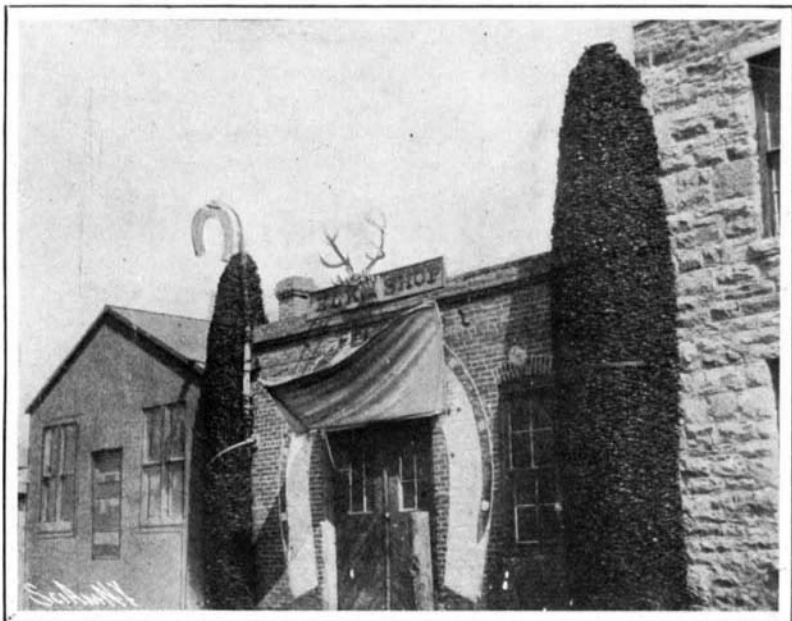


**A COLUMN OF HORSESHOES**

In the town of Fort Collins, Col., the village blacksmith has created a curious but very appropriate sign. In fact, it represents not only his industry, but the many years in which he has been engaged in it. As the illustration shows, on either side of the entrance to the shop are pillars, which rise several feet above the roof. From a distance they resemble box trees with the branches closely cut, to give them an ornamental appearance. As a matter of fact, the columns are composed of discarded horseshoes. As each is fully thirty feet in height and five feet in diameter, a faint conception may be obtained of the immense number of shoes utilized in constructing them, for each column was built up by laying the shoes one upon the other with their flat sides in contact. Through the center of each column runs a wooden post, and the novel structure has been formed by wiring the shoes to it.

The construction of the signs was begun when the shop was opened for business. The columns have become too heavy to be increased in height, and are



**A COLUMN OF HORSESHOES.**

anchored by iron bands to the walls of the building.

**THE GIANTESS ROSA WEDSTED.**

The subject of the accompanying illustration is a Finnish maiden of twenty-four years, Rosa Wedsted, native of a village near Helsingfors. She has already attained the respectable height of 7 feet 2 inches and is still growing.

Neither her parents nor any of her four sisters and brothers are above the average height, and until her sixth year no intimation was given that she would exceed the stature of the normal human being. From that year she made rapid progress, and by the time she had reached her fourteenth year she had attained to the astonishing height of 5 feet 7 inches. Since then she has been mounting upward slowly, having in the last ten years added about 1 foot 7 inches, with undiminished tendency skyward. The peculiarity concerning her growth seems to be limited almost exclusively to her lower limbs. She possesses an extraordinary length of leg, while the rest of her body and arms seem to have extended but mildly in comparison.

**Inoculating Material for Leguminous Crops.**

The erroneous statements which recently appeared in the public press regarding the free and unlimited distribution of inoculating material for leguminous crops is likely to cause those who apply for these cultures to be disappointed. The publication of the results obtained with pure cultures in inoculating leguminous plants has resulted in such a demand for this material that the facilities of the Department of Agriculture have been taxed to their utmost. It has been impossible to meet the demand; in fact, the total quantity which could be prepared this season was promised early in February.

The patent which the Department holds upon the method of growing and distributing these organisms was taken out in such a way that no one can maintain a monopoly of the manufacture of such cultures so as to permit of its being taken up and handled commercially. The commercial product is being handled quite generally by seedsmen. Upon application the Department has furnished all necessary information to the bacteriologists representing properly equipped concerns, but it cannot assume to make any statement which could in any way



**THE GIANTESS ROSA WEDSTED.**

be regarded as a guarantee of the commercial product; nor is it prepared to indorse each and all of the somewhat extravagant claims occasionally made for this discovery.

**A SPONTANEOUSLY-MOVING STONE BALL.**

In the principal cemetery of Marion, Ohio, there is a monument which has attracted a great deal of attention for some time. It consists of a large stone ball, 36 inches in diameter, resting upon a heavy pedestal. This ball is slowly turning upon its base, revolving about a horizontal axis in a direction from north to south, presumably by the action of the sun's rays.

