

# A BIG ENGINEERING FEAT.

## GREATEST BRIDGE IN THE WORLD TO SPAN THE HUDSON.

### A Forty Million Dollar Steel Structure Will Connect Jersey City and New York.

The greatest cantilever bridge in the world is to span the Hudson River from New York to New Jersey, says a letter from New York to the Chicago Herald. It will be bigger and longer than the enormous structure in Scotland which crosses the Firth of Forth and is the most extensive structure in existence built on the cantilever principle: It will be one-third longer and much wider than the suspension bridge which unites New York and Brooklyn, and will cross the water at a greater elevation by twenty feet than does the East River bridge. Its cost will be about \$40,000,000 and five years will be required to construct the work. As the new aqueduct is the marvel of the nineteenth century in hydraulic engineering, so in bridge construction will the proposed structure be the wonder of the age.

The engineers, Thomas C. Clarke and Charles B. Brush, have practically determined upon the location of the approaches on the opposite shores, but of course they decline to make that knowledge public as yet.

The law says that the bridge must land in the metropolis between Tenth and 15th streets, on private property, to be acquired under the right of eminent domain. In New Jersey it will probably start from the lower part of Palisade Ridge in Jersey City, where the ground is 100 feet above the level of the Hudson, and a natural grade to the approaches of the bridge would be secured without the building of an elevated viaduct. If this proves to be the site selected the most reasonable assumption would be that the New York terminus will be in the region of Broadway and Forty-second street. Thus passengers from the South and West will be whirled into one grand union station. Into this will also run the trains of the Long Island Railroad, which will cross the East River by a tunnel that will be continued under Forty-second street to the Grand Central and also to the great union station, similar to that of the Northwestern Railway in London.

Being built upon the cantilever principle there will be but a single span over the river, with a tower on either shore. Grain storerooms will be under the bridge and also under the tracks along the Palisades. The freight cars will unload by chutes extending to the tops of these warehouses. The bridge will be of steel, and 2400 feet from span to span.

It will have six railroad tracks, its bottom will be 150 feet above the river's surface and its top will be fifty feet still higher. After the granite piers and approaches are constructed the bridge will be put together section by section, the steel being brought to the spot on floats from the mills as needed. The latter part of the stupendous undertaking will be the easiest of accomplishment.

When the Herald correspondent called at the office of the bridge commissioners he found ex-Judge George W. Green, the father of the bridge project, with Secretary Swan both busily engaged in the examination of a mass of plans and estimates. Judge Green said: "The cost of the bridge itself will be about \$15,000,000 and the total cost including approaches and stations about \$40,000,000. Of this sum \$10,000,000 will be raised by sale of stock and \$30,000,000 by the issue of bonds. The passenger stations will be built of steel, and large enough to admit all trains that now enter New York, New Jersey and Brooklyn. It will have twenty tracks, side by side, and be 1300 feet in length. The grade in and out of the city over the bridge will be forty feet to the mile. The roads accommodated by the bridge are the Pennsylvania; Central Railroad of New Jersey; Delaware, Lackawanna and Western; New York and Erie; New York and Greenwood Lake; New York, Susquehanna and Western; New York, Ontario and Western, and the West Shore, with the smaller roads operated by or having connection with these corporations. The roads enumerated reach every section South and West. Their passenger traffic is about sixty millions a year, and the freight reaches the enormous sum of 80,000,000 tons yearly. When this bridge is constructed the discomfort and delay passengers now experience in crossing to New York on ferryboats will be at an end, and the cost of transportation of baggage and transshipment of freight will no longer exist.

"It is evident that New York is reaching the limit of its resident population. While the latter can extend north and to Long Island, it will also naturally extend to the west of the Hudson, where is an inviting field for residence. While this territory in New Jersey will grow in population it will not take from New York any of its population which it can more favorably accommodate. There will have to be provided a system of rapid transit over the bridge to accommodate those living within a short distance of the metropolis. Within twenty years the beautiful region all about the Palisades will contain the homes of thousands of those who will seek this quarter to avoid the high rents and excessive cost of living in this city. In every aspect the bridge will be a blessing to the metropolis and to the commercial interests of the nation."

**A Ball of "Daddy Long Legs."**  
A curious natural phenomenon was seen at Plainfield, N. J., a few days ago. A gentleman walking through his garden saw a living ball of "daddy long legs," as they are commonly called. There were hundreds of the insects in the lump, which was fully half a foot in circumference. Their long legs were tangled in a seemingly inextricable mass. The animal warmth of their tiny bodies probably induced the insects to huddle so closely together.—New York Telegram.

# PECULIAR INFATUATION.

## Different Methods of Following the Injunction "Love One Another."

Do men ever fall in love with each other? Women do. Not long ago a young woman in New Jersey was married to a youthful laborer on her father's farm. Some time afterward it was discovered that the husband was a female; the young wife refused, however, though earnestly entreated by her friends, to give up her chosen consort. The strangest part of the discovery was the fact that the bride knew her husband was a woman before she was led to the altar.

