

A Country Whose Cotton May Compete With That of United States



A SUDAN COTTON GIN.



COTTON MERCHANTS OF OMDURMAN.



WEAVING COTTON IN THE SUDAN.

Copyright, 1907, by Frank G. Carpenter. ARTIST—(Special Correspondence of The Bee)—The British officials here tell me that the day will come when the Anglo-Egyptian Sudan will be supplying a good share of the raw material needed for the cotton mills of Manchester. If so, it will be in the future. The total amount of cotton raised in but a few million pounds, and the exports of last year were only 4,999 bales. There is no doubt but that the Sudan has vast areas of good cotton lands, but large irrigation works will have to be constructed before they can be brought into cultivation, and Egypt is kicking at every attempt to rob her of the Nile.

Native Cotton Everywhere.
At present cotton is raised in a small way in every one of the thirteen provinces of this country. It is grown to a considerable extent along the Nile between here and Egypt. In Berber and Dongola, two large provinces of lower Nubia, the most of the crop is used by the local weavers, who make it into a rough white cloth known as damar, which forms a large part of the clothing of the Sudan.

Some is grown along the borders of Abyssinia, and there was formerly a cotton factory in one of the towns of Kassa. Still further south, in the province of Senaar, there are branches of the Blue Nile whose valleys are famous for cotton. The governor there had a cotton show last week which attracted a hundred exhibitors, and he has set up a few small cotton gins which are now being worked. That region has exported considerable cotton to Abyssinia.

In the Red Sea provinces there are several large plantations, and I am told that a good crop is expected at Tokar, where cotton growing is an established industry. The governor of the White Nile province has recently reported that he is succeeding in raising Egyptian cotton, and that two acres of ground at Duem last year turned out from three to four bales each, with only three artificial waterings. The sirdar tells me that the vast plain between the White and Blue Niles, known as the Gestreh, could be made to produce vast quantities of cotton, and it is believed that it can be raised in the Bahr el Ghazal, away up on the edge of the Congo watershed. In the Blue Nile province the cotton acreage planted this year is twice as large as it was last, and in the White Nile province an increase of about 1,500 acres is reported.

Cotton at Khartoum.
Here at Khartoum there has been a considerable increase in the amount of cotton planted, and the farmers tell me that the crop pays well. One of the richest of the Khartoum merchants, who has 5,000 acres of land, says that he raised 100,000 pounds of cotton last year, which he shipped to Alexandria for sale. It was sent there unspun, and it brought 21 cents a pound, or 1/2 cent more than the cotton of the lower Nile. Mr. Caputo says that he bought his land for \$50 an acre, and that he has already been offered \$25 per acre for 500 acres, but that he would not take it. He said:

"I can make 2 or 3 per cent net out of my land by renting it at \$2 per acre for a money rent, and I plant it to cotton several times as much more. I am now using steam pumps and am importing steam plows; and it may be that I shall some time have a cotton factory and ginning establishment right here."

Leigh Hunt's Great Plantation.
One of the most daring cotton planting enterprises to be found in the whole Nile valley has been started by an American. I refer to Mr. Leigh Hunt, who, in connection with Mr. Slout Passett and others, made a big fortune in gold mines in Corca. Mr. Hunt has a concession of something like 50,000 acres bordering the Nile, just opposite where the river Athara, or Black Nile, flows into the main stream. The Athara brings down almost all the mud which the Nile spreads over Egypt, and these lands are so situated that they can be easily irrigated.

Mr. Hunt has imported a number of steam pumps, and is gradually putting water onto the land. He has built a house there which has cost something like \$20,000, and I understand that he has spent something like \$1,000,000 in the development of his property. His lands lie near the junction of the Cape to Cairo road, which runs from Alexandria south to Khartoum, and the Nile and Red Sea railway, which connects that road with Port Sudan on the Red sea. This will give him two outlets for his cotton. He can either send it to the Red sea across the Nubian desert by a short railway haul of about 500 miles, or down to the Mediterranean over the Cape to Cairo route, a distance of considerably more than 1,000 miles. The probability is that it will all go to the Red sea, and thence by steamship to Europe or the United States.