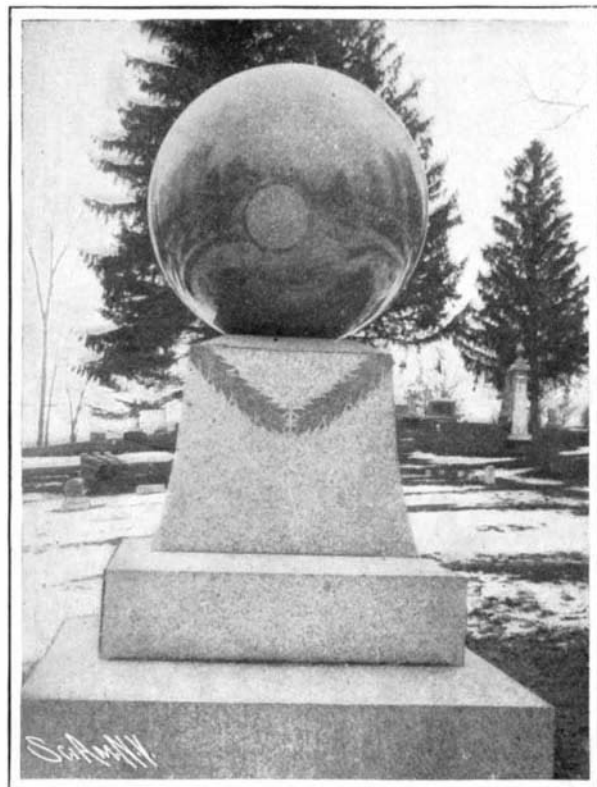
The monument was erected a number of years ago by Mr. C. B. Merchant, a local banker, but it was not known that it was turning until the spring of 1904, when the cemetery employes noticed that it had apparently shifted a little. Since that time it has been watched and measured repeatedly, and it is established beyond question that the stone is turning continually.

The ball was never securely fastened to the base, but the unpolished spot seen in the illustration was set in a socket, and it was supposed that the friction of the two rough surfaces would be sufficient to prevent any displacement. At the present time, however, the rough spot is nearly half-way to the top on the north side, and has moved over five inches since the first of August. There is very little chance for the perpetration of a hoax in connection with this interesting phenomenon, as the ball weighs 4,200 pounds, and would require extensive machinery to move it.

A number of theories have been advanced to account for the cause of this natural phenomenon. State Geologist Edward Orton, Jr., in a letter to a member of the cemetery association, says that the rotary movement is probably due to two causes. First, the ball becomes more heated than the heavy base, and consequently expands more, giving rise to a slight creeping. The ensuing contraction might not be sufficient to take up the displacement caused by the heat in the earlier part of the day. Secondly, we may regard the circumference of the sphere as lengthening out on one side, and giving rise to a pulling stress between the ball and base upon which it rests.

Prof. Becker, one of the head physicists of the Geological Survey, and Prof. Gilbert, who is probably the most prominent geologist in the Survey, have been consulted upon this question, but without very satisfactory results. Both were uncertain as to the cause of the rotation of the sphere, save that there could be no doubt that it is attributable to the action of the sun's rays. Prof. Becker said that if the rotation were from south to north, instead of being, as stated by our correspondent, from north to south, he could more easily understand the case, for then expansion of the sphere

itself would be on the south side chiefly, so that leverage would be applied on that side, which might raise the ball there, causing it to slip downward correspondingly on the north side. Prof. Gilbert suggested that there might be a difference between the cup-shaped



Since this photograph was taken the ball has rotated 14 inches eastward.

**A BALL OF STONE THAT TURNS SPONTANEOUSLY ON ITS PEDESTAL.**

socket and the sphere, with a correspondingly imperfect fit and unequal friction on the two sides.

From the illustration it appears that there is a large evergreen tree not far from the monument, and apparently directly to the south of it. It has been suggested that the monument is thus partly shaded at times, or for a portion of the day, and that there is some connection between this fact and the rotation. At present, despite all these theories, there seems to be no satisfactory explanation, and the phenomenon will probably remain unexplained until it has been under close scientific observation for a lengthy period of time.