If men do not exhibit this strange infatuation for one of their own sex, they at least oftentimes give evidence of the fact that they love one another. There are many instances on record where one man has given his life for another. There are many more instances where men have given life to another.

It is a proud possession—the knowledge that one has saved a precious human life. Meriden, Conn., is the home of such a happy man. John H. Preston, of that city, July 11th, 1890, writes: "Five years ago I was taken very sick, I had several of the best doctors, and one and all called it a complication of diseases. I was sick four years, taking prescriptions prescribed by these same doctors, and I truthfully state I never expected to get any better. At this time, I commenced to have the most terrible pains in my back. One day an old friend of mine, Mr. R. T. Cook of the firm of Curtis & Cook, advised me to try Warner's Safe Cure, as he had been troubled the same way and it had effected a cure for him. I bought six bottles, took the medicine as directed and am to-day a well man. I am sure no one ever had a worse case of kidney and liver trouble than I had. Before this I was always against proprietary medicines but not now, oh, no. Friendship expresses itself in very peculiar ways sometimes; but the true friend is the friend in need."

# HOUSEHOLD AFFAIRS.

## CHOCOLATE MERINGUES.

Six ounces sugar, two and a half ounces chocolate powdered, three whites of eggs. Whip the whites very stiff, then lightly stir in the sugar and chocolate. Bake them on a sheet of thin white paper in a moderately heated oven.

## CABBAGE SALAD.

Boil the heart in salted water till tender, but not too soft. Then drain well, and set in a cool place, or on ice, first pulling the leaves apart so that no wet lurks within. Make a dressing with the raw yolk of an egg, a tablespoonful of salad oil, two tablespoonfuls of cream, two tablespoonfuls of vinegar, and a tablespoonful each of mustard, salt and pepper. Chop the cabbage, add to the mixture, and garnish with slices of tomato.

## GIBLET SOUP.

Ingredients—Four sets of chicken giblets or two of turkey, one onion, carrot, turnip, a little parsley, a leaf of sage, a little lemon juice, two quarts strong chicken or beef broth. Cut up the vegetables, brown them in a stew-pan with a piece of butter the size of an egg. When they begin to brown add a teaspoonful of flour and the giblets. Fry them quickly for a moment, watching them carefully that they do not burn. Now cut the giblets and put all into a soup kettle, with salt, pepper and the stock. Let the soup simmer for four or five hours, then strain it. Thicken with a little flour, and add one of the livers mashed. Season highly and add the lemon juice. Pour into tureen over the yolks of hard boiled eggs, one for each person.—Cincinnati Enquirer.

## BIRDSNEST PUDDING.

Core and peel enough tart, well flavored apples to cover the bottom of a round porcelain pudding dish. Put about half an inch of boiling water in the dish with the apples. Cover them with a plate and set them in a hot oven to cook for twenty minutes. At the end of this time the apples should be tender and nearly cooked and the water entirely absorbed. If any water remains it should be gently turned off, but so as not to break the apples. Prepare an unsweetened custard of five eggs and a quart of milk which has been brought to the boiling point. Add the eggs to the hot milk, carefully beating them in. Season the mixture with a spoonful of salt, and pour it over the apples. It should cover them. Replace the pudding dish in the oven without a cover, and bake the custard and apples till the custard is firm in the centre. The oven should not be too hot.—Boston Cultivator.

## HOUSEHOLD HINTS.

Powdered ammonia is considered excellent for cleaning silver.

Butter is tainted by any strong smelling odor. Therefore it should be kept by itself.

Have coffee pulverized. A third less will be required and the quality much improved.

There is no economy in cheap soap. Get the best; when half the quantity will be needed.

To cleanse knit and crochet articles rub in a pan of flour until clean and shake thoroughly.

Camphor ice is made of one ounce of lard, one ounce of spermacetti, one ounce of camphor, one ounce of almond oil, one half cake of white wax. Melt all together and mix thoroughly.

To set delicate colors in embroidered handkerchiefs, soak them ten minutes previous to washing in a pail of tepid water, in which a dessertspoonful of turpentine has been well stirred.

Creamed sweetbreads, creamed fish, chicken in cream sauce, and hot crab meat may all be served in paper cases. Each case should be placed on a pretty dish and served immediately after being filled with the hot mixtures.

Newspapers soaked in water, then squeezed quite dry and torn into little bits should be sprinkled over a dusty carpet just before sweeping it. The paper collects the dust, and there is no danger of its staining the carpet.

A gargle for sore mouth and throat is to take four large spoonfuls of good cider vinegar, four of water, a teaspoonful of common salt, and a very small portion of red of black pepper; gargle every hour. It is worth more than all the chlorate of potash in this country and it cannot harm you.

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Further investigation showed that bees, which were in possession of the tree, had stung the fox to death in the time it took to fell the tree. When the dead fox was withdrawn from the hollow the bees began to come after and made it warm for the hunters and their horses. They decamped as speedily as possible, some of them being badly stung.—New York Journal.

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