

Prout, 1875 (*General Stone*). Map of the Department of Ancachs Peru, by A. Raimondi (*A. B. Wyon, Esq.*).

On Mr. H. M. Stanley's Exploration of the Victoria Nyanza. By
Lieut.-Colonel J. A. GRANT, C.B.

THE journey recently made by Mr. H. M. Stanley, the commissioner of the 'Daily Telegraph' and 'New York Herald,' is one of the most important and brilliant that has ever been made in Central Africa, or, indeed, in any other country. For, when we consider that he accomplished it so quickly, taking only nine months from the time he left England, it seems at first as incredible as was his famous discovery of the late Dr. Livingstone. It is not alone the short time, but the great geographical question which he has finally settled—namely, he has confirmed Speke's discovery, that the Victoria Nyanza was one vast inland fresh water—he has navigated its shores for a thousand miles, thereby proving that its waters are continuous.

Before remarking upon Mr. Stanley's two letters, dated the 1st of March and 15th of May last (a third letter has arrived through Egypt, dated 12th April, 1875), I may allude to the knowledge we had of the great Lake previous to the time when Mr. Stanley visited it.

The lakes of Central Africa were known to geographers as far back as the year 833, for in 'Tabula Alinamuniana' of this date, also in Abul Hassan's map of 1008, we have the Nile rising from one Lake "Lacus Kura Kavar;" and in the latter map we have mention of M. Komr (Mountains of the Moon) at lat. 7° s. Several old maps, showing the lakes with their effluents, have been referred to in Lelewel's 'Géographie du Moyen Age,' and may be classed as follows:—

1154. Tabula Rotunda Rogeriana	} Have 3 Lakes and 3 Rivers.
1274. Ib'n Saïd	
1331. Ismael Ab'ulfeda	} " 1 " 3 "
1274. Ib'n Saïd	
1311. Bernardi Sylvani	} " 2 " 1 "
1501-4. Charta Marina Portugalensis	
1507. Iohannes Ruysch	} " 3 " 1 "
1529. Diego Rib'ero	
1529. Diego Rib'ero	
1540. P. Apianus. <i>B. Gemma.</i> Frisius ..	

Other more modern maps might be quoted, but during the last century map-makers seem to have left out all the lakes of Central Africa, and it is only in the last fifteen years that the centre of Africa has again been studded with its lakes.'

In the year 1857, the London Geographical Society sent Captains Burton and Speke, both officers of our Indian Army, a service which I had the honour of belonging to, to explore Africa from Zanzibar *via* Lake Nyassa, to Egypt. Thus it was that we first heard of Lakes Tanganyika and Victoria.

Captain Speke, in 1858, went twenty marches north of Kazeh, alone, with (?) seventeen natives, to test the Arab rumour that a great ocean, which they called a bahr, or sea, existed. He found that the Arab traders had informed him correctly; a lake of almost unbounded extent stretched away from him to the north; there was, he was told, as great breadth of it on his left hand as there was on his right. He returned to England and presented his map of the discovery of the Victoria Nyanza to this Society, accompanying it with his belief that the waters he had seen were those of the Nile—but this had yet to be proved. The President for the time was the late Sir Roderick Murchison, who at once grasped the subject, and said, "Speke, we must send you back again."

Many months' preparation for his next expedition passed slowly to Speke, but at length, in 1860, he and I started from Zanzibar with 200 followers. It will give some idea of the fickle African when I tell you that we had only 40 men of the 200 when we reached Kazeh, 430 miles west of the sea-coast. Three-fourths had deserted us. We need not, therefore, be alarmed by the report of Mr. Stanley that one-half of his men were non-effective. He will enlist others, or do with fewer.

Months of weary delay again took place on the way between Kazeh and the hilly region of Karagweh, on account of the difficulties thrown in the way by the inhabitants. We wished to get on quickly, and tried to march near the Lake, but were told that the ordinary route *via* Usui must be kept. We accordingly went that way, and crossed the watershed at $2\frac{1}{2}^{\circ}$ s. lat. From this position we descended the northern incline of Equatorial Africa, and never left Nile-land till we reached the Mediterranean.

After leaving Karagweh, the country, bounding the Lake on the west and north, to the capital of Uganda, may be generally described as a plain 4000 feet in altitude, but worn away at intervals of from 1 to 10 miles, with narrow excavations made by streams falling into the Lake. The route may be likened to the teeth of a saw, the points being plains and the depressions swamps. We had extensive views of the Lake from these plains; seeing its bays and islands, but no peaks nor distant ridges nor mountain-cones to the east, nothing but a clear sea-horizon was visible, and no native could tell who lived beyond this sea.

The bays and long inlets of water or friths, seen by us on the western and northern shores, were M'werooka, Katonga, Murchison, &c. Some were completely land-locked, and 20 miles in length; I allude to the one seen near our camp at Uganda capital. It is here, probably, that Colonel Long, of the Khedive's service, found himself the other day, when he reported that Speke's Victoria Nyanza was merely a small affair of 30 miles in extent. What a prize he had at his feet!

The largest island I observed was that of Sesseh at the north-western corner of the Lake; by compass-bearing it was 40 miles long; the width could not be taken with any accuracy from the shore, but it appeared only 3 or 4 miles. It has no hills, is low in the water, and at one point I observed its shore to be within a mile of the mainland. The King of Uganda keeps his fleet of canoes here, and consults with the God of the Lake, who resides on this island.