**Luminous Phenomena of the Human Skin.**

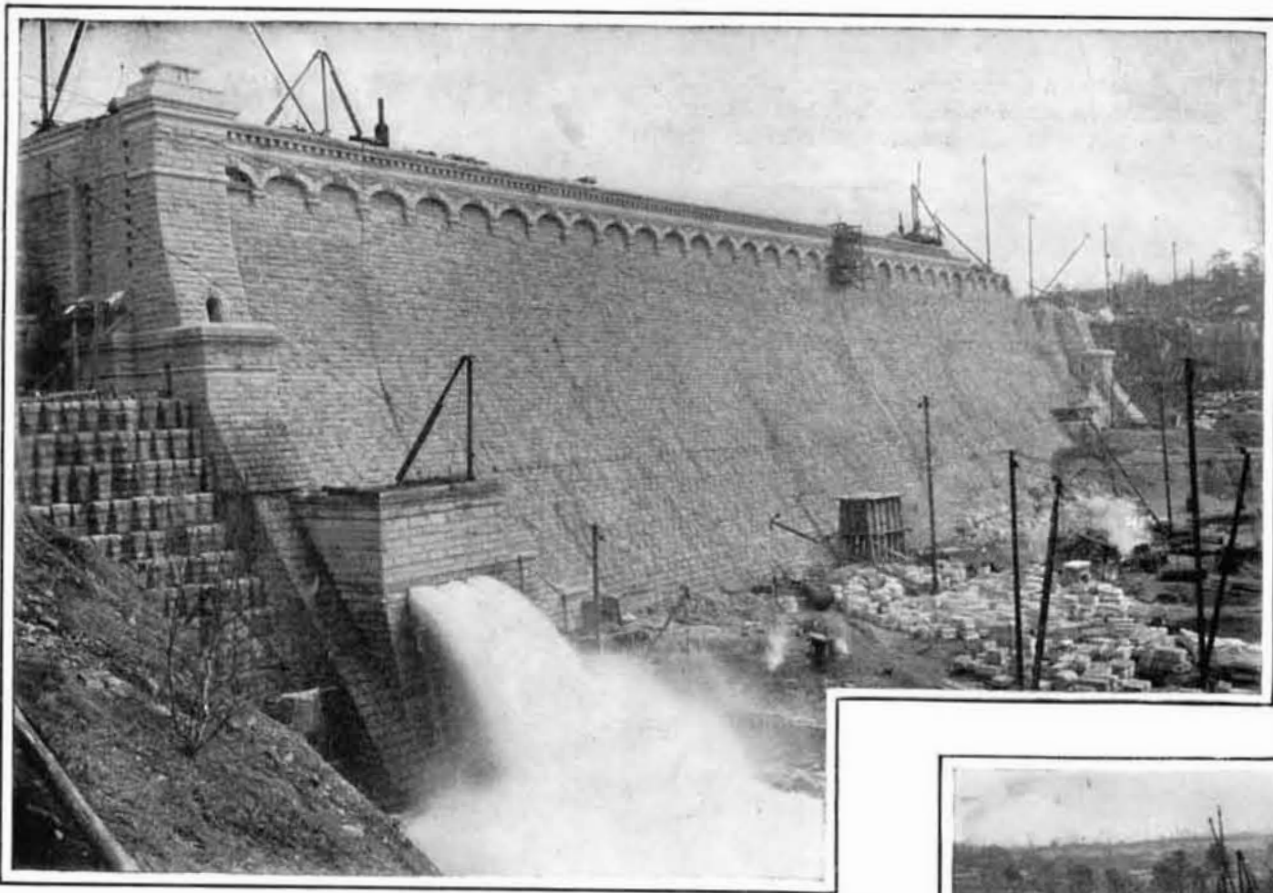
In a recent issue of the Deutsche Medizinische Wochenschrift Prof. Sommer records some interesting observations made by himself on a luminous effect produced after rubbing the human skin on incandescent lamps. While grasping a small electric lamp one night, the professor happened to observe that on contact with his hand the bulb of the lamp would show a luminosity comparable with a mist of light, illuminating certain parts of the glass as well as his fingers, even before the electric current was completed. This remarkable phenomenon could be produced several times by rubbing the electric bulb with the hand. It should, however, be mentioned that not all electric bulbs are suitable for the experiment and that those which have been used for some time and showing the well-known dark coating of carbon particles are especially apt to failure.

When rubbing a new or nearly new lamp, containing no metallic conductors, strongly on the skin of the forehead or lower arm, and withdrawing the lamp suddenly from the skin, the bulb will show the luminous phenomenon. When withdrawing the lamp and stopping it suddenly, its outlines stand out distinctly illuminated, while in the middle a bright spot is observed.

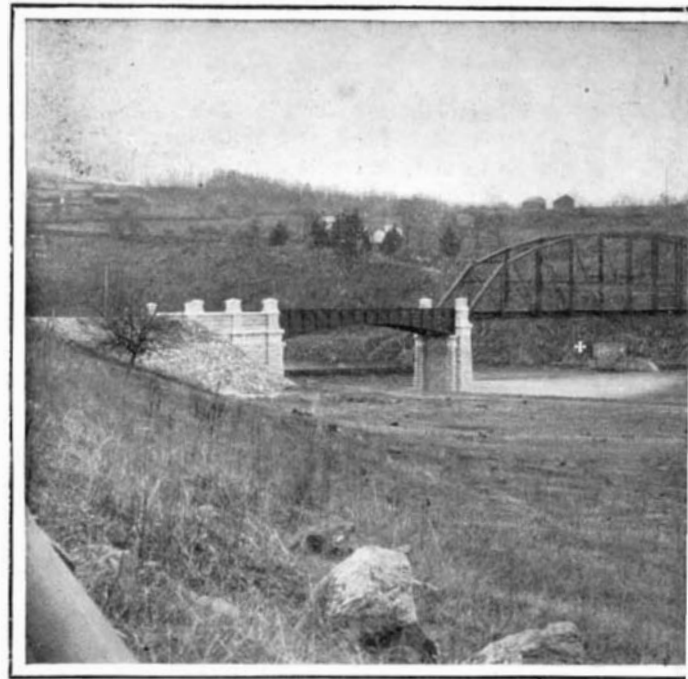
If after rubbing the lamp on one part of the body (e. g., the lower arm) some other part as the cheek be touched with it, the contact will even without any friction result in a luminosity lighting up part of the face. When breathing strongly on a lamp that has been rubbed over some part of the body, a distinct luminosity is produced.

According to Prof. Sommer the phenomena in question would be partly of a physiological character, that is to say, belonging to the human or animal organism. On continuing his researches, he detected the photographic action of the luminosity, and as part of the same phenomena can be obtained also by friction on other substances, they would seem to be partly due to some general physical law.

