

Big Schemes of Upper Nile River Improvement Which Cost Millions

KARUM.—Special Correspondent.

of the Nile.—I want to tell you about some gigantic projects which the English are contemplating in the upper Nile.

This mighty stream has now its whole course through British territory. It rises in Lake Victoria, in the British province of Uganda, and flows through that province into the Anglo-Egyptian Sudan, traversing the old land of Nubia, and then flows on down through Egypt, which is practically a dependency of Great Britain, of the Mediterranean sea. From its source to its mouth it flows through about thirty degrees of latitude, and its course has a length of more than 4,000 miles. The British control not only the main stream, but most of its tributaries, and thus own the great lakes of Victoria and Albert Nyanza, as far as the Nile outlets are concerned. The only other nation which has anything to do with the stream is the Abyssinian, in whose highlands the Blue Nile and Atbara have their sources. The control of these two rivers is, however, so restricted by treaties that they cannot be touched except by British consent, so that the Nile may be called an English river and may be looked upon as in the hands of one of the richest, most able and most successful of the developing nations of the globe.

I have already told you of the improvements that the British have made as to the Egyptian course of this great waterway. For a month and more I have been traveling along that part of it. I have visited the great canals of the Sudd, and also the Barrages at Khartoum and Assouat, which have been built at a cost of \$2,000,000 to give the farms of Egypt a steady water supply. This dam has made a reservoir 100 miles long, and it now holds back 1,000,000,000 tons of water to feed the Nile which flows on to the sea. It is now twenty feet higher, and it will be raised back almost as much more. It has already added millions to the wealth of the lower Nile valley, and it has made the Egyptian one of the most prosperous of nations.