It was mentioned last season, at one of our meetings here, by Sir Samuel Baker, that he was given to understand the native name for the Lake was Sesseh. Petermann, in a comprehensive map published this autumn, has followed this mistake by calling the Lake Sessi See, as well as Ukerewe, and Victoria Nyanza. I explained that Sesseh was a large island, and am glad to have my statement confirmed by Mr. Stanley, who has found it to be the largest island on the Lake. Various and numerous were the other islands seen by us, but they were nearly all uninhabited, and of no importance.

The greatest river on the route between the most southern point of the Lake, round its western and northern shores, is the Kitangule Kagcera in the district of Karagweh. It rises probably from the foot of the conical mountain of M'f'oombiro, supposed by us to be 10,000 feet high; numerous lakes and valleys send their waters to it. In appearance it has a slow, majestic, winding course, which is navigable for 30 to 40 miles from its mouth; vessels drawing 25 feet of water could, I believe, float at the ferry where we crossed. Speke and I had to conjecture this depth at the ferry, because we were forcibly prevented from dropping our lead-lines into it: the King would not be pleased; it was not "canny" to take soundings.

I should not be the least surprised to hear that Mr. Stanley selects this noble river as a point for exploration. With the *Lady Alice* he can ascend this stream from the Lake up almost to King Rumanika's door; or he can cross over the mountains of Ruanda and Urundi and descend to the spot on Lake Tanganyika, where

Livingstone and he had such a pleasant picnic; or he may select the Albert Nyanza as his field for exploration. All will be new to us; either route would interest geographers intensely, for the country, its people, and its animals are all unknown.

Leaving the river Kitangule, and proceeding north to the capital of Uganda, a distance of 125 geographical miles, we counted five-and-twenty streams, varying in depth from 3 to 10 feet, which we waded, swam, or crossed by bridge; there were numerous other smaller ones which would not give trouble even when flooded. They were mud-coloured and mud-sided—swamp rivers, in fact.

The area of the Lake, according to Speke, who took latitudes and longitudes for its western half, and only had native information for the other half, is 645 geographical miles in circumference; and if we add to this the circumference of Lake Bahr-ingo, now said to form a portion of the Lake, we have 910 geographical miles. Speke, therefore, after his last journey in 1860–3, made the Victoria Nyanza out to be of an area not equal to Lake Superior, which is 1500 miles in circumference, but parallel in size with Huron (600) and Erie (650).

You naturally ask how Speke came to make the Lake the size it has proved to be. There was no theory in his statement, as you will allow when I state that, at Muanza, along the west side, and on the north, he had taken its latitude, longitude, and altitude. Native travellers had gone, *by water*, from Ukereweh to Kitangule, and onwards to the capital of Uganda, also onwards to Baringo. We travelled by the western side, where the country is without mountains, low and swampy; and when Captain Speke got to the Ripon Falls, the natives told him there was as much water, from where he stood, to the East, as there was to Katonga Bay in the West, where he lately came from. Therefore it was by these measurements that he made the Lake the size it has proved to be by Mr. Stanley.

The only point where water was observed to leave the Lake was at Ripon Falls, in Uganda. Here the body of water is 150 yards wide—the depth was not calculated—but this quantity bears but a small proportion to the contents of the Lake. As to the depth of the Lake, I am inclined to the belief that Stanley's measurement will show it is a comparatively shallow body of water, resting on a vast plateau; that there is no chasm such as Tanganyika is formed of. Stanley has given us only one measurement for depth—275 feet, and had not taken the centre of the Lake. The Nile, after leaving the Lake at Ripon Falls, has a navigable course to the

Karuma Falls. From here to the Albert Nyanza its course is through rock and over high falls. We have yet to learn the exact position of the river as it leaves the Albert; but it is again navigable from this to Apuddo, the village near M. Miani's tree; hence it again foams over rocks for some distance, and at intervals, as it runs below, and north of the Jubl Kookoo Mountain range. Colonel Gordon has, however, found it navigable farther up from Gondokoro than was suspected, namely, up to 12 miles south of Regiaf, whence all the way to Egypt—*during high Nile*—for 1620 geographical miles there is no obstruction to a boat drawing 5 or 6 feet of water.

Many will remember the enthusiastic reception given in old Burlington House where Speke and I were received after telegraphing that the "Nile was settled;" that "the Victoria Nyanza was the source of the Nile." Such a reception certainly awaits Mr. Stanley when he appears here; and if he should make more discoveries—which he undoubtedly will if God spares him—there is no honour which this Society can bestow that he will not have earned over and over again. He, as an observer, a traveller in its real sense, a provider of true and pleasant pictures from unknown lands, has confirmed the discoveries made by Speke, and to him the merit is due of having sailed on the broad waters of the Lake, and sent home a map, and descriptions so vivid and truthful that the most sceptical cannot fail to be satisfied.

Here it may be as well to explain that some geographers never accepted Speke's Lake as one great ocean, although the geographical world did. The foremost of unbelievers, and the one who appeared first in the field, was Captain Burton, the companion at one time of Speke. He did not seem to have any reason for his argument. He said there must be several lakes, lagoons; anything, in fact, except *the* Lake. Even the late Dr. Livingstone and Mr. Stanley made out there must be several lakes. Livingstone wrote in a very patronising tone, "Poor Speke had turned his back upon the real sources of the Nile"—"his river at Ripon Falls was not large enough for the Nile"—and was disparaging of Speke's discoveries. The work of Dr. Schweinfurth, the 'Heart of Africa,' has fallen into the greatest blunder. Also, nearly three years ago, a map, constructed by Mr. Keith Johnston, without authority, in our map-room, was suspended from these walls, but, on my protest, the President Sir Henry Rawlinson ordered that it be altered to the delineation of the Lake by Speke. This was done.

