
 ΦΑΙΝΗΤΑΙ ΣΥΝ ΤΑΣ ΖΑΙΝΟΥ ΜΗΝΙΩ ΤΩΙΣ ΥΓΓΕΝΕΚΑΙ ΕΠΙΣΤΟ  
 ΛΟΓΡΑΦΩΙ ΓΡΑΨΑΙ ΑΙΟΧΩ ΤΩΙΣ ΥΓΓΕΝΕΙΚΑΙ ΣΤΡΑΤΗΓΩ ΤΗΣ  
 ΘΗΒΑΙ ΔΟΣ ΜΗ ΠΑΡΕΝΟΧΑΕΙΝ ΗΜΑΣ ΠΡΟΣ ΤΑΥΤΑ ΜΗ ΔΑΔ  
 ΑΩΙ ΜΗ ΔΕΝΙ ΕΠΙ ΤΡΕΠΕΙΝ ΤΟ ΑΥΤΟ ΠΟΙΕΙΝ ΚΑΙ ΗΜΙΝ ΔΙΔΟΝΑΙ  
 ΤΟΥΣ ΚΑΘΗΚΟΝΤΑΣ ΠΕΡΙ ΤΟΥ ΤΩΝ ΧΡΗΜΑΤΙΣΜΟΥΣ ΕΝΟΙΣ  
 ΕΠΙΧΩΡΗΣΑΙ ΗΜΙΝ ΑΝΑΘΕΙΝΑΙ ΣΤΗ ΑΗΝΕΝ ΗΙΑΝ ΑΓΡΑΦΟΜΕΝ  
 ΤΗΝ ΓΕΤΟΝ ΤΙΑΝ ΗΜΙΝ ΥΦΥΜΩΝ ΠΕΡΙ ΤΟΥ ΤΩΝ ΦΙΛΑΝΘΡΩΠΙΑΝ  
 ΙΝΑ ΗΥ ΜΕΤΕΡΑ ΧΑΡΙΣ ΑΕΙ ΜΝΗΣΤΟΥΣ ΥΠΑΡΧΕΙ ΠΑΡΑ ΤΗΙΣ ΤΟΝ  
 ΑΠΑΝΤΑ ΧΡΟΝΟΝ ΤΟΥΤΟΥ ΔΕ ΓΕΝΟΜΕΝΟΥ ΕΣΟΜΕΘΑ ΚΑΙ ΕΝ  
 ΤΟΥΤΟΙΣ ΚΑΙ ΤΟΙΕΡΟΝ ΤΟ ΤΗΣΙΣΙ ΔΟΣ ΕΥΕΡΓΕΤΗ ΜΕΝΟΙ ΕΤΥΧΕΙΤΕ

TRANSLATION.

To King Ptolemy, and Queen Cleopatra his sister, and Queen Cleopatra his wife, gods Euergetæ, welfare: we, the priests of Isis, the very great goddess (worshipped) in Abaton and Philæ, seeing that those who visit Philæ—generals, chiefs, governors of districts in the Thebaid, royal scribes, chiefs of police, and all other functionaries, as well as their soldiers and other attendants—oblige us to provide for them during their stay, the consequence of which is that the temple is impoverished, and we run the risk of not having enough for the customary sacrifices and oblations offered for you and for your children, do therefore pray you, O great gods, if it seem right to you, to order Numenius, your cousin and secretary, to write to Lochus, your cousin and governor of the Thebaid, not to disturb us in this manner, and not to allow any other person to do so, and to give us authority to this effect, that we may put up a stele with an inscription commemorating your beneficence toward us on this occasion, so that your gracious favor may be recorded for ever; which being done, we and the temple of Isis shall be indebted to you for this, among other favors. Hail.

The following are translations of the king's reply to the petition, and of his order to Lochus (not here given in the original Greek text).

LETTER OF THE KING TO THE PRIESTS.