As yet the experiment is not far enough advanced to be pronounced an unqualified success. Mr. Hunt has had trouble with his labor, with his machinery and with insect pests, and especially the locusts, which have eaten up a large part of his crops. These difficulties can be overcome, and the land promises to be worth a great fortune. I understand that it was given him by the government at a low rate in consideration of his developing it. It will cost, with its improvements, only a few dollars per acre, and when the water is put upon it, it should be worth more than

\$200 per acre, and it will then rent for enough to pay a good interest on that sum. Thirty thousand acres at \$200 per acre means \$6,000,000, and this, I am assured, is not an overestimate of its probable value, if it can be brought under cultivation.

I met Mr. Hunt in New York shortly before I left for Africa. He then hoped to be in Egypt at the time of my visit, and asked me to call upon him at his plantation. He met with an accident, however, which kept him in the United States longer than he had intended. I asked him some questions about his plantations then, but he had little to say. He is modest in talking about himself, and the information I have given here is not from him. I find that he has the respect and esteem of every one here, and the general opinion is that he will succeed. I am told he is a large owner of lands in the suburbs of Khartoum. About three or four years ago he bought sixty acres just outside the town, paying \$100 or \$120 per acre for it. The total cost was under \$10,000. That land is rapidly increasing in value, and is said to be now worth anywhere from one-quarter to one-half million dollars. Angelo Caputo tells me that he is authorized to offer Mr. Hunt \$200,000 for it as a whole, but, he adds, Mr. Hunt will probably keep it and develop it upon his own lines as a new addition to the city of Khartoum.

Selling Cotton in Omdurman.
Speaking of the cotton of the Sudan, I visited an odd street in Omdurman yesterday, devoted to selling the native product. The chief cotton market of this region consists of many little sheds covered with mats facing a dirt road. It is situated not far from the center of the city of Omdurman, and there are several thousand acres of mud flats reaching out on all sides of it. Both the sheds and the streets are filled with cotton. The cotton is brought in in bags of matting and is sold just as it is when picked from the plants. The sam-

ples are displayed in flat, round baskets, each of which holds perhaps a bushel; and when carried away it is put up in bags and not in bales. A great part of it goes to the native weavers, who turn it into cloth, using the smallest factories one can imagine. Not far from the street where the cotton is sold I found a little factory, which put the raw material through all the processes and turned it into native cloth. The establishment consisted of a half dozen mud huts, shut off from the street by a mud wall, which, with the huts, formed a court. In the court a dozen black-skinned women were sitting on mats on the ground, spinning and spinning, while the weaving went on in the huts at the back. The gin was somewhat like a clothes wringer, save that the rollers were about as big around as the ordinary candle, and that the whole machine was so small that it could have fitted into a peck measure. One woman turned the machine, while another put in the cotton and picked out the seeds as they failed to go through. Near the gin sat two women who were snapping the lint with bowstrings to separate the fibers, and further over there were a half dozen others, sitting cross-legged, and spinning the lint into yarn by hand.

I went to the mud huts at the back and looked in at the weavers. They were black boys and men, who sat before rude looms on the edge of holes in the ground. The looms were so made that they could be worked with the feet, the shuttles being thrown back and forth by hand. The latter moved through the cloth with a whistling noise, and this was about the only sound to be heard. The cloth turned out is very good. It is well woven, soft and brings good prices. Its wearing qualities are better than those of the Manchester and American cottons. I asked what wages the boy weavers received and was told 19 cents a day.

The British government is rapidly improving Omdurman. When the mahdi

lived here it contained 800,000 or 800,000 people; and it still covers about the same space as then, although its population is not more than 70,000. It is a city of mud huts. There are not a dozen two-story houses in it, and the place still looks somewhat like a large native camp. When I first rode through it I asked my guide whether the holes in the walls had not been made by cannon balls at the time of the battle. He replied, "Why, man, those are the windows. The houses have no other windows than those." The huts are all flat roofed, with drain pipes extending out into the streets, so that the water pours down the necks of the passersby when it rains. The stores are mere square rooms, facing the streets—they rent for a dollar or so a month—and everything is simple and exceedingly cheap.

The government is improving things gradually. It is making a new plan for the city and has already laid out many wide streets. It has taken the sixty acres which the khalfia had for his special headquarters and will build dwellings of the first class upon it. This tract is still surrounded by a great wall, twelve or fifteen feet high and four or five feet in thickness. It once contained an open-air mosque and also the chief buildings of the khalfia. In another part of the town there will be second-class dwellings; and in a third dwellings of the third-class. The civil engineers have already laid out a park in the center of the city, and the vegetation in it is watered by women who bring the supply from the Nile in great jars on their heads. In this park the band will play every Friday afternoon.