Numbers of other writers and map-makers, Continental and English, have gone on disintegrating the Lake from book to book, map to map, and from year to year; but I think the public will now

perceive how unjust the above critics have been, how firmly the fame of Speke has been established, and will not fail to accord him that place in their opinions which he may have lost for a time.

The following published maps exhibit the Victoria Nyanza divided into two or more lakes:—

‘The Nile Basin,’ by Richard F. Burton, 1864. Coast-line delineated only at south extremity of Lake, and the south side of the islands Kerewe and Mazita; from the Kitangule River to the Katonga; at Murchison Creek; at Napoleon Channel. Between these is placed the words “Supposed Site of Victoria Nyanza.” Bahari Ngo made a distinct lake.

‘Lake Region of Eastern Africa,’ by A. Keith Johnston; 2nd edition, 1872. Victoria Nyanza, a continuous coast-line from Napoleon Channel, along N. and W. sides to Urundi, on E. coast; coloured only as water at the S. extremity, and round the islands Kerewe and Mazita; from a little S. of Kitangule River to a short distance E. of the Katonga; about Murchison Creek; about Napoleon Channel. The eastern side made a distinct lake, with the name ‘Bahari ya Ukara.’ Lake Baringo entirely separated from the Victoria Nyanza.

‘Dr. Livingstone’s Routes, 1866 to 1872;’ map in ‘Ocean Highways,’ July, 1872, by A. Keith Johnston. Victoria Nyanza, a continuous coast-line as above, with the islands Kerewe and Mazita, forming a peninsula from the E. shore; water shown only from Napoleon Channel to the Kitangule River; about the southern part of the Lake and the peninsula; along the E. coast with the name ‘Sea of Ukara.’ Lake Baringo quite distinct.

‘How I found Livingstone,’ by H. M. Stanley; map by E. Stanford, 1873; S. of equator only. Coast-line of Victoria Nyanza only delineated, and water coloured at Jordan’s Nullah, a little past Muanza, the Bengal Archipelago, and S. side of Kerewe and Mazita Islands; from opposite Mashonde to the equator; on E. side about Kaverond of Wakefield’s map, with name ‘Sea of Ukara.’

‘Livingstone’s last Journals,’ 1874; map of the Forest Plateau of Africa, by E. Stanford. From E. of Muanza to Ripon Falls the W. and N. coast of the Victoria Nyanza is shown as delineated by Speke, but with the opposite coast generally parallel to it, at a distance of 30 to 50 miles, with the name Lake Okara; E. of the S. extremity of this Lake is placed another, 60 miles long by 50 broad, named Kavirondo, and connected with Lake Okara by the Kidette River. Lake Baringo is also detached, and communicates with the Asua by the River Ngardabash.

In Sketch-map of Dr. Schweinfurth’s routes, 1868–71, by E.

Weller, in 'The Heart of Africa,' by Dr. Schweinfurth, a series of five distinct lakes of small extent, connected by rivers, takes the place of the Victoria Nyanza. Of these, Lakes Ukara and Ukerewe, respectively the E. and S. extremes of the Victoria, are named. Lake Bhari Ngo is quite separate (drained by the Asua), receiving at the N. the waters of Lake Zamburu, by a river from its S. extremity, which last receives the waters of another lake, not named.

Besides these, I might also mention:—

'Süd Afrika und Madagaskar,' by Dr. Petermann; No. 45 of Stieler's Hand-Atlas, 1872. In this, 'Ukerewe' (Victoria Nyanza), 4308 feet (?), is shown according to Speke, except that there is no E. coast marked; Lake Baringo is also omitted.

In Colonel Long's map of his visit to M'tesa and the Victoria Nyanza, published by the Chief of the Staff, Egyptian Army, the Lake is shown to have a width of only 20 miles from the N. coast.

It is now my place to make some comments on Mr. Stanley's journey.

Starting from Zanzibar, in the month of October, 1874, with 300 followers, he made a rapid journey of 720 miles to the south-east corner of Victoria Nyanza, performing this distance in 103 days, inclusive of halts. Through forests, across deserts and rivers, he conveyed the boat, *Lady Alice*, in sections, and launched her on the Lake. The forethought and energy required to convey this boat must command the fullest admiration, for in doing so, he has navigated the Inland Ocean, and given us a thrilling account of its extent, its rivers and shores, and its beautiful islands.

He experienced almost stunning losses and privations in his land journey. Having to travel through sterile, unhealthy regions, the want of food and water was felt severely; his men suffered from sickness—death was rife amongst them—and he had to contend against the Waturu race, who sounded their war drums, and killed twenty-one of his men. After contesting with them for three days, and clearing a way for his advance, he continued his march towards the Lake. In his letter of the 15th of May, allusion is made to a fight from his boat with the Wavuma race; but as no particulars are furnished, the account may be in the correspondence sent *viâ* Uganda to Egypt.* The Island of Uvuma at the north-end of the Lake, is the position mentioned.