To the priests of Isis in Abaton and Philæ, Numenius, cousin and secretary, and priest of the god Alexander, and of the gods Soters, of the gods Adelphi, of the gods Euergetæ, of the gods Philopatores, of the gods Epiphanes, of the god Eupator, of the god Philometer, and the gods Euergetæ, greeting: Of the letter written to Lochus, the cousin and general, we place the copy here below, and we give you the permission you ask of erecting a stele. Fare ye well. In the year . . . . of Panemus . . . . and of Pachons 26.

ORDER OF THE KING.

King Ptolemy and Queen Cleopatra the sister, and Queen Cleopatra the wife, to Lochus our brother, greeting;

Of the petition addressed to us by the priests of Isis in Abaton and Philæ, we place a copy below, and you will do well to order that on no account they be molested in those matters which they have declared to us. Hail.

OBELISK OF CATANIA, SICILY.

The so-called obelisk of Catania is placed, like that of the Piazza della Minerva, Rome, upon an elephant cut in stone, and is erected in front of the cathedral.<sup>1</sup> It is not an Egyptian obelisk. According to Westropp, it is probably a Roman imitation. D'Orville, quoted by Zoega, states that the citizens of Catania claim that it was made there. It is probable that it formerly served as the meta of a circus. Four columns of hieroglyphs are cut upon it, each column occupying two of its faces.

In the museum of this city is preserved a fragment, a broken apex, with a part of the upper portion of the shaft. This, according to Westropp, is a fragment of a second obelisk. Zoega, however, concludes that it belonged originally to the standing obelisk: it has, he says, the same polygonal form, and the little of inscription that remains upon it would well join on upon the inscriptions of the standing shaft.

OBELISK OF ARLES, FRANCE.

In the Place de l' Hôtel de Ville of the city of Arles, Southern France, there stands an obelisk of gray granite.<sup>2</sup> As it is uninscribed, its ancient history is not known. Zoega conjectures that it was brought from Egypt to Arles about A. D. 315, in the reign of Constantine the Great. The gray granite from which it is hewn exactly resembles that of the not far remote quarries of Mt. Esterel, near Frejus, France. It is probable, therefore, that it is not of Egyptian, but of Roman origin, made and transported hither in the time of some one of the later Roman emperors. It is supposed to have been intended for the meta of an ancient circus at Arles; but it was never so employed; it was suffered to lie in neglect on the riverbank where it was landed.

According to Buchoz, it was found lying buried in a garden on the bank of the Rhone, 1389. The annals of the city record that Charles IX of France A. D. (1560-1574) gave orders that the shaft should be transported to some other city; but these orders were never carried out. In 1676 it was erected in its present position by the citizens of Arles, in honor of Louis XIV. Upon the apex was set a gilded sun, the emblem or device of that monarch,—such as is seen, for example, on the gates of Versailles,—and on the four faces of the pedestal were cut high-sounding inscriptions in his praise. Some restorations were made in 1829, at which time four bronze lions were placed at the angles of the base. Later, an inscription has been added in honor of Napoleon III.

LEPSIUS' OBELISK, BERLIN.

The most ancient of all obelisks now existing is that found by Lepsius, in the year 1843, in a tomb near the pyramids of Gizeh.<sup>3</sup> In his "Letters from Egypt," he speaks of this tomb as belonging to the beginning of the vii dynasty; but in his "Denkmäler," he classes the obelisk among the monuments of the iv-v dynasties. Its form is that of the earliest representations of an obelisk on scarabei. The following is his own account of the discovery of the shaft, in a letter written at Gizeh, Jan. 28, 1843:

"Some days ago we found, standing in its original place in a tomb of the beginning of the vii dynasty, an obelisk of only some feet in height, but well preserved, and bearing the name of the person to whom the tomb was erected. This form of monument, which plays so conspicuous a part in the New Empire, is thus thrown some dynasties farther back into the Old Empire than even the obelisk of Heliopolis."

<sup>1</sup>Zoega, pp. 87, 647.