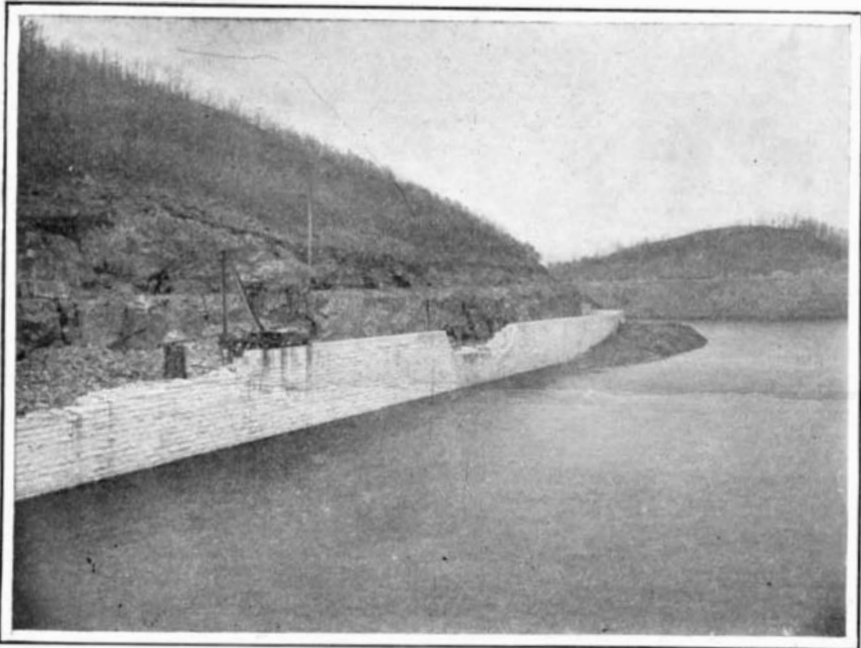




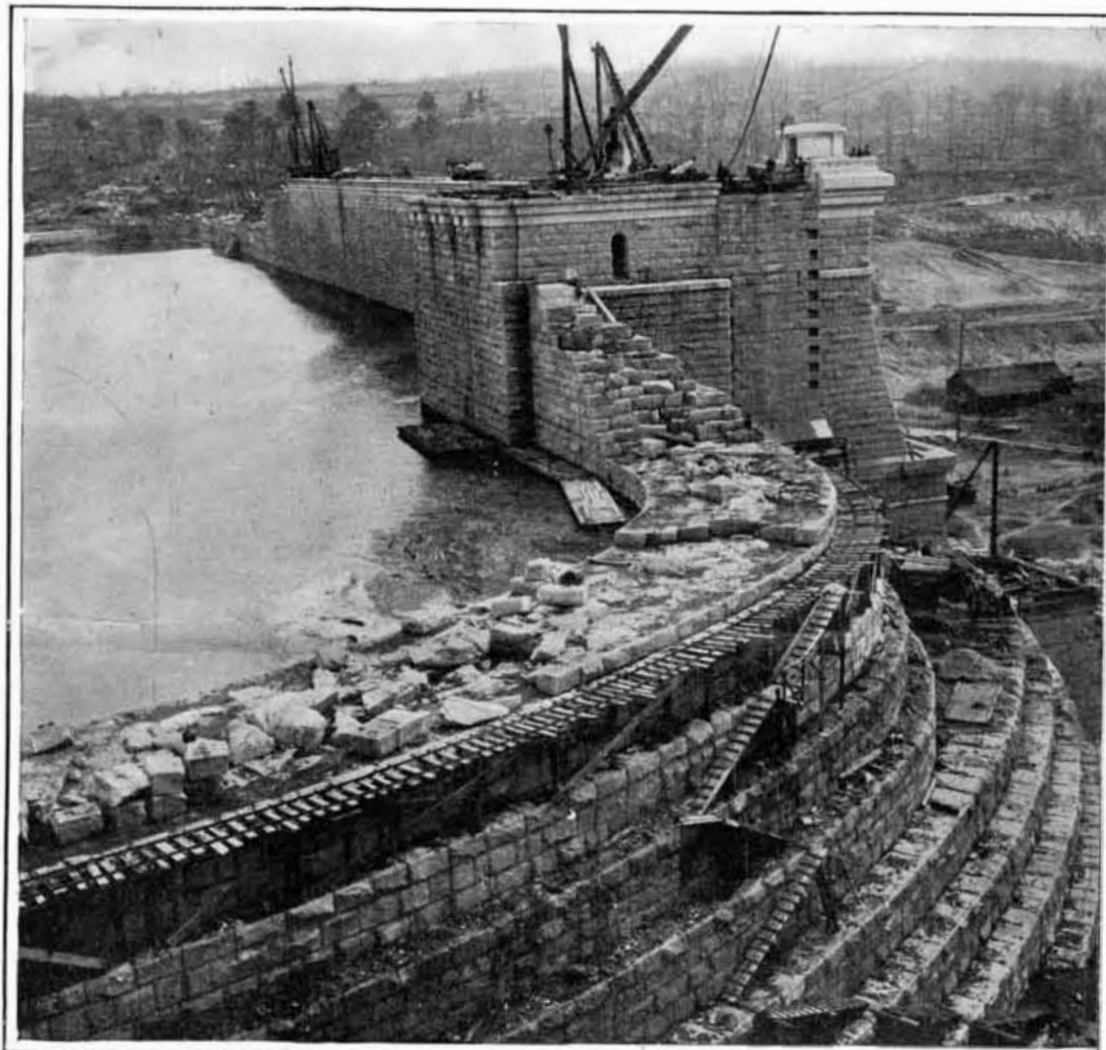
Downstream View of Dam, Looking Southeast.