* This correspondence has reached England since the above was written. The people use slings, a fact which corroborates what we learnt in Uganda.—J. A. G.

On the 27th of February last he obtained his first view of the great sea, and it can be imagined how impatient he must have been, and how hard he and his men must have worked to put the *Lady Alice* together, to have a short trial on the Lake before taking to sea in her. There are many questions which we should like to ask Mr. Stanley here; but we must be content with his map now before us, with its rivers, islands, and broad expanse of water.

Of the rivers which he observed during his voyage round the south, east, north, and west coasts, he gives, commencing with the most southern and proceeding northwards, the Monunguh, Luwamberri, and Duma; these three join and form the Shimeeyu. The Ruana falls into Speke Gulf, and is made 90 miles in length. Fifty miles farther north comes the Mara, 70 to 80 miles. Twelve miles north there is the Mori; then in succession, the Shirati, Gori, Ugoweh, and Yagama. In all, ten rivers are in the map. The only one described—the Leewumbu, or Shimeeyu—seems to be the only important river. It rises in 5° s. lat., and 35° e. long., runs a course of 170 miles, where it and two others join to form the Shimeeyu, which extends for 100 miles farther. The width of the Leewumbu in the dry season is 20 feet, and depth 2 feet. Mr. Stanley gives great importance to the Shimeeyu, saying its course is roughly 350 miles, that it is one mile wide at its mouth, and 400 yards across above the mouth. This river may prove to be the most southern waters of the Nile. But the river Ugoweh, at the north-east corner of the Lake, must be a considerable stream also, for hippopotami were seen in it. No remarks are made on the other streams.

We therefore have but one great stream on the whole length of the eastern shore of this great Lake; and we know that on the western shore there is the same coincidence, namely, the Kitangule-Kagoera, the only river which obliged us to cross by canoe. The River Katonga we heard much spoken of as a troublesome stream, but I do not think it can be navigable from the bay.

It seems as if the great brown plains, which Mr. Stanley speaks of as bounding the Lake to the east, drank up all the rain that falls upon them. Everywhere he heard of plains to the east; even the "Towering Table" mountain of Majita or Mazita, east of Ukerewe Island, was seen to be surrounded by plains; also the island-like mountains of Ururi, Uramba, and Shashi, they, too, had their plains; but all these being within a radius of 40 miles (*vide* map), I take it they are remains of an old plateau, being 3000 feet above the level of the Lake. There is a similar table mountain at Chey-

simbee (mentioned in Stanley's map) on the opposite coast, but it is only 400 feet above the plain.

The mountains of Ugeyeya are called gigantic, for Mr. Stanley says, "We pass between the Island of Ugingo and the gigantic mountains of Ugeyeya, at whose base the *Lady Alice* seems to crawl like a tiny insect, while we on board admire the stupendous summits." There is nothing as to size or summit on the other side of the Lake to compare with this description of the equatorial mountains of Ugeyeya. This seems to be rather a mountain region, for, to the east of the "Bridge" or Basalt Isles, a "flat and slightly wooded district, varied at intervals by *isolated cones*," was visible from the summit of the Isle. Manyara, at the north-east angle of the Lake, on the eastern side of the bay, is "a land of bold hills and ridges, while the very north-eastern end, through which issues the Yagama river into the Nyanza, is flat."

Having examined all the notes on the mountains of the east coast, we can say that there are no mountains, no volcanic cones, to be compared with them as to their height and *proximity to the Lake* on the west coast, where the whole country is flat from Kitangule, north, and the streams run to the Lake like hare-soup down a tilted plate, leaving deep furrows in the plain. We saw several long valleys which, no doubt, once were "friths" in the Victoria Nyanza, they are silted up; thousands of acres of land on the west coast are in this state. I therefore cannot but conclude that the fairway of the Lake will be found on the east coast, and that the miles of swamps and shallow water in the west do not exist to the same extent on the other shore. But this interesting question will, I trust, soon be settled when we receive Mr. Stanley's observations on depths.

No fewer than sixty to eighty islands may be counted upon Mr. Stanley's map, dotted generally in clusters all round the shores, at distances of 2 and 3 miles from the mainland. The largest in the whole Lake is Sesseh, which we made 40 miles in length. Mr. Stanley makes it 35×25 . Passing to the south of the Kitangule, we have Bumbireh, 25×8 ; and following the curves of the Lake, Ukerewe, 32×7 ; Ugingo, 20×5 ; Usuguru, 22×5 ; and Uvuma, 15×10 . The remaining islands are small in comparison to those mentioned here, and the majority of the islands are near the northern shore, at the end where the waters leave for Egypt, and the others are chiefly by the shores of the southern third of the Lake.

If we examine the areas of the islands mentioned above, for instance, Sesseh—or, as Mr. Stanley calls it, Sasse—it has an area of about 700 English square miles; the dimension of this one island

will give some idea of the importance of this inland sea, which is probably the largest body of fresh water—at *this altitude*—in the known world.