<sup>2</sup>Zoega, p. 87. Buchoz, "Correspondence d' Histoire Naturelle." Murray's "France." (Wood-cut in English Encyclopædia.)

<sup>3</sup>Lepsius, "Briefe aus Ægypten, p. 40. "Denkmäler," vol. iv, pl. 88.

The obelisk is the smallest known, being only two feet, one and one-half inches high. It is preserved in the Royal Museum at Berlin.

## OTHER OBELISKS IN EGYPT.

## OBELISK OF BEGIG, OR CROCODILOPOLIS.

Near Begig (or Ebgig) in the Fayûm, and in the vicinity of the site of the ancient Crocodilopolis, and of the former position of Lake Moeris, there lies prostrate in the sands a shaft of syenite broken into two pieces.<sup>1</sup> It is a monument of Usortesen I (xii dynasty, B. C. 2371-2325, Lepsius,) who also erected the obelisk now standing at Heliopolis.

The broken shaft at Begig is so peculiar in form, showing two large and two small faces, that it is often called a stele rather than an obelisk. Instead of terminating in a pyramidion, it has a rounded summit, in the centre of which a deep groove is cut,—it is not known for what purpose.

As the shaft now lies, only one of its broad faces is visible. Its upper portion is occupied by five vignettes, representing the king as appearing before ten pairs of divinities, five on the right, five on the left (Chabas); the most honorable positions being assigned to the deities Amen and Phthah (Rawlinson, ii, 149). The inscriptions here give only the names of the king and the divinities. Below these vignettes are nineteen vertical columns of hieroglyphs, separated by grooved lines: the characters are very small, and, for the most part, illegible; but the name of the monarch is recognizable. On the narrow faces of the shaft are inscriptions which speak of the king as "beloved by Phthah and by Month," Mentu, a local deity of Hermonthis, or Erment.

## OBELISK IN CAIRO (?)

In Loftie's "Ride in Egypt," p. 84, is a wood-cut of a part of an obelisk, built into a gateway. No description of this fragment, however, is afforded in the text, and it may be identical with one of the Amyrtæus obelisks in the British Museum.

## OBELISKS OF SÂN (TANIS).

The city of Sân in the Delta (Tanis; the Zoan of the Bible, the scene of the miracles of Moses, Psalm lxxviii, 43, and the starting-point of the Exodus, Brugsch) was made the capital of the Hyksos, or Semitic Shepherd Kings, xiii-xvii dynasties. After their expulsion, at the beginning of the xviii dynasty, it was for a time neglected; but, under the xix dynasty, it was made a royal residence, and adorned with new structures, replacing those of the hated Shepherds. Especially was it favored by Ramses II, who transferred his court to this place, and made it a new temple-city, filling it with sanctuaries, statues, and obelisks (Brugsch, "Egypt," ii, 94).

The fragments of ten or more (twelve obelisks, Ebers; thirteen obelisks, Fergusson<sup>2</sup>) prostrate obelisks are found on this site<sup>3</sup>; the largest number ever discovered at one place. They seem to have formed a great avenue in front of a temple of Ra, and are assigned to the time of Ramses II. One, figured in the "Desc. de l'Égypte," is represented as nearly perfect; its pyramidion is sculptured with vignettes in which a single sitting figure is shown. Some of the shafts bear one column, others two columns of hieroglyphs. Two of these obelisks, both by Ramses II, are especially mentioned by Birch: on one the scenes of the pyramidion depict the king adoring Ra and Tum: the inscriptions declare that he is "the smiter of the Shepherds," and that he "makes his frontiers wherever he wishes."

The shafts vary in size: some have a mean diameter of about five feet, and when entire may

<sup>1</sup>"Descr. de l'Égypte, Antiq.," vol. iv, pl. 71. Lepsius, "Denkmäler," vol. iv, pl. 119. Lenormant, "Musée," pl. xxvi. Lawrence Oliphant, in *Blackwood*.