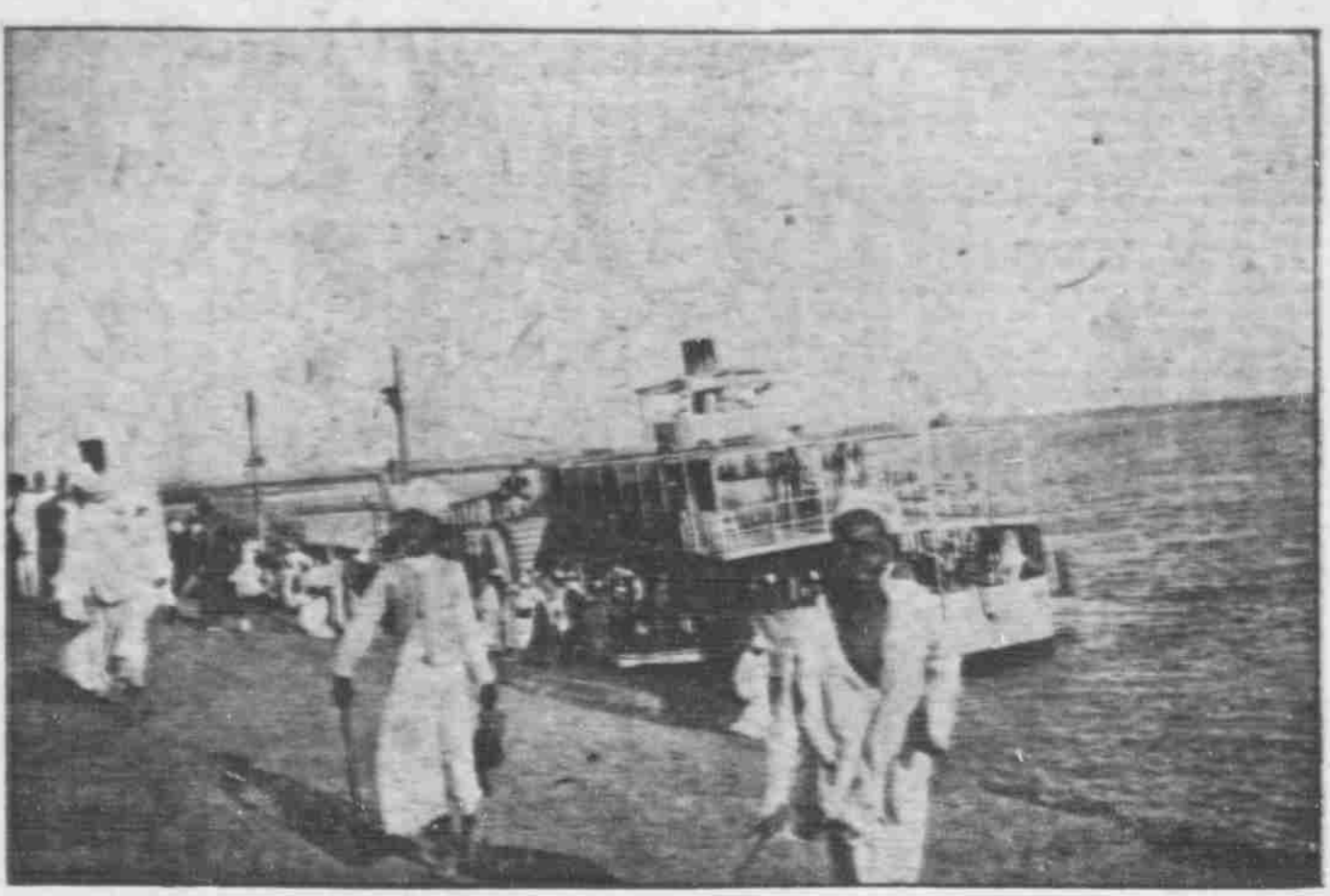


DANCING GIRLS OF THE BLUE NILE.

regions that big game is to be seen. There the land is a little higher, and elephants, giraffes and buffaloes inhabit the edge of the swamps. In the heart of it, and in fact in all parts of it, there are vast numbers of hippopotami, and there are all sorts of swamp birds everywhere. From the reeds and mud banks dozens of wild cranes, geese, grebes, herons, pelicans and ducks of every description rise up as the boats approach, and there are insects by millions. There are all sorts of mosquitoes, mites, spiders and flies, and there are other insects which carry fevers and the tsetse fly, which causes the sleeping sickness. Among the queer birds is the white-headed stork, one of which may be seen here in the palace grounds at Khartoum. The wild geese are black, white and brown.

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Another project, which seems to be more feasible, is the digging of a canal on the Nile, beginning at Bor and running south across to where the Sobat river flows in. Such a canal would carry the waters of the Nile along on the highlands above the swamps and prevent their flowing into them except when desired. This canal would need to be a little over 20 miles long, and it could be controlled at Bor by a dam across the stream, by which as much or as little of the Nile as is needed can be sent down the river. The channel proposed would carry about 1,500 tons of water per second, which is only one-fifth more than the amount discharged into the Nile at Assouat. This Bor-Sobat canal would shorten the main Nile as a navigable waterway, and all the boats going up and down the stream would pass through it. The excavation would cost about \$2,000,000, and the regulation works \$500,000 more.



FRANK ON THE WHITE NILE.

There is one obstacle, however, to such an undertaking. The rising of the lake might flood parts of German East Africa, and, if so, the Kaiser would probably object. Dams at the mouth of Lake Albert would result in the storage of 5,000,000,000 tons for every meter of height, and the two lakes together would have, for each meter added to them, a storage capacity of 1,000,000,000 tons—amount beyond conception, enormous. Within the next few months I expect to make my way southward to the great lakes of central Africa, and shall be happy to discuss the matter from the standpoint of the conditions about Lake Victoria. As the civil engineers here estimate it the regulation of Victoria and Albert lakes could be accomplished at a cost of \$6,000,000, which is \$2,000,000 less than was the cost of building the Assouat dam.

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Improvement of the Blue Nile.—If these projects for the White Nile are carried out, Egypt will have all the summer water she needs and much of her desert, not now irrigated, can be made fertile. The water supply will be constant all the year round, and there will be no objection to the use of the Blue Nile for the irrigation of the Sudan. That river will still be allowed to carry its heavy load of silt down to Egypt during the floods, but, in the summer, it may be so regulated by a dam at Lake Tzana, as will furnish perennial irrigation to a large region near here. The Blue Nile is just about as long as from Philadelphia to Chicago. It rises in the mountains of Abyssinia at an altitude as great as that of the top of Mount Washington, and winds its way down through Abyssinia and the Sudan to Khartoum, where it joins the White Nile. The river here is about as wide as the Potomac at Washington, and its waters are now beautifully clear. During the floods they turn reddish brown, being loaded with a great quantity of the leaf mold of the Abyssinian plateau. The river is navigable as far as the outcrops at Rosetta, which is 426 miles from here, and there are regular steamers plying upon it. Beyond that point the stream is known as the Atbara. It flows out of Lake Tzana in a series of channels and light rapids, which soon unite to form a stream 700 feet wide, in which shape it flows on, narrowing and widening until it reaches Rosetta.

Big Projects of the Upper Nile.