Captain Speke attached the Lake Bahr-ingo to his lake at its north-east corner. Rev. T. Wakefield places it 50 miles detached from the Lake; but Mr. Stanley inquired of the natives regarding it, and was told there was no Lake in that direction. However, considering that the native information obtained by the two former gentlemen has proved to be correct in most cases, and that it was obtained independently, on this account I do not give in to the non-existence of the Bahr-ingo Lake. He mentions that the River Ugoweh joins the Lake here, and is of considerable size. Hippopotami were seen there by him, and it may be the water communication which Speke heard of as connecting the Bahr-ingo with the Nyanza. There is also the Yagama here.*

Regarding the altitudes taken by Mr. Stanley, we find that in leaving the desert plain of Ugogo, he ascended to another plateau, 3800 feet; again, as he proceeded north-west, he came on a still higher one of 4500 feet, and his greatest altitude was 5100 feet, which is the watershed between the Lake and the sea-coast. This last height corresponds with the highest *inhabited* country Speke and I traversed in our journey, namely, the capital of Karagweh, which approaches to within 50 miles of the w.s.w. end of the Lake.

The height of the Nyanza above the sea was 3550 to 3650 feet by one aneroid, and 3575 to 3675 by another. A further observation by Mr. Stanley, with two boiling thermometers, made the altitude, subject to correction, similar to Speke's, namely, 3808, or 68 feet in excess of Speke's observations. The difference is insignificant, and we may accept them as the established altitude of Victoria Nyanza.

Mr. Stanley found that his latitudes along the Uganda shores differed from Speke's by an average of 14 miles. This difference of 14 miles may be accounted for, as suggested to me, by his having forgotten to apply the semi-diameter of the sun to his observations. It should also be taken into consideration that the sun was close to the Equator when he observed for latitude at noon, and that, under such circumstances, the observation would be a very doubtful one. His longitudes varied little. In one instance, that of the Katonga, Stanley made it 16 miles north latitude and on his map 22, while

* Since the above was written, another letter from Mr. Stanley states that Baringo begins north of Ugeyeya, is a country 15 miles of latitude, with deep land-locked bays. "Thus hereabouts almost a lake is formed separate from the Victoria Nyanza." This is very important, as it confirms Speke's statement that Baringo was connected by water with the Victoria Lake.—J. A. G.

Speke's observation was a few miles south of the Equator. The two observers observed differently; but this is no reason for discrepancy. Mr. Stanley took the sun at noon with a sea-horizon, and made an observation for longitude in the afternoon. He cannot understand how Speke—who was on shore—observed, unless it was by double altitude of the sun; but I can give the explanation. Speke took his latitudes by observing the meridian altitude of suitable stars with an artificial horizon, and generally found a star of the first magnitude for his purpose. At Katonga he had Capella and Canopus (both first magnitude). Indeed, while in Uganda, it will be seen, from the following, that he used no others. The observations were checked by the fact that he was travelling north at every stage; his dead reckoning would correct him. I cannot see how to account for such a blunder, for I have the fullest confidence in his observations:—

31st January, 1862, at Meruka, by star (1st Mag.)	Capella	..	Lat. 36° 2' S.
1st February, 1862, at Sangwa	Capella	..	Lat. 30 47
2nd " " at Masaka	"	Capella	.. Lat. 20 2
6th " " at Kituntu	"	Canopus	.. Lat. 7 40 S.
9th " " at Nakusi	"	Capella	.. Lat. 7 15 N.
10th " " at Kibibi	"	Capella	.. Lat. 15 0
12th " " at Nakatema	"	Capella	.. Lat. 17 55
13th " " at Niamagoma	"	Capella	.. Lat. 17 15
25th " " at Bandowaroga	"	Canopus	.. Lat. 21 19

Speke never rested satisfied with an indifferent observation; he repeated it by another star on the same night or following opportunity, so that he took many more observations than are recorded, and only registered those which gave him confidence.

At the stations immediately south and north of the Equator he observed as follows for longitude and variation:—

3rd February, 1862, at Masaka	5 altitudes and 3 compass bearings.
4th " " at Masaka	3 distances.
10th " " at Kibibi	10 altitudes and 7 distances.
11th " " at Kibibi	12 altitudes, 5 distances, and 1 compass bearing.

The area of Victoria Nyanza, as made known to us by Mr. Stanley, proves that Speke far underrated its extent. I have carefully measured the maps of both travellers with compass to ascertain their existing difference, measuring every 10 miles, and the result, by this rather rough means, obtained is as follows. The map in Speke's book was the one measured from:—

Circumference of Speke's Lake	645 geographical miles.
" " Stanley's Lake	890 " "

If we add 265 geographical miles, the circumference of the

Bahr-ingo Lake in Speke's map, we get 910 miles as one body of water—a curious similarity, in circumference, to Stanley's single Lake—only 20 miles of difference.

Mr. Stanley thinks the mode of spelling Nyanza is objectionable, because he says the natives do not pronounce it in this way. Let me first explain that in using the expression Lake Victoria Nyanza, we actually say Lake Victoria Lake—Nyanza signifying Lake. All that is necessary, when using the word, is to call it the Victoria Nyanza, or Victoria Lake. As to the spelling and pronunciation of the word, we find that it is sounded differently in different localities, and different people spell it differently:—

In old maps	Nianja, of 3 syllables.
In Livingstone	N'yassa, of 2 "
1863 Speke and Grant	N'yanza, of 2 "
1870 Rev. T. Wakefield's Sadi	N'yanja, of 2 "
1875 Mr. H. M. Stanley	Niyanza, or Nee-yanza, of 3 syllables.

Nyassa, Nyanz-a (nasal n), and N'yanja, have a more liquid sound than the three-syllable word of Nee-yanza; and we found the Waganda and Wanyoro pronounced it by the method adopted by us.

