

The only place in New York city where the lamprey is served up is at the Grand Union Hotel.

At the next dinner of the Ichthyophagous Club, the sea lamprey will receive special attention from the French cooks, and is to be served in every known style.

The negroes of the South have great respect for the lamprey eel on account of its supposed medicinal qualities, the skins being in great demand as infallible cures for rheumatism and kindred ailments. The skins are bound about the ankles, wrists, and neck of the patient while fresh from the body of the eel, and are worn for long periods of time, in fact often till they drop off.

In the months of March and April, the lampreys begin ascending our fresh water rivers and streams that empty into salt water. Here they construct what might be called a nest, composed of stones piled up in a heap. These stones are carried from a distance by means of their sucking mouth. In these conical heaps of stone they deposit their spawn.

A NEW EXHILARATING SUBSTANCE.

Dr. Luton, of Rheims, calls attention in a French medical paper to the exhilarating properties of the tincture of ergot of rye when associated with phosphate of soda. The circumstances of the discovery were as follows: A woman of 62, at the infirmary of the *Maison de Retraite*, in Rheims, was receiving tincture of ergot of rye for disease in the knee. Fearing an unfavorable turn, the doctor thought to strengthen the action of that medicament with phosphate of soda, and accordingly combined a little of the two substances in a quarter of a glass of sweetened water. The patient, about three-quarters of an hour after taking this, surprised the inmates by bursting into loud laughter, without obvious reason, and this continued for more than an hour, with brief intervals. The laughter seemed to be associated with merry ideas, and to indicate a kind of intoxication. For some time after it died down the woman was in great spirits and good humor. Dr. Luton had not witnessed the scene, but the consequences to the patient being good, he administered the substance again, and a third time, observing the same effect. The experiments were further repeated on seven or eight women and girls with like results. In the case of men the action of the substance is less marked: it appears only in coloring of the face, giddiness, and slight headache. The effects in question have probably a common origin, it is thought, with those from eating rye bread when, in rainy years, the cereal contains as much as five per cent. of ergot. A sort of intoxication is produced which the consumers by no means despise.

PRESERVATION OF INDIA-RUBBER TUBING UNDER WATER.

Mr. Mareck relates his experience of having met with serious annual losses, in consequence of certain kinds of India-rubber tubing soon becoming brittle on exposure. After many experiments, he has adopted the plan of preserving them under water, which he renews from time to time. He found that even the thickest kind of tubing will thus remain soft and pliable without losing elasticity; nor has he found any other drawback by adopting this plan, except this, that they undergo a change in appearance. Red or brown tubing gradually fades, and becomes brownish or grayish-yellow; gray tubing becomes darker and browner externally. A section of tubing reveals the fact that about one-half of the thickness of the rubber, from the outside toward the middle, appears bleached and fatty; but the change is one which is rather of benefit for their practical use. The author adds that very thin rubber bands, with which other goods were tied, became so soft that they could be rubbed to small crumbs with the fingers.—*Dingler's Polyt. Jour.*, 239, 325.

A MAGNETIC CURIOSITY.

M. Obalski describes a pretty magnetic curiosity to the Academie des Sciences. Two magnetic needles are hung vertically by fine threads, their unlike poles being opposite to one another. Below them is a vessel containing water, its surface not quite touching the needles. They are hung so far apart as not to move towards one another. The level of the water is now quietly raised by letting a further quantity flow in from below. As soon as the waters covers the lower ends of the needles they begin to approach one another, and when they are nearly immersed they rush together. The effect appears to be due to the fact that when the gravitation force downwards is partly counteracted by the upward hydrostatic force due to immersion, the magnetic force, being relatively greater, is able to assert itself.

THE ELECTRIC EXHIBITION.

Such has been the progress made during the past few days in preparing for the International Exhibition of Electricity that it is now possible to render account of very interesting novelties and some valuable scientific applications. One gain, also, as the preparations proceed, a more exact perception of the extraordinary extent of the illumination which will be put forth. The form of the Great Hall of the Palace is rectangular, the open central space being about two hundred and fifty metres long and one hundred metres broad. The walls are of masonry. The interior is constructed of lofty iron pillars sustaining a semi-circular arched roof glazed throughout. These iron pillars, about eight metres apart, carry galleries every side, under which are receding spaces about thirty metres deep. In one of these underspaces on the river side, the boilers, engines, and dynamo-electrical machines are placed; the boilers to the rear, the engines in line, and the host of electrical generators in front. This space will be railed off for the protection of spectators. The French Syndicate supply power to all who require, and will be remunerated by thirty-three per cent. of the night receipts, the charge of admission being one franc during the day, and one and a half from eight to eleven p.m. They have a set of four enormous Belleville boilers, of which the French think a great deal because they burn coal dust and there is a superabundance of it in the country. They are good boilers, and the four furnish sixteen thousand pounds of steam per hour, equal to eight hundred horse power nominal. Beyond this they have two hundred horse power in gas engines upon the Otto principle. Nevertheless, M. Fontaine is at his wit's ends to meet the ever increasing demands upon his resources.

The Brush Light Company is the only one of the English Exhibitors that has any prospect of being ready for the inauguration. Their motive power is supplied by seven fine Robey engines, respectively of forty, twenty-five, twenty, sixteen, fourteen, twelve, and ten horse-power nominal in all. Concrete foundations have been laid for seventeen machines, sixteen light-giving and one electro-plating. The arc-light generators consist of one Brush dynamo-electric machine, sustaining forty lights, and one of sixteen lights, all of two thousand candle power each: one, of the same pattern as the forty light above, but differently wound, producing a single light of one hundred and fifty thousand candles—three times the power of the first-class lighthouse contributed by the French Minister of Public Works; one machine of six lights of six thousand, and one of the six lights of three thousand candles each; a one light machine of fifty thousand candles, resembling the above sixteen-light one but differently wound; and a one-light machine of fifteen hundred candles.

The French Syndicate serves a hundred magneto-electric machines of various systems—Gramme, Siemens, Meritens, Lontin, &c.; and they have supplied the Gramme pendant lamps arranged around the roof of the Central Hall, to the illumination of which they contribute over two hundred thousand candle power. These new lamps are remarkable for the artistic change the common engineer's lamp has undergone by the merest touch of French natural taste in ornamental design. To the tall brass cylinder there has been merely added a crown of metal leaves and a ring of coloured fringe, and to the opal globe a pendant of like material. The effect is simple and pretty. The hall of the grand side entrance *Porte 1V.*, is being furnished with electro-plated lamps of exquisite elegance of design and admirable workmanship by the Paris firm of Siemens Brothers. The numerous bronze statues—especially two full-size figures carrying Jablchkoff lights near this entrance, and the various ornamental stands find holders in the extensive suite of reception rooms, boudoirs, and picture galleries, and happily give proof that the necessities of putting out of sight and of protecting the conducting wires impose upon artistic designers no greater restrictions in their conceptions than those of mastering the unsightliness of gas pipes. Both the London and Paris firms of Siemens Brothers, make further contributions to the general illumination of the interior.

The Edison exhibit will be one of very great interest, and the two salons which contain it will prove very attractive. They are fitted up as picture galleries, and will contain a complete illustration of his system of district lighting in competition with gas, as well as representations of all his inventions and discoveries during the past thirteen years. For the present the five hundred small incandescent lights in these rooms will have to be maintained by four small Edison dynamo-electric machines, driven by a hired engine of thirty-five horse-power.

The Siemens electrical tramway is fast becoming a verity. The over-head conductor is erected for the whole distance be-