<sup>2</sup>Ebers, "Alexandria," p. 110. Fergusson, i, 111.

<sup>3</sup>"Descr. de l'Égypte, Antiq.," vol. v, pl. 28, 29. Denon, "Voyage," pl. 17. Lenormant, "Musée," pl. xxix, No. 7. Burton, "Exc. Hier.," pl. xxxviii-xl.

have been from fifty to sixty feet high; those at the lower extremity of the avenue measured about thirty-three feet (Murray, Westropp, and Cooper).

OBELISK OF ASSOUAN (SYENE).

In the Syenite quarries of Assouan (Syene), from which so many splendid monuments were taken to adorn the cities of ancient Egypt, is still lying an unfinished obelisk. According to Wilkinson, the shaft was left in the quarry because of a fracture of its centre: Murray states that there is only the semblance of a fracture. It is finished on three sides, but it is still united to the quarry by its lower face. It is remarkable, says Ebers, as showing that the Egyptians often finished their works in the quarry.

OBELISK OF PHILÆ.

In the myth of Osiris, Typhon, the darkness and death, is represented as cutting the body of Osiris into fourteen fragments, and scattering them far and wide. Isis sought and gathered up the fragments, and, on each spot where one was found, raised a monument in its honor. Philæ was one of these burial-places.

In the sacred island of Philæ, especially consecrated to the worship of Osiris, the hall of reception, which visitors approached from the landing-place, was originally decorated with obelisks of sandstone (Ebers). At this point there still remains an uninscribed sandstone shaft, the apex of which is broken off and missing.<sup>1</sup> It is assigned to the times of the Ptolemies, by whom the principal buildings of Philæ were erected. (See obelisk of Corfe Castle.)

OBELISK OF SARBUT EL-KHADEM, SINAITIC PENINSULA.

In the Sinaitic Peninsula, on the way from Suez to Mount Sinai, are the hills called Sarbut el-Khadem, overlooking the Wadi Nasb (see obelisk of Wadi Nasb). Here are ancient copper mines, once extensively worked by the Egyptians. Inscriptions here found show that mining was carried on at this point in the reign of Amenhat II, xii dynasty; centuries before the Israelites passed by in their weary march to Sinai. Inscriptions of Hatasou and Thothmes III show that mining went on under their rule. A colony of workmen was established here, bringing with them, though in their plain workmen fashion, the life and architecture of Egypt into the Peninsula. At Sarbut el-Khadem a temple was erected to the goddess Hathor, the ruins of which still remain. Here are found still standing seven or eight stelæ, from seven to ten feet high, from eighteen inches to two feet wide, and from fourteen inches in thickness, bearing the cartouches of different monarchs (Robinson's "Biblical Researches").

Here too, according to Baedeker, there stands, on a hill above the mines, an ancient Egyptian obelisk with partially obliterated hieroglyphics.<sup>2</sup>

OBELISK OF WADI NASB, OR NAHASB, SINAITIC PENINSULA.

The Wadi Nasb lies near the western shore of the Sinaitic Peninsula, about seventy miles S. S. E. from Suez. A little farther on to the S. E. is Sarbut el-Khadem, on the hills of that name.

At Wadi Nasb, on a hill which covers one of the old mines, the German traveller Ruppell discovered, in 1817, a small sandstone obelisk which had fallen from its pedestal.<sup>3</sup> The face which lay on the ground, and was thus protected from injury, proved on examination to be covered with finely cut hieroglyphs: the inscriptions on the other sides had been obliterated. Unfortunately, no

<sup>1</sup> "Descr. de l'Égypte, Antiq.," vol. i, pl. 1, 2, 4.

<sup>2</sup> Baedeker, "Lower Egypt," p. 512. Baedeker alone mentions this obelisk. I have quoted all that he says. I have examined all the books in Astor Library on the Sinaitic Peninsula, and find no mention of this shaft. It is not the same with the obelisk of "Nahasb" (Cooper, p. 102), for that was prostrate, while Baedeker's obelisk of Sarbut el-Khadem is standing.