The projects which the British are now considering are more important than anything they have done in the past, and they will rank as the most daring of the engineering plans of the century. If carried out they will add as much as it did to build the Sudd canal, but they will secure the greater Egypt a steady water supply all the year round for all time to come, and they will build up here, at a distance of 1,500 or 2,000 miles south of the Mediterranean sea, several other Egyptes twice as rich as the lower Nile valley, each supporting its millions of people.

The projects embrace the regulation of the great lakes on the highlands of central Africa, so that they may serve as reservoirs for the Nile. They include the embankment of those tributaries of the Nile which empty into the great swamps on the northern slope of the Congo watershed, and also the digging of more than 20 miles of new channels, by which the main stream of the White Nile will be greatly shortened and its bed fitted for carrying the enormous volume of its waters unimpeded down to Khartoum. Another scheme contemplates the damming of the Atbara so that it will irrigate large tracts in upper Nubia, and still another the erection of a dam at Lake Tzana, on the highlands of Abyssinia, which will make that great lake a reservoir for the Nile and enable it to collect the fertile plain, which lies between the Blue and White Niles, ending here at Khartoum.

Opening Up the Tributaries.

Nevertheless, one of the projects contemplates the opening up of these tributaries of the Nile. It is believed that the Bahir of Zeraf could be so banded up that it would carry the volume of the Nile and keep it out of the swamps, and thus save the enormous amount of water wasted by evaporation. The river would have to be banded up between Bor and Lake No, and in that case it could probably carry the Nile's summer water supply. The Bahir of Sobat will also be opened up for navigation, and by some means or other a great part of the river water will be held in its course. These schemes would mean an expenditure of millions of dollars. I think the estimate is about \$2,000,000.

Damming the Great Lakes.

With this part of the Nile channel so improved by means of regulators at Lake Albert and Lake Victoria, where the Nile flows out, the supply of water for Egypt and a part of the Sudan would be unlimited, and it could be controlled at Bor by a dam across the stream, by which as much or as little of the Nile as is needed can be sent down the river. The channel proposed would carry about 1,500 tons of water per second, which is only one-fifth more than the amount discharged into the Nile at Assouat. This Bor-Sobat canal would shorten the main Nile as a navigable waterway, and all the boats going up and down the stream would pass through it. The excavation would cost about \$2,000,000, and the regulation works \$500,000 more.

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Pearl Fishing a Profitable Canadian Amusement

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her brother's pygamas. One woman has on a red hat, which is not so fashionable as the white ones in the picture labeled "A Pearl Fishing Picnic Party." One man so far forgot himself as to come in a derby.

The girl in the front row wearing a red bathing suit is a New Yorker and this is her very first experience. She is quite willing to repeat it. Just what the young woman who is crumpling down a little to the right of center stage is up to is could not be ascertained in time for publication.

After you get your picture taken in your stage clothes—which is a very necessary part of the performance—you take to the water. It is considered perfectly proper to splash your neighbor at will even if he is half under water grabbing for a clam. It might be explained here that the pearl mussel of fresh water rivers is always called a clam. It isn't right, of course, for a clam does not produce real pearls. Whether or not the clam appreciates the compliment could not be learned.

When everyone has collected a reasonable number of the clams, he or she, as the case or the gender may be, proceeds to the anxious business of opening them. A group engaged in the operation was caught by the camera and is displayed herewith. The young woman straggling up apparently has found a pearl and she is speculating as to its value.

It must be confessed that the rewards of these industrious amateurs are not very great. As they keep going to the same place year after year, a mussel doesn't get much of a chance to produce a good sized pearl before he is ruthlessly smashed from his nest. But once in a while a lucky fisher will find a stone that is worth anywhere from \$5 to \$10.

There is a more serious side to amateur pearl hunting which brings about much better results. It's like trout fishing; you don't want a crowd if you desire to get a full crew.

So one or two men will take a few days off and beat the streams in parts not usually frequented by the publickickers. They find just as much pleasure in extracting a large pearl from an ineffective clam as the fisherman does when he lands a trout after a hard fight or a hunter when he brings down a moose. They don't want the pearls to sell, but to give to daughters or wives or sweethearts, or if the fish is especially good, to friends.

As the water is sometimes almost to the knees, it is no easy matter to wade about. Wet stones are slippery things at best.

When the spring floods have subsided the young people in the towns begin to organize pearl fishing parties and these are held up all summer. From St. John and from Fredericton they drive out in large parties to some favorite spot and put in a day of pleasure. Of course, like hunting or fishing, or any other outdoor sport, you will better if you are something to show for the day's work, but those who have been on these trips say they enjoy it, whatever the luck.