Native Hospitals.
Omdurman has now hospitals, which have been recently established by the Sudan government. It was taken through them by the governor, and the English and Egyptian doctors in charge gave me every opportunity to see their work. I was even offered the chance to be present at several surgical operations, including the cutting

off of the leg of a patient who had just come in, but I declined. The hospitals cover five or six acres. Their buildings are of one story and they are made of sun-dried brick, but they are cool and well lighted. The patients are black men and women of many tribes. There were several hundred in the various wards, and the doctors told me that during the last year they had given treatment to 12,000 sick who had been brought to the doors of the hospital, and in addition to the 300 or 500 patients who were kept in the hospital itself. The British are greatly improving the sanitary conditions of the natives. They have cleaned up the city, and it now looks remarkably well for a native town. It is rapidly growing, and will probably be the commercial capital of the Sudan. It will keep its African character, but will be modified by the new Africa, and, as such, will be one of the most interesting cities of the continent.

Slavery in the Sudan.
The British are doing what they can to break up slavery in the Sudan. This region was once one of the chief slave markets of the continent. Slaves were brought by the thousands from central Africa to Khartoum and Omdurman, and they found their way thence down to Egypt. During the Egyptian rule there were military stations in different parts of the country, and they became centers of the slave trade, and when the navigation of the White Nile was declared free it was made a slave route. Later on the Arabs raided the natives of central Africa and sent up their slaves to Khartoum. The trade was somewhat checked while Gordon ruled, but it broke out again under the mahdi, and when the British took hold Omdurman was one of the chief slave markets, and slaves were brought in in droves from all parts of the country. Since then the buying and selling of slaves has been stopped, as far as possible, but it is still carried on in many of the provinces, and it will be a

long time before it can be entirely eradicated. Sixty-seven slave dealers were captured last year and tried. Fifty-eight were convicted and more than fifty received sentences in the penitentiary of from one to seven years each.

What a Swiss Boy Did.
While I was at Assiout, about 300 miles south of Cairo, Dr. Alexander, the president of the training college there, told me how a poor Swiss boy broke up the slave trade of upper Egypt. Said he: "This incident occurred just before the British occupation of some years ago. The boy, whose name was Roth, got the idea that it was his mission to aid in abolishing slavery, and that his field lay in the Sudan. He had no money, but he worked his way to Alexandria, and thence up the Nile to Assiout, landing here without a cent. He applied for work at the mission schools, telling us his plans, and we finally arranged that he could teach French. While doing so he studied Arabic, and went out through the country to learn all he could as to slavery. He spent his vacations living with the people, traveling about and visiting the villages. It was then contrary to the law to sell slaves in Egypt, but Roth learned that the trade was going on, and that caravans were bringing slaves from the Sudan down here, and that they were then sent to Tunis and Tripoli and thence to Constantinople. One day he came into the mission and said that a big slave caravan was encamped outside Assiout, and that the men hid their slaves in caves during the day and sold them at night. He begged me to go with him to the governor and demand that they be punished. I did go, but was not able to do anything.

"After this," continued Dr. Alexander, "both despaired somewhat, but said he intended to go to Cairo and get the English consul general to help him. He did so and convinced the consul general that his story was true. The two went together to Rias Pasha, who was then

foreign minister, and demanded that the sale of slaves be stopped. Roth had then the English government behind him, and the Egyptian government had to respect him. They gave him a company of 100 soldiers and told him to go back to Assiout and capture the caravan. It was probably their intention to notify the slave dealers in time so they could get away, but Roth stopped his special train outside the town, divided his company into two bands, surrounded the caravan and took the traders and sixty-seven slaves, whom they had with them. He brought the slaves to the mission school and said he wanted me to hold them, as the Egyptians would not dare to take them from under the American flag.