<sup>3</sup> Ruppell, "Reisen in Nubien, Kordofan, und dem peträischen Arabien," p. 266.

copy of the hieroglyphs was preserved, and it is impossible to decide to which reign the shaft belonged. Cooper conjectures that it is to be referred to the Saitic period,—the xxvi dynasty.

OBELISKS OF DRAH ABOU'L NEGGAH, THEBES.

In the necropolis of Drah Abou'l Neggah, on the western bank of the Nile at Thebes, were found the mummy-cases of two kings named Antef or Entef, of the xi dynasty (B. C. 2423-2380, Lepsius), which have been removed to Paris.

A small obelisk bearing the name of one of the Antefs of this dynasty was discovered here by Mariette. Its height was not more than 3.5 metres, that is, less than eleven feet (Rawlinson).<sup>1</sup>

Villiers Stuart reports that in 1878 he discovered in this necropolis, close to the spot where the mummy of Queen Ah-hotep had been found, two prostrate obelisks, each broken into several pieces.<sup>2</sup> On removing the sand in which they were buried he found them to be inscribed with well-preserved hieroglyphs, which prove, as he says, that the two shafts were erected by a king Antef of the xi dynasty. The plate which he gives shows one face of each. The inscriptions shown in this plate are translated by him as follows: on one obelisk, "The crowned Horus, sovereign of the mountain-lands, perfected of god, son of the Sun, granted life forevermore"; on the other obelisk, "Noub-Kafer-Ra, perfect of god, made for himself good and splendid temples." No dimensions are given for these shafts.

These obelisks of Drah Abou'l Neggah, if accepted as belonging to the xi dynasty, are the most ancient of all known obelisks, with the single exception of the small example found by Lepsius.

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<sup>1</sup> Rawlinson, "Egypt," vol. ii, p. 148. Mariette, "Monuments Divers," pl. 50, a.

<sup>2</sup> Villiers Stuart, "Nile Gleanings," p. 273.

# Record of all Egyptian Obelisks.

TABLE OF COMPARATIVE DIMENSIONS AND WEIGHT OF OBELISKS AS FAR AS CAN BE ASCERTAINED.