Some allusion may be made to the names of the countries which were observed by Mr. Stanley on the east and north-east shores of the Lake, trying, by comparing them with the routes given by the Rev. T. Wakefield, to find similarity or identification; but, after a close examination, I have failed to dovetail the routes of the latter with Mr. Stanley's names. Sadi, Mr. Wakefield's informant, was correct in describing the extent of the Lake, and conjectured that the northern stream from Lake Bahr-ingo "enters the Nyanza to the northwards;" but, as already stated, Mr. Stanley found the country of Baringo almost land-locking an arm of the Victoria Nyanza at the place where Speke had his Baringo Lake.

The only names which tally are given below, and I leave it to others to make farther inquiry:—

<i>Wakefield's Map.</i>	<i>Stanley's.</i>	<i>Speke.</i>
	Shashi	Ushaki.
	Ururi	Urudi.
Kavirond	Kavirondo.	
Ukara (Mainland)	Ukara (Island).	
Ligeyo	Ugeyeya.	
	Uyuma (Island)	Uyuma.
	Usoga	Usoga.
	Manyara	Amara.
	Bumbireh (Island)	Umbiré (Mainland).

Few, indeed only one in Speke's case, of the above places were

visited either by Sadi or Speke; they were obtained by inquiry from natives, and their positions are tolerably accurate when compared with the same places fixed, I presume, astronomically by Mr. Stanley.

I should like to call your attention to the skilfully executed maps which are before you: one representing the map of Stanley upon that of Speke, the other reducing Stanley's map to Speke's latitudes and longitudes. They are the work of Mr. Turner, the Assistant Curator in the Map Room of our Society. He has pointed out to me that if we compare the latitude and longitude given in Stanley's letters with those in his map, they differ in 11 instances, and from 5 to 18 miles.

Allusion may be made to two statements in Mr. Stanley's letter of the 12th April, that M'tesa was King of Karagweh, Uganda, Unyoro, Usoga, and Usui; and that he observed a positive tide in the Luaserri during the morning, for two hours it flowed north, and two hours south; he was told that this is peculiar to all the inlets on the Uganda coast.

As regards the former, we found that although M'tesa had great influence over the rulers of these places, sending his men as far even as Zanzibar, he was king only in his own country, which extends properly from the Katonga to Unyoro and Ripon Falls, where alone the true Waganda live. Regarding the tides, we remarked none in the Lake or any portion of it, and I attribute the motion he observed to the wind blowing down the Lake.

In concluding these few remarks on Mr. Stanley's journey, I may state that they are made on my own authority by request of the President of the Geographical Society, for I felt that it was not for me to come forward as the champion of Speke, he required no such bolstering; in fact, I should have preferred that some other and more competent hand wrote a comment on Mr. Stanley's journey. However, I have great pleasure in complying, for it has opened up to me an old love, and given me this opportunity of congratulating the Society on the great achievement before them. Who amongst us would have had his energy? Who would undertake a cruise in an open boat and absent himself from his camp for fifty-eight days? Who would risk such danger to life and exposure to an African sun in the month of April? Who of us are able to guide, provide for, lead and attend to a little army successfully, and, in the midst of all this, take their observations for latitude and longitude? I think him a worthy representative of the energy which sent out such an expedition.

Sir SAMUEL BAKER said, when the older African travellers, like himself, were placed on the retired list, one great pleasure still remained to them—to watch the efforts and praise the energy of those younger explorers who were following in the paths which the older ones had marked out. He had come up to the present Meeting from the West of England, at some personal inconvenience, on purpose to render all the praise that an old African could to the immense energy displayed by Mr. Stanley. At the same time he always felt great pleasure in meeting other African travellers (because the younger ones must not be supposed to extinguish the old lights); and there was now present the oldest African explorer—Captain Burton. He had always advocated fair play among them; and though there had been some little rivalry between them, he was perfectly certain that nearly every traveller who had started from this country had done so with the honourable ambition of carrying out what he considered to be his duty to this Society, and above all, his duty as representing the integrity and determination of Englishmen. Captain Burton first of all started with Captain Speke. Both Captain Speke and himself (Sir Samuel) were comparatively young men when they first met on board the “P. and O.” Company’s steamer. Speke was then preparing for his first expedition to Africa. The next time he met Speke was in latitude 5° n., when he was with Colonel Grant, after they had marched through Africa and had arrived at Gondokoro. He had never had a greater pleasure, and he hoped he might say the same for them, than that meeting afforded. On that occasion Speke left in his hands what was almost like his will—namely, his sketch-map of the country he had traversed, pointing out the Lake Luta Nziye as still remaining to be explored—and this he (Sir Samuel) carried with him throughout his long and arduous first expedition. Upon his return he had the honour of handing that map to Sir Roderick Murchison, at Burlington House, as the testament of Speke, who was then dead, and of explaining to the Society that he owed the greater portion of his success to it. That original map was now in the possession of the Society; and as he had always supported Speke’s view, it was a proud moment to him to find that it had been verified almost to the letter by Mr. Stanley. All must regret, that in this hour of triumph Speke was no more; but his fellow-traveller, Colonel Grant, and all his family, must feel that this day added to Speke’s undying reputation. He was exceedingly pleased to find that the reports of the natives to himself had been more or less verified by Mr. Stanley’s discoveries. Many persons might have forgotten the discussion that took place in that hall, in January, 1874, upon the report that he had received from King M’tesa’s envoys, who told him that there were two great lakes, one being named Sessé; that there was a channel between them; and that it was a day’s hard work for a canoe to pass through. Colonel Grant stated that Sessé was an island, and that, therefore, there must be some mistake. Mr. Stanley’s account, however, had shown that there was no mistake. It was most natural for the natives to describe the portion close to M’tesa’s capital north of the island as the Sessé Lake, just as Mr. Stanley had heard that Bahringo—instead of being a lake, as Speke thought—was a country. As they called the water near Sessé the Sessé Lake, so they called the water near Bahringo the Bahringo Lake. They were perfectly right in saying that there was a channel, and that it was a day’s journey for a canoe to pass through into the second great lake. This showed how careful travellers must be in receiving geographical information from the natives; though Burton, Livingstone, Speke, Grant, and himself had done their best, there still remained some disputed points. At the same time, there was always some truth in native hearsay, if it could only be ferreted out. All must be struck with Mr. Stanley’s candour in the letters which he had sent home. It was not at all necessary for him to write about the fights and the bloodshed that occurred between him and the natives. There were,