"Shortly after this there came a message from the governor of the province ordering that the slaves be given up. The messengers were backed by soldiers, but nevertheless I refused, saying it was impossible on account of the absence of Dr. Hoge, the superintendent of the mission. The next day Dr. Hoge arrived, and the governor sent for him. He abused him for not giving up the slaves, whereupon Dr. Hoge charged him with wanting to evade the law, and told him that if Assiout had any respect for the law or had a governor who was anything of a man, the caravan would have been already arrested and the owners punished." He then demanded that this be done, and as a result the slave dealers and slaves were taken to Cairo to be tried there. The government of Egypt did not dare to whitewash the transaction, and it was forced to dismiss the governor and punish the slave dealers. Roth was afterward appointed an agent of the Egyptian government to keep down the slave trade. He came to the Sudan and carried on his work there in connection with Gordon and Slatin Pasha, and Slatin speaks of him in his book entitled 'Fire and Sword in the Sudan.' He died while fighting the slave trade there."

FRANK G. CARPENTER.

Reconstruction of Imperial Rome a Colossal Undertaking

ROME, Dec. 28.—Prof. Marcellian, a modest but learned archaeologist who has made the topography of ancient Rome a life study, has, after seventeen months of patient and careful work, succeeded in reconstructing in terra cotta the principal buildings of imperial Rome. His models, complete in every detail, are now exhibited in a hall near the Forum.

To attempt an adequate even though brief description of Prof. Marcellian's work will fill volumes. Nothing short of a treatise on ancient topography would give a correct idea of this vast undertaking, which is meant more for students of archaeology than for ordinary sightseers. A thorough knowledge of Roman history is indispensable in order to appreciate the work and to realize how faithfully the reconstruction of the monuments it contains has been done. Still even to the uninitiated the reconstructed city of the Caesars

will be interesting. The models of the various imperial buildings are made of terra cotta, painted and often gilded after the style of their originals. The different kinds of marbles, the color of bronze, the statues, tiles and trees are all faithfully reproduced. Sometimes a single broken column has served to reconstruct a whole portico, the representation of a temple on an old coin has been copied in the present reconstruction, and when such materials were lacking old prints, descriptions by classic authors and the researches of learned men in past generations have been utilized and made to serve for the reproduction of temples, palaces, bathhouses and fora, of which not one single stone standing on another exists at the present day.

The Arch of Augustus, the Forum or Colosseum is the most prominent building in Prof. Marcellian's model of imperial Rome. It stands isolated, wonderful and immense, a striking monument, rightly compared in magnitude with the pyramids of Egypt, intact and complete as it stood before fire, earthquakes and modern generations had reduced it to ruins. Stone cippi surround the base building. The imperial box, painted and with gilded stucco reliefs, is seen between the nineteen arches, and the poles for the awning are on the roof.

The colossal statue of Nero or of the sun in gilt bronze, the work of Zonodorus, with the seven rays around its head, may be seen near the Colosseum, with the Meta Sudana on the left. Back of the Colosseum is the Temple of Venus and Rome, Veneris at Roma, and immediately behind it the Basilica of Constantine, with its nave and two aisles, its vaulted ceiling supported by eight fluted columns of porphyrian marble and its entrances on the Via Sacra, decorated with four large columns of porphyry.

On the opposite side of the Clivus Sacrus is the Porticus Margaritaria, an arcade for jewelers and goldsmiths, supported by ten rows of stone pilasters, where the negotiandis exhibited their precious merchandise in booths and in shops made by means of brick walls raised between pairs of stone pilasters.

Further along on the same line follows the House of the Vestals, an oblong brick building surrounded by streets on every side, its most prominent feature being the atrium from which the whole building is often named. Its architecture may be compared to that of medieval double-storied cloisters, necessarily very airy and spacious to give the inmates, who were seldom allowed to go out, the chance of taking bodily exercise.

The atrium was surrounded by state apartments on the ground floor, while the private rooms of the vestals were on the upper floor. The house was built in an