A popular place with these amateur pearl fishers is Salisbury. It is a village. Near it are the North and Little rivers, branches of the Saint John river, and there are some pearls. The pictures which accompany this article are of parties from Montreal who have driven twenty miles or more.

The first thing for the pearl fisher to do is to dress for the occasion. Pearl fishing etiquette says that the less you wear the better. A bathing suit may be suitable, but some consider it altogether too dressy for an unconventional occasion.

You will get an idea of the variety of the costume in the picture of the group standing in the water ready to begin operations. The young woman in the center has apparently borrowed the top piece of

the difference between the fresh water and the oriental pearl, he was told to "see Catelle." He was the man who kept track of such things, they said.

"Catelle" proved to be Willis R. Catelle, who when he isn't buying and selling diamonds and other precious stones gathers facts and puts them into books. He has written a whole volume about pearls, which is something.

"I suppose oriental pearls are immensely more valuable than the fresh water kind," the reporter asked.

"Not at all," said Mr. Catelle. "A pearl's value depends on its size, its shape, its color and its luster. The oriental pearl is softer in luster and for that reason is usually more valuable. A fresh water pearl is apt to be metallic in tone.

But the fresh water pearls are frequently so fine that you can't tell them from the orientals. They are growing rapidly in the public estimation and consequently are growing in price, too.

"Lots of them go abroad, where they command higher prices than they do here. I asked dealers in London what they didn't know what I was talking about. I really don't know whether they know

Twenty-nine years to a day from the revelation of the A. T. Stewart grave robbery in New York, interest in that sensational event, was revived through testimony in a London court. It was on November 4, 1878, that Assistant Sexton Francis Parker discovered the desecrated grave in St. Mark's churchyard. It is the story of his American connections with Stewart and Judge Hilton, told last Friday by Robert Caldwell in the suit brought to establish the identity of Thomas Charles Bruce as the fifth duke of Portland, that has led to a new version of the story that the stolen body of Stewart was returned.

One of the first accounts of an alleged return of the corpse declared that there had been in a dark alley of New York one night an exchange between a Hilton representative and an unknown man of \$25,000 for a sack containing the Stewart remains. Later in January, 1880, a circumstantial story was printed stating that on the failure of negotiations between Judge Hilton and a gang of ghouls headed by one "Grey Larry" the body had been "lost" in a trunk in Chicago. It was said to have been taken first to Gloucester, N. J., then to Paterson, then to Canada. Included in this account is the incident of an interview in which Inspector Byrnes withdrew from the case after expressing the opinion that Judge Hilton did not care a copper about recovering the remains so long as he had to pay for them.

Exploring the Sudd.

This vast region is covered in the Sudd. It is now being explored and attempts have been made to cut channels through it. I have met some of the surveyors who have attempted to penetrate it and some who have broken away parts of it to open up channels for the Nile. They describe it as a vast sheet of brilliant green made up of papaya, nutmeg trees and sword grass. These rise from five to twenty feet above the water and are broken here and there by patches of smilax trees and by channels, pools and lagoons. The greater part of it is so barren and inhospitable, and this is especially so that region along the Bahir of Ghazal. There are some Diska villages near Bor and a few tribes on the edge of the Belgian Congo. Further south at Lake and Gondokoro the region is populated.

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that big game is to be seen. There the land is a little higher, and elephants, giraffes and buffaloes inhabit the edge of the swamps. In the heart of it, and in fact in all parts of it, there are vast numbers of hippopotami, and there are all sorts of swamp birds everywhere. From the reeds and mud banks dozens of wild cranes, geese, grebes, herons, pelicans and ducks of every description rise up as the boats approach, and there are insects by millions. There are all sorts of mosquitoes, mites, spiders and flies, and there are other insects which carry fevers and the tsetse fly, which causes the sleeping sickness. Among the queer birds is the white-headed stork, one of which may be seen here in the palace grounds at Khartoum. The wild geese are black, white and brown.