however, certain people at home who were very fond of sitting down and criticising. That was a most unfair thing for those to do who had no knowledge of the necessities of the case. In those wild countries there was no law but the law of force; but he was perfectly certain that nobody travelling for this Society or for this country would ever dream of using force that was not absolutely necessary. Still there were some persons who, for the sake of cavilling or of trying to take the gilt off a man's achievements, would find fault with the actions of travellers. It had now been proved that Speke and Grant were perfectly right in saying that the river issuing from the Victoria Nyanza was the Nile, although they did not pass along the Nile the whole of the way down. Colonel Long, of Colonel Gordon's Expedition, had been up to M'tesa's, and had published a map, which had been very properly criticised by Colonel Grant. Of course Colonel Long did not mean to take the wind out of Speke's sails, but he had certainly taken the water out of the Lake, for he said it was only 15 or 20 miles broad. Of course that was utterly absurd; but at the same time he stated that he had found the sources of the Nile in some enormous lake near Unyoro. He (Sir Samuel Baker) had been there, and knew that at certain times of the year the whole of that country was in the same state as some parts of England had been in during the last few months. If the natives of Africa had been in the neighbourhood of Bridgewater during the last fortnight, they would have shown on their maps a very large lake as existing in the centre of England. Stanley had not only proved the enormous size of Victoria Nyanza, but also the great difficulty of navigating it with hostile tribes on its shores. People at home had no conception of the difficulties that Mr. Stanley must have encountered in carrying the *Lady Alice* through Africa and launching her on the Lake. He admired that feat almost more than anything else that Stanley had done, because he himself took out two boats, but never managed to get one of them near the Albert Lake, for he could get nobody to carry them; and down to the present time neither of them had been put upon the Lake. The difficulties that Mr. Stanley had met with would, he was afraid, close the road to any missionaries or others who might wish to travel there, for the natives appear to have a peculiar, British antipathy to strangers; which recalled to his recollection a picture that appeared in 'Punch' some years ago—a picture of two colliers in that civilised part of England near the collieries: they saw a tourist, and one of them said to the other, "Jack, who is that?" the other replied, "Why, he's a stranger;" and Bill exclaimed, "Then heave half a brick at him." No doubt the natives thought Mr. Stanley was a tourist, and, instead of heaving half a brick at him—for they had no such civilised missiles—they used a sling, and Mr. Stanley was actually slung at, which verified the native accounts given to Speke and Grant, "that the inhabitants of the east shore of the Victoria Nyanza made use of slings." It was now proved beyond doubt that the Victoria Nyanza was a great basin receiving affluents, varying in magnitude, from both east and west; and that from that great centre the Nile issued and fell into the Albert Nyanza. There was a little passage in one of Mr. Stanley's letters which struck him as a slight inaccuracy, and he was sure that on reflection Mr. Stanley would regret that he had written it hurriedly. After being in M'tesa's country only five days, he wrote an admirable letter to the 'Daily Telegraph'; but when stating that the King received him with great splendour, he added that M'tesa had a body-guard "composed chiefly of Baker's renegades." If he had said that Baker was his body-guard it would have been easy to prove an alibi; but the "renegades" touched him to the quick, because that was a reflection upon his good and faithful soldiers. In fact, he never lost a single man as a deserter in all those countries. Some people supposed that blacks were not capable of any virtues, but his black soldiers were the perfection of fidelity. At the same time, Mr. Stanley re-