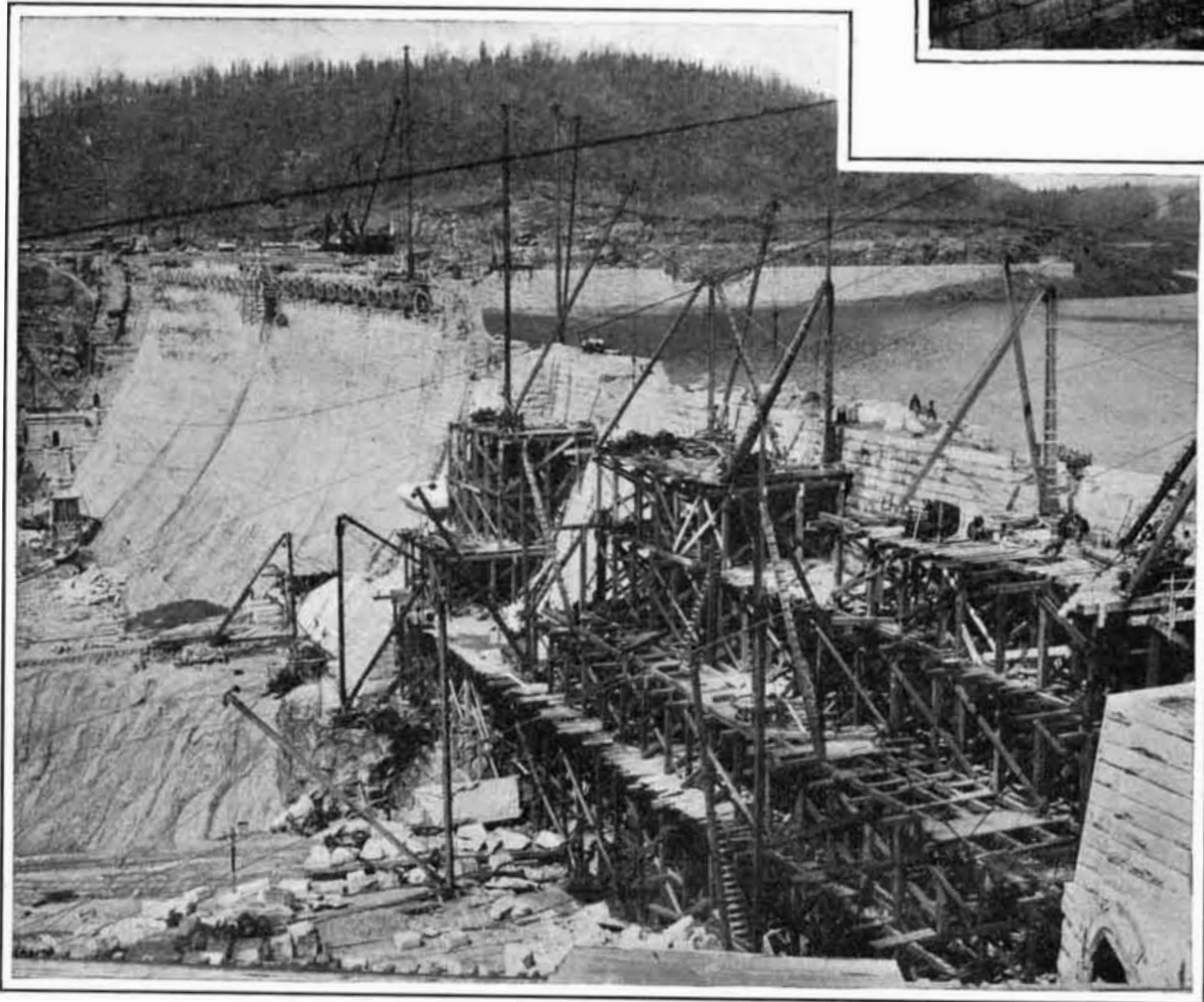
New Steel Highway Bridge and New Gatehouse at Old C



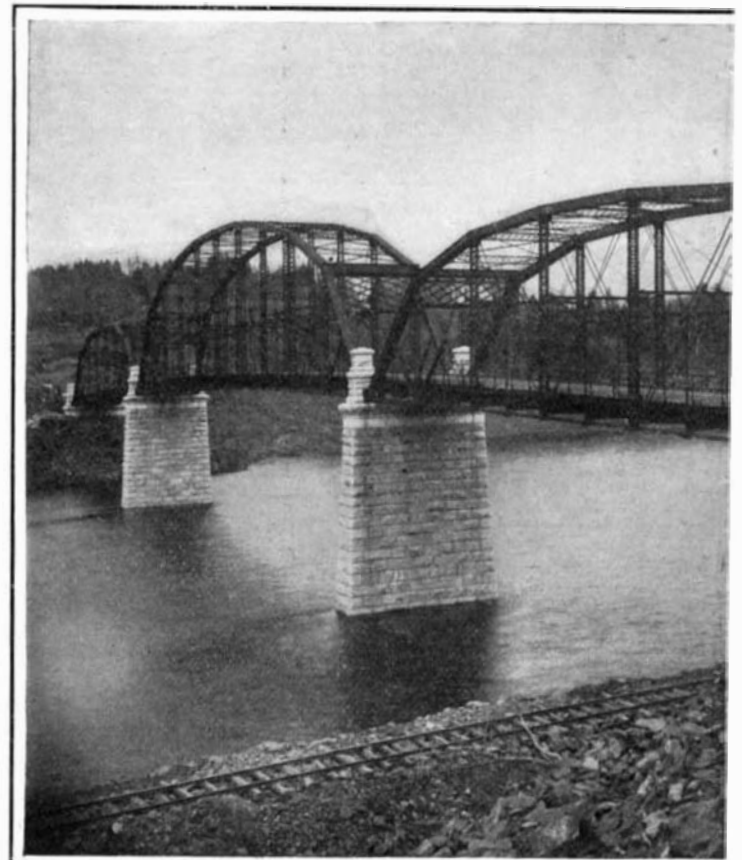
The finished crest marks the high-water level of the Reservoir.  
The 1000-Foot Spillway, Viewed from the Lake.