NAME OR DESIGNATION.	TOTAL HEIGHT.			THICKNESS AT BASE.			Proportion of H. to T.	Weight in pounds.
	Max. given.	Probably correct.	Min. given.	Max. given.	Probably correct.	Min. given.		
Lateran, . . . . .	108'-7"	105'-6"	104'-11"	{ 9'-8".5 × 9-10	{ 9'-0" × 9-10	9'-6"	11.2	1,020,000
Hatasou, Karnak, . . . . .	108-0	97-6	90-0	8-6	7-10	7-10	12.5	742,000
Assouan, <sup>1</sup> . . . . .	95-0	95-0	95-0	11-1.5	11-1.5	11-1.5	8.5	1,540,000
Vatican, . . . . .	83-1.5	83-1.5	82-4	9-4	8-10	8-10	9.4	721,000
Luxor, . . . . .	82-0	82-0	77-0	8-2.5	8-2.5	7-8	10.0	568,000
Piazza del Popolo, . . . . .	78-6	78-6	78-0	8-5	8-0	8-0	9.8	525,000
Paris, . . . . .	82-0	74-11	74-4	8-0	7-11	7-6	9.4	498,000
Thothmes I, Karnak, . . . . .	93-6	71-7	63-3	8-1.5	6-1	5-1	11.7	346,000
Monte Citorio, . . . . .	72-0	71-5	69-0	7-11	7-11	7-4	9.0	460,000
New York, . . . . .	71-0	69-6 <sup>2</sup>	53-4	8-8	{ 7-9.25 × 7-8.25 ×	7-5	9.0	448,000
London, . . . . .	68-5.5	68-5.5	64-0	{ 7-8 7-10.3 ×	{ 7-8 7-10.3 ×	7-7	8.8	418,000
Heliopolis, . . . . .	68-2	67-0	66-0	{ 6-0 × 6-4 ×	{ 6-1 × 6-3 ×	6-0	10.9	271,000
Constantinople, . . . . .	59-7	55-4	50-0	7-2	7-0	6-10	8.1	299,000
Piazza Navona, . . . . .	54-3	54-3	51-0	4-5	4-5	4-5	12.2	118,000
S. Maria Maggiore, . . . . .	48-5	48-5	48-5	4-3	4-3	4-3	11.4	102,000
Monte Cavallo, . . . . .	45-0	45-0	45-0	—	4-2	—	10.8	96,000
Trinita dei Monti, . . . . .	48-0	43-6	43-6	4-3	4-3	4-3	10.8	90,000
Begig, . . . . .	43-0	42-9	41-6	{ 6-8.5 × 4-8 ×	{ 6-8 × 4-0 ×	{ 6-8 4-0	7.9	120,000
Prioli, . . . . .	35-0	35-0	33-0	6-0	5-10	5-9	6.0	118,000
Philæ, . . . . .	33-0	33-0	33-0	—	—	—	—	—
Monte Pincio, . . . . .	30-0	30-0	30-0	3-11	3-11	3-11	7.6	42,000
Corfe Castle, . . . . .	22-1.5	22-1.5	22-1	2-2	2-2	2-2	10.2	12,000
Pantheon, . . . . .	20-2	20-0	17-0	2-7	2-7	2-7	8.0	13,500
Amyrtæus, . . . . .	19-9	19-9	17-0	2-4	2-4	2-4	8.5	12,000
Thothmes III, Karnak, . . . . .	20-0	19-0	18-10	3-6	3-6	3-6	5.2	34,000
Piazza Minerva, . . . . .	17-7	17-7	16-2	2-6	2-6	2-6	7.0	11,000
Boboli Gardens, . . . . .	16-1	16-1	16-1	2-5	2-5	2-5	6.6	10,000
Catania, . . . . .	12-4	12-4	12-4	—	—	—	—	—
Thebes, . . . . .	11-0	11-0	11-0	—	—	—	—	—
Benevento, . . . . .	11-9	9-0	9-0	2-1	2-1	2-1	4.3	5,000
Villa Mattei, . . . . .	8-3	8-3	7-4	2-7	2-7	2-7	3.2	4,000
Alnwick, . . . . .	7-3	7-3	7-3	{ 0-9.7 × 0-9	{ 0-9.7 0-9	0-9	9.2	600
Wadi Nasb, . . . . .	7-11	7-11	7-11	—	—	—	—	—
Florence, . . . . .	7-0	7-0	7-0	—	—	—	—	—
Borgian, . . . . .	6-7	6-7	6-7	1-8	1-8	1-8	—	—
Florence, . . . . .	5-10	5-10	5-10	—	—	—	—	—
Frag. Rome, . . . . .	—	5-1	—	—	—	—	—	—
Frag. Rome, <sup>3</sup> . . . . .	—	4-5	—	—	—	—	—	—
Albani, . . . . .	—	—	—	—	—	—	—	—
Sân (Tanis), <sup>4</sup> . . . . .	—	—	—	—	—	—	—	—
Cairo, . . . . .	—	—	—	—	—	—	—	—
Essex, <sup>5</sup> . . . . .	—	2-6	—	—	—	—	—	—
Lepsius, . . . . .	2-1.5	2-1.5	2-1.5	0-9	0-9	0-9	2.4	200

<sup>1</sup> Still in the quarry at Syene.  
<sup>2</sup> Measurements exact.  
<sup>3</sup> There are also other fragments at Rome.  
<sup>4</sup> A number of fragments of obelisks exist here.  
<sup>5</sup> A pyramidion only.