marked that Baker's name was in bad odour with all that he met. He was exceedingly proud to know that his name was in bad odour, and he thought the Meeting would reciprocate the feeling, when he told them that the body-guard, which Mr. Stanley described as "renegadoes," were the dispersed slave-hunters; and he hoped his name would be in bad odour with the slave-hunters for many generations to come. Mr. Stanley left England before 'Ismailia' was published, and he, therefore, knew literally nothing about the Expedition which he (Sir Samuel Baker) had led. Stanley had never been within 150 miles of the country which the Expedition had been sent to, and had only been in M'tesa's territory five days. Many years ago, when on his first Expedition, he (Sir Samuel) had profited by the great advantage of having had predecessors who had left good names behind them. These predecessors were Speke and Grant. Therefore M'tesa sent his envoys to him, though he was too ill with fever to see them. On his second Expedition the King knew him perfectly well; and knowing the immense importance of gaining his friendship in the search for Livingstone, his first object was to make an alliance with M'tesa, who had ambassadors in every part of Africa within many weeks' journey of his capital. So effectual were the representations then made to him, that he sent out two special Expeditions, entirely of his own good will, to search for Livingstone, and was quite prepared to succour him. Camaron met the envoys at the fifth or sixth degree of south latitude, and received the letter that he (Sir Samuel) had written to Livingstone. That very letter had been sent back to England, and was now in his possession again. People who merely read books of travels often did not see the pith of the work that had been done; and the greatest work that was done by the last Expedition was the opening up postal communication right through the country to Zanzibar. He had given orders to M'tesa, that if any white man should come from the south (expecting Livingstone), he was to pay him every possible attention, as he would be a British Consul, and in fact, a great man in England. Stanley appeared from the south, and, naturally enough, M'tesa thought Stanley was Livingstone, and had beaten his big drums and called out all his big people. Stanley had thus received the favourable welcome which any white man coming from the south was sure to have received with such an introduction.

CAPTAIN BURTON remarked that Mr. Stanley had had the rare happiness of satisfying both the contending parties—those who believed that the Victoria Nyanza of Speke was a single lake, and those who were of opinion that the area covered by it consisted of one great lake and several smaller ones. From the accounts of the Arabs in 1858-9, he (Captain Burton) laid down the Lake as 240 miles in length by 80 miles in breadth. In his publications he would only allow the part to be put in which had been actually surveyed, and he considered that he was right in taking that course. In a subsequent volume on the sources of the Nile he also inserted the parts that had been actually seen. His objection was not to the size of the Lake, because the Lake that he had laid down was just as large as the one navigated by Mr. Stanley, but to a lake with three or four distinct outlets. Speke had marked Mazita as an island; but following the assertions of the Arabs, he (Captain Burton) had put it on the map as a headland, as was now proved by Mr. Stanley to be the case. The existence of lakes to the north-east, and possibly to the east of the Victoria Nyanza, was still extremely probable. The Mombas missionaries had heard of the Isamburu Lake, and of a volcanic region that was far too distant from the coast to be fed by sea-water, and too far from the Victoria Nyanza to be connected with that lake. He still regarded it as possible that the Tanganyika might be connected with the Nile. Sir Samuel Baker had stated in his last most charming book that he had very precise details from the Arabs and natives about a water-passage between the Tanganyika and

the Albert Nyanza. Dr. Livingstone had also seen the current in the former flowing north for some months. Since then Lieutenant Cameron had discovered the mouth of the Lukuga. He could only say that he did not believe in Central African lakes with two outlets; but at present the evidence was that Tanganyika in the dry season was still water, but that in the rainy season it shed its water to the north and west. He would not say that that was impossible, and he still lived in hopes that by some curious possibility the Lukuga would be found to be the ultimate source of the Nile. In conclusion, he expressed his heartfelt sorrow that his old companion, Speke, had not been spared to be present at this great Meeting. No man would have been more delighted to see the corrections that Mr. Stanley had made with regard to his wonderful discovery of that magnificent water that sent forth the eastern arm of the Nile.

Mr. EDWIN ARNOLD (of the 'Daily Telegraph') thanked the speakers for the encomiums they had passed on the labours of Mr. Stanley, and the Meeting for the applause with which they had received them. If it were possible for him to communicate at once with Mr. Stanley, he was sure that a copy of the speeches just delivered would cheer and aid him more than beads, or boats, or provisions, or anything else that could be sent him. He also thanked the Meeting on behalf of the proprietors of the two allied papers which had sent out the Expedition. He read from a private letter addressed to himself the last words that Mr. Stanley had written, and that had arrived in this country. These were, "I am in perfect health, thank God: the Nile sources and their atmosphere make me stronger and stronger, and increase my energy; my last word to you is *en avant!*"

Mr. HUTCHINSON (Secretary of the Church Missionary Society) said the subject of sending a mission to Central Africa had long occupied the attention of his Society. It was owing to their missionaries that Geographical enterprise was first started on the eastern shores of Africa, and the Society now honestly contemplated the possibility of responding to the call which Mr. Stanley had forwarded from the King of Uganda. No doubt there were great difficulties in the way, but every possible care would be taken and every detail carefully planned. They did not anticipate so much hostility from the natives as Sir Samuel Baker had spoken of, and they hoped that Colonel Gordon's Expedition would be of great assistance in ultimately opening a route to Uganda. One friend had given 5000*l.*, and another had promised 3000*l.*, showing that there was a feeling in the country in favour of honest and earnest efforts to carry the Gospel to the natives in that part of the world.

The PRESIDENT said Mr. Stanley had been much more fortunate than travellers in general. Almost all others, especially in Africa, had had to wait for the end of their labours before getting the credit for them; but Mr. Stanley, fortunately for Geography and for himself, had been able to substantiate a great claim on the consideration and the applause of Geographers by the work which he had already done in connection with the Victoria Nyanza; though that was only part of the work which he had in hand. From the Victoria Nyanza he would prosecute his researches farther towards the west, and in all probability he would repeat on the Albert Nyanza the same achievement which he had carried out on the Victoria Nyanza.

Sir Henry then read the following notes relating to Colonel Gordon's Expedition.

Progress of Colonel Gordon's Expedition.

FROM the early part of the present year down to September, Colonel Gordon has been employed in the very arduous work of bringing his boats and a steamer up the part of the Nile above