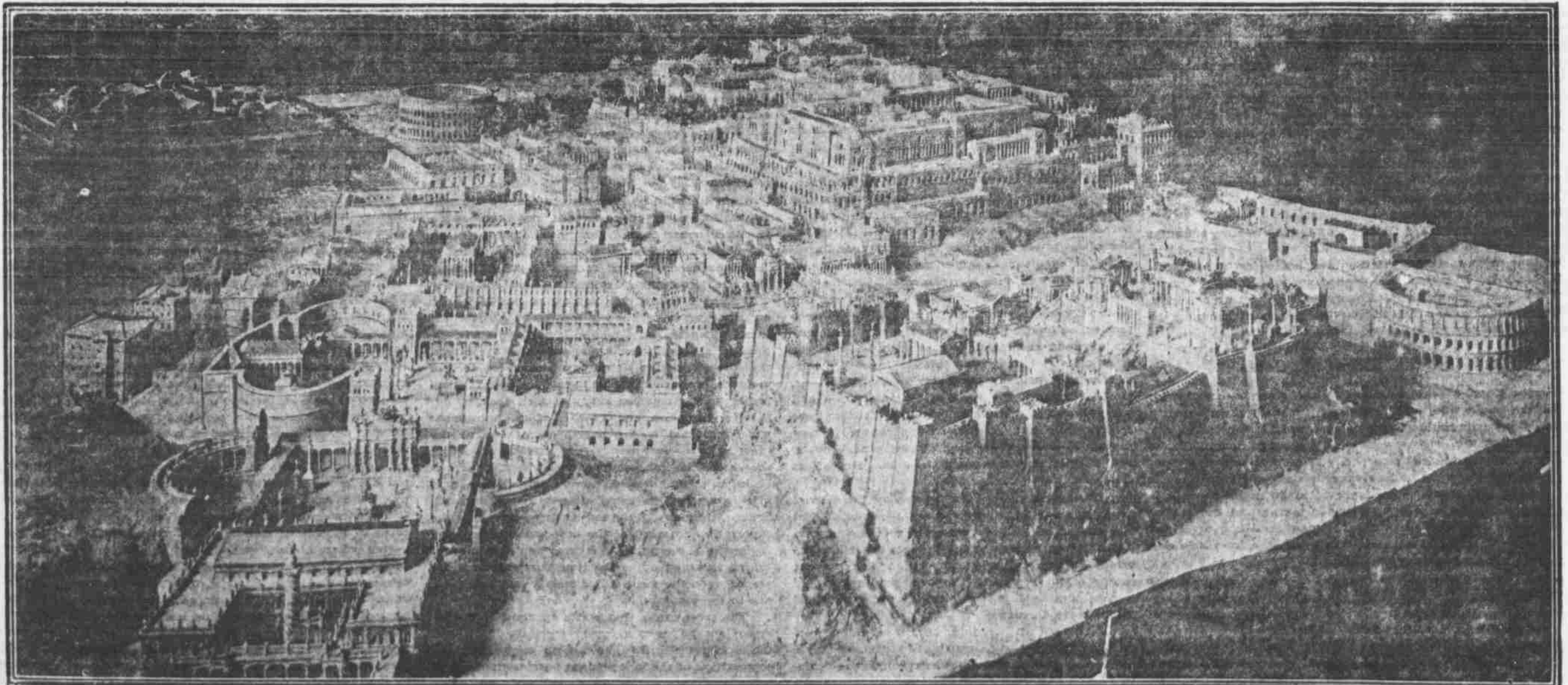
unhealthy position against the cliff of the Palatine. Here towers the Domus Galiana or House of Caligula to the height of 150 feet, whose facade is represented in its present ruinous state, although only in its substructures built by Caligula to raise the slope of the hill. The palace, with its state apartments and halls and porticoes, is all gone.

Here may be seen also the Domus Augustiana or House of Augustus, the very seat of the empire. It is divided into three sections, the first, from the side of the Velia, occupied by the propylaea, the temple of Apollo, the portico of the Dianaids with its fifty marble statues of the Dianaids and in equal number of equestrian figures of the sons of Egestus, and the Greek and Latin libraries. The middle section was occupied by the shrine of Vesta, and the last on the side of the Circus, by the imperial house itself, a set of magnificent

buildings crowded with the masterpieces of Greek, Tuscan and Roman art. Separating the House of Augustus from the baths of Septimius Severus is the stadium of Domitian, oblong shaped, with a curved end, 140 yards long and 47 wide; the Circus Maximus, which unfortunately is not visible in either of the two accompanying illustrations; the gardens of Adonis, laid in oriental style, with large pots of slaves in which were sown the special plants sacred to the god who represented the sun and was regarded as the promoter of vegetable life; the palace of Septimius Severus; the Septisodanum, consisting of seven rows of columns symbolizing the seven bands of heaven, and many other temples and palaces innumerable, with columns, porticoes, statues and gilt bronze decorations.

Underneath the Palatine is seen the Forum, where the destinies of the ancient

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VIEW OF THE RECONSTRUCTION OF ROME, TAKEN FROM BEHIND THE CAPITOL.