

## Will Crinoline

## Come Again?

**A**S MANY of the earlier fashions for women have returned of late," says the Indianapolis News, "people have been asking themselves, Will crinoline come back, too? Fashion is an uncertain arbiter, and the modes that it prescribes one season are not necessarily an indication of those for the next. Were not full sleeves dictated just when women were all comfortably provided with close ones? But crinoline—no, not now, and probably never again. The wide, sun-plaited skirts might seem to denote a tendency in that direction, indeed, but as women have been slow to adopt them, it is likely that the fashion, instead of going further in this direction, will swing back in the opposite one.

"Carlyle found a whole philosophy on clothes. With less ingenuity, social history might be founded on them. How greatly the life of women has changed since crinoline skirts were worn! The change can only be realized by imagining the women of today wearing them. This proves a difficult task, for, somehow, they do not fit into the picture. The modern drawing room does not provide the spacious setting they require. For the club or business women they would be ridiculous. And yet, crinoline skirts are charming—that is, they were. What reader, what feminine reader, at least, of Trollope's novels has not been fascinated by the pictures of the heroines in them? What romantic figures Fanny and Lucy Robarts make in their enormous skirts! With less drapery would they be so romantic? Put a tailor-made suit on one of these drooping creatures? It would be like robbing a bird of its plumage.

"The crinoline skirt, by some magic of its own, seemed to make more of a woman not merely in the material, but in a poetic sense. It is a fact, as a graceful modern novelist points out, that women's personality permeates their garments as that of men does not. Touch a man's clothing, says this writer, and you touch something external to him, but touch just the outermost frill of a woman's gown, and behold, the delicate creature is there before you. And yet, crinoline was fearfully inconvenient! Fancy a crowd of women in a narrow space! What a fluttering and tilting! Pretty, and yet awkward, too. Many women of this city can recall that when Lincoln's body lay in state here there was an official request that women going to view it should lay aside their hoops. How queer they must have looked! "Crinoline belonged to a time when women occupied pedestals, to the time of sense and sensibility, smelling salts and leisure. As they have become more and more a part of the workaday world, their dress has inevitably adapted itself to their new environment. Once in a while a piece at the theater like 'When Johnnie Comes Marching Home,' reminds us, by its exquisite charm, that something has been lost in the transformation. But the fact remains that crinoline belongs to the past. We have neither time nor space for it today."

## Cysters' Secret Revealed

After years of vain effort science has at length discovered how to artificially propagate the oyster.

New Jersey's laboratory at Tuckerton consists of a rickety little cabin that looks as though the first heavy wind would blow it over and the first high tide wash it away. Not even a chair adorns the quarters, a rough board table serving as a stand for microscope and glass vessels in which are gathered oyster germs. At every high tide the water floods the laboratory, but settles through the sand floor and passes off quickly. Such is the place in which Prof. Julius Nelson, biologist of the State Bureau of Shell Fisheries, has successfully solved his problem.

One of the first objects that strikes the eye on entering the laboratory is a common chicken egg incubator. "You see," said Prof. Nelson, "the nights are frequently cold. It may be 80 or 90 degrees at noon and before the next sunrise it may fall below 60 degrees. Now, in nature the oysters are in water which is almost stationary in temperature during the twenty-four hours, say 75 or 80 degrees, so I have had to install an incubator and keep the temperature about 80 degrees all night long."

So saying, he opened the several oysters and selected the most "milky," plunged the point of his knife into their sides and smeared a drop of this "milk" on a glass slide. The microscope revealed tiny eggs, somewhat resembling oyster shells in their outline, only not so fat. They were so small they could scarcely be seen with the naked eye. Prof. Nelson wiped off the point of his knife with a little sea water, after jabbing it alternately into the male and the female oyster, until the water was as turbid as if milk had been added.

Ten minutes later he declared fertilization had been completed.

"A couple of hundred sperms, more or less," he said, "will fasten to the egg, but microscopic study reveals that if more than one enters the result will be a mon-

strosity that will fail to develop."

Drawing off the spermized water, Prof. Nelson put it into clear water, repeating the operation several times. The zone occupied by the eggs could be seen as they slowly settled at the rate of one inch every five minutes. In about an hour, at a temperature of 80 degrees, the first development of the egg begins. It consisted of the egg pinching off the bud, which, however, still stuck fast. Soon a pair of buds appeared, and later each part pinched into two and so on until the egg looked much like a mulberry or raspberry in form.

In about five hours this little egg, or embryo oyster, began to spin around. A drop of highly magnified water revealed thousands of tiny oyster "fry" swimming about. In twenty-four