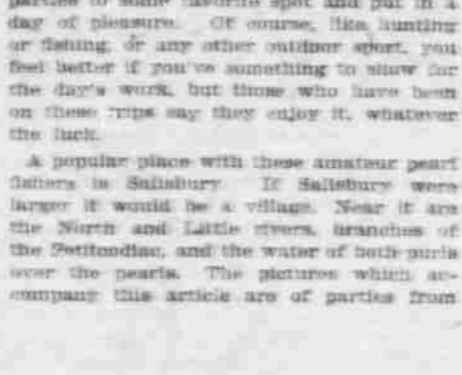
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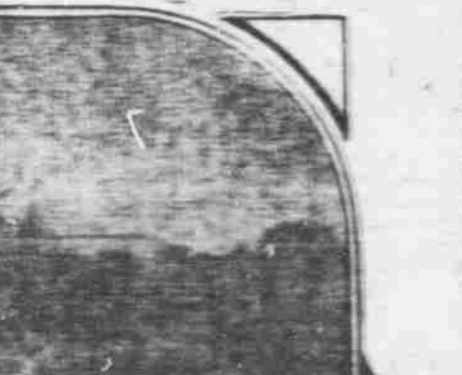
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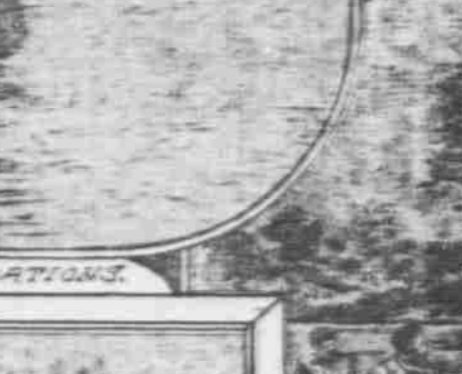
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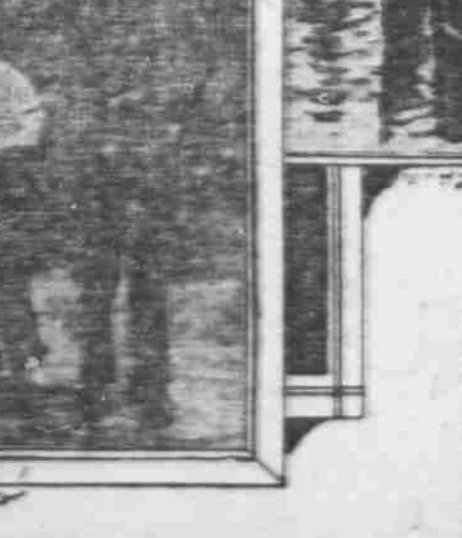
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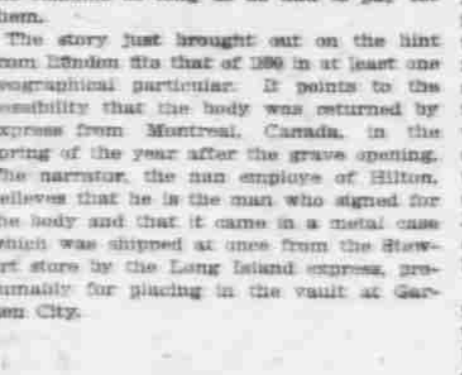
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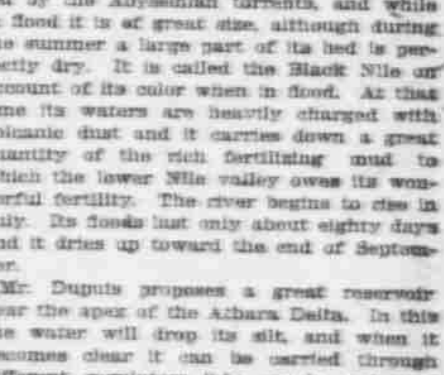
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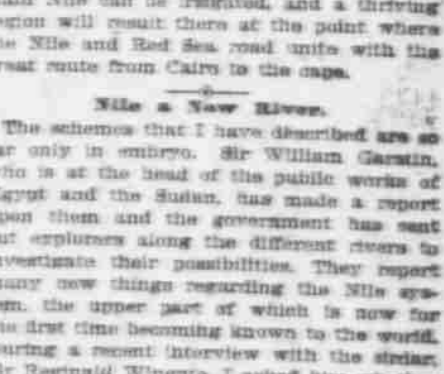
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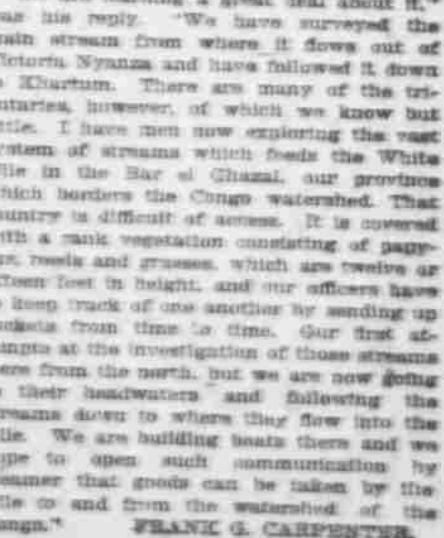
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