Difference of level between the water within the dam and the river at its toe is 120 feet. All t  
Looking Down the Croton Valley from



The Uncompleted Southerly Portion of the Dam ; Takes Place of Original Earth-and-Core wall Section.



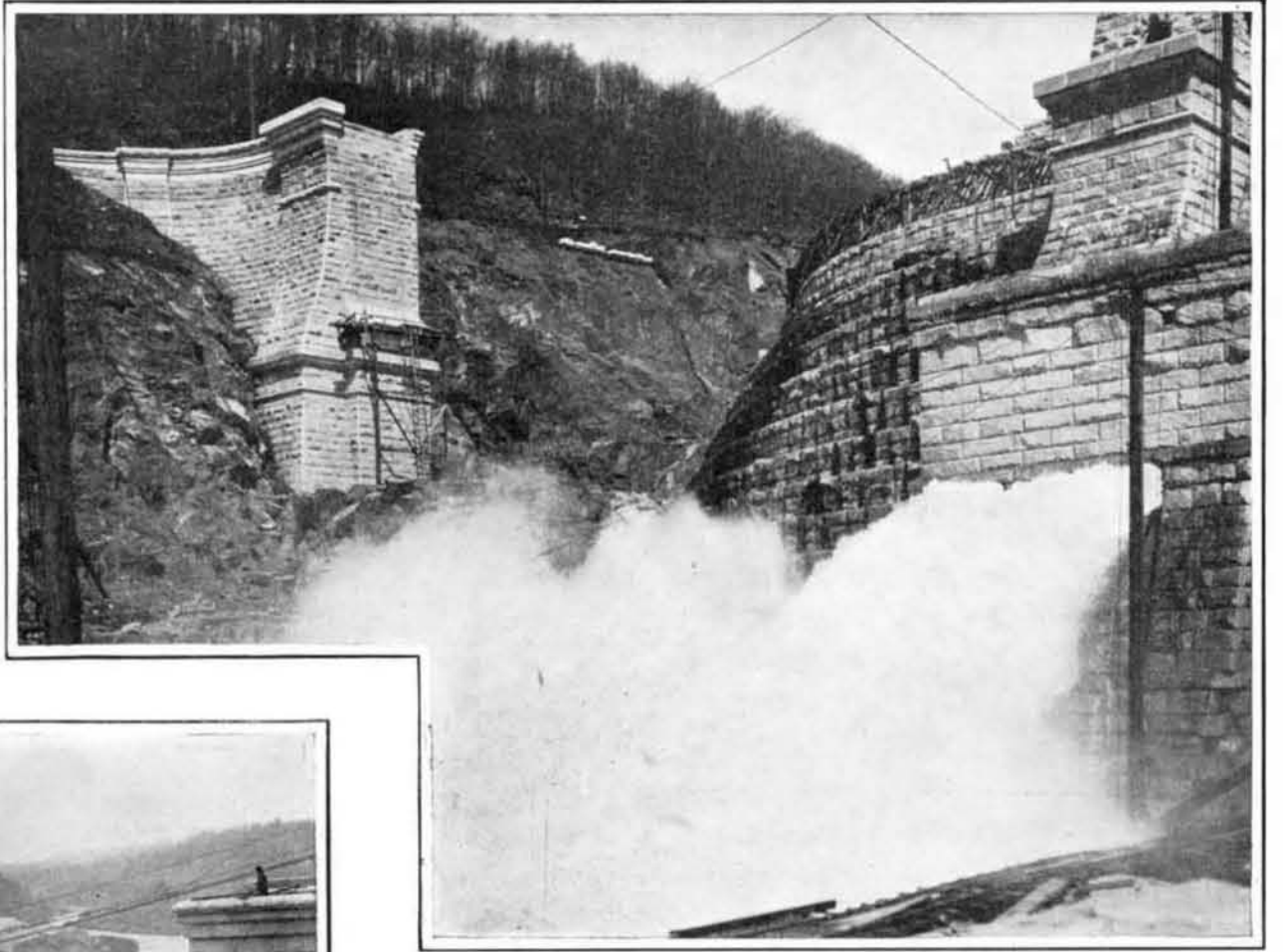
New Bridge Built to Carry the Highway

**CLOSING OF THE CROTON DAM. BUILT FOR 1**

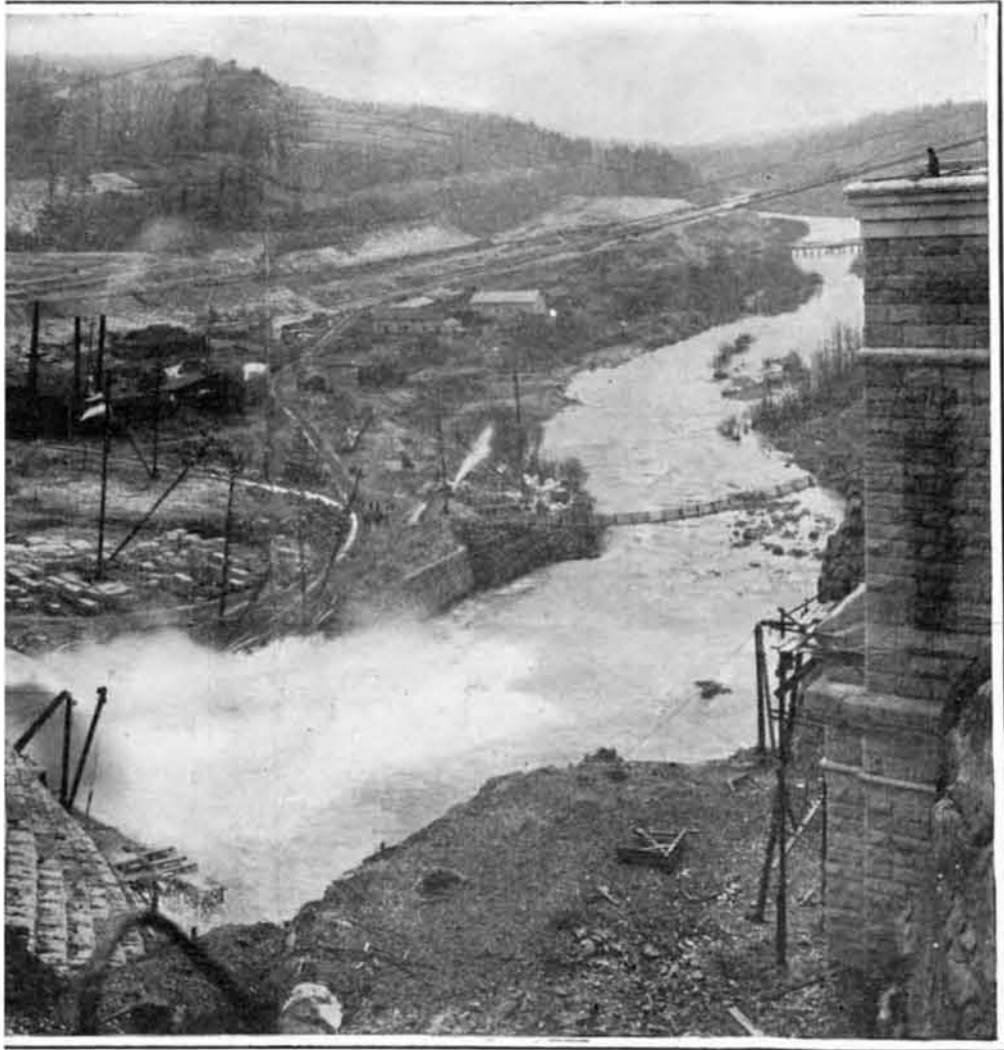




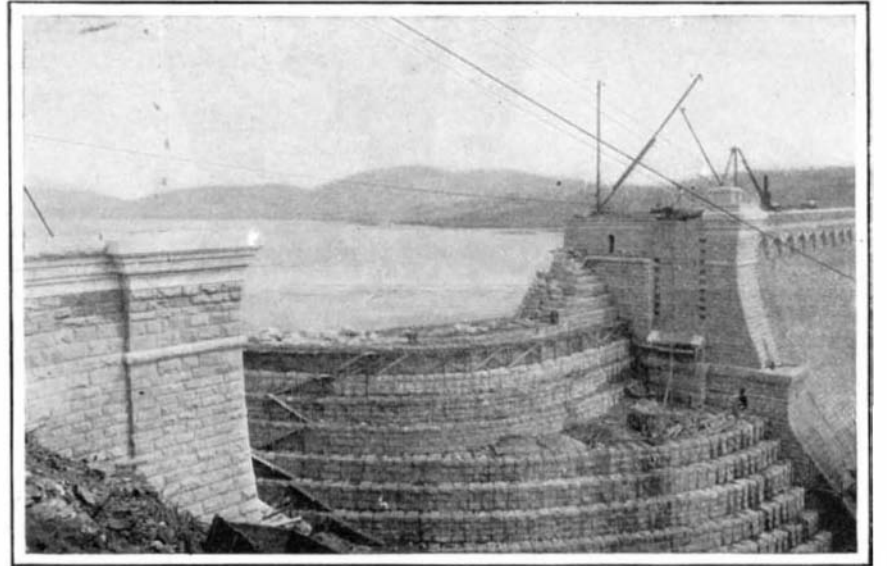
Croton Dam. Cross Marks Site of Submerged Dam.



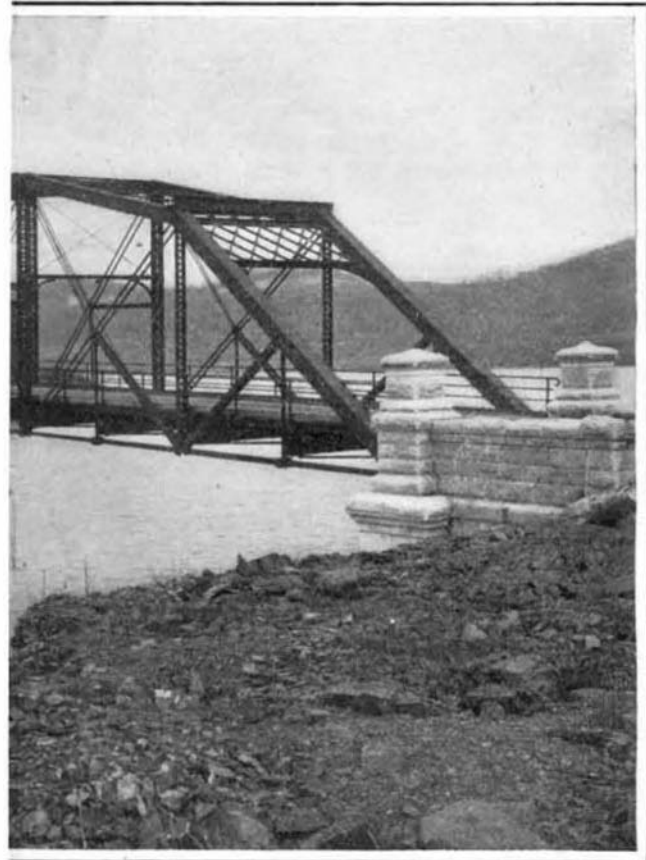
One billion gallons per day are passing through the dam.  
Looking Northeast Through Spillway Gap.



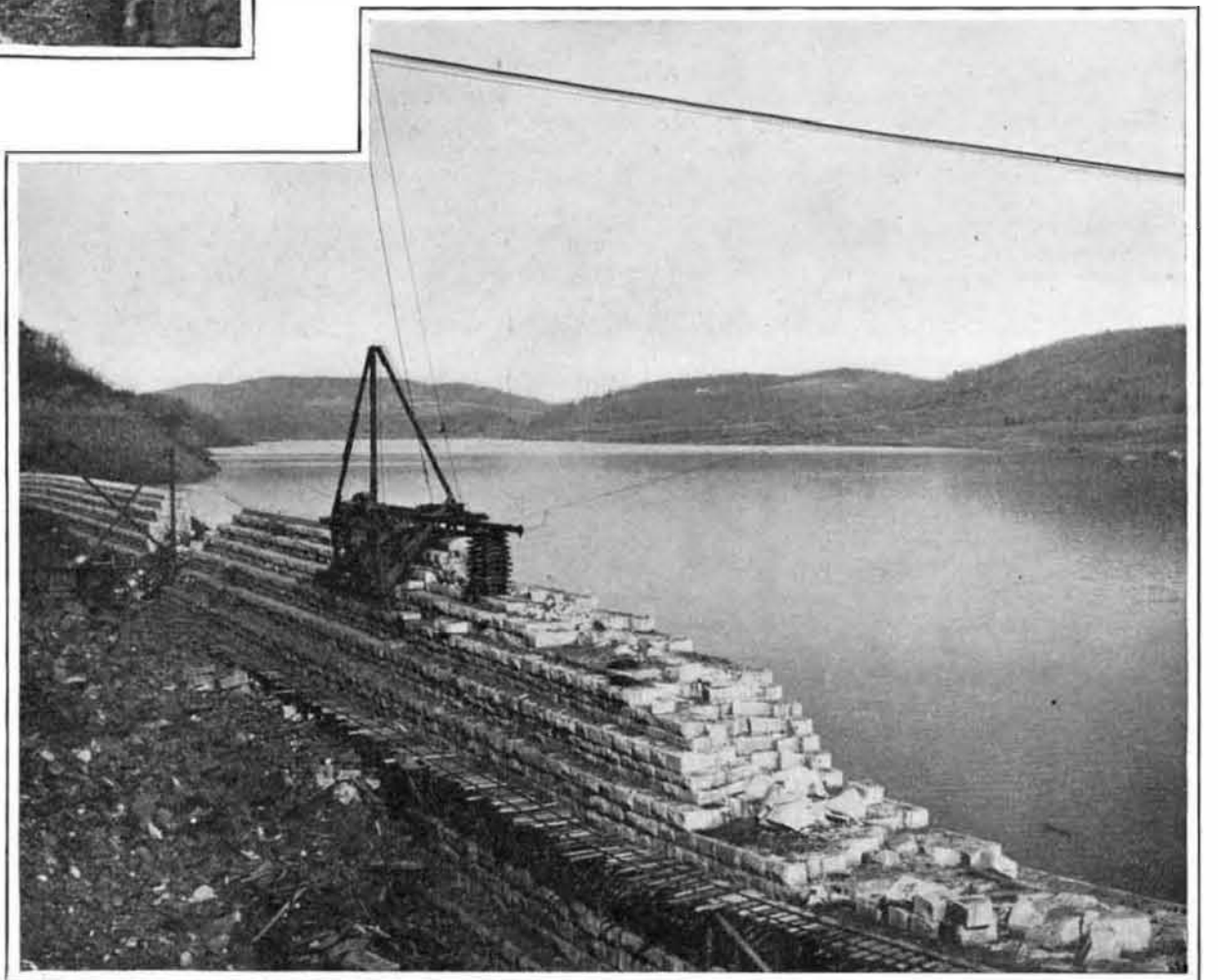
The water seen in the river has passed out through the three four-foot blow-off pipes.  
on the Crest of the Spillway.



A Glimpse of the Reservoir Through the Spillway.



View Across an Arm of the Reservoir.



Croton Lake at its Broadest Point ; 20 Miles Long and Holding 30,000,000,000 Gallons.

**THE WATER SUPPLY OF NEW YORK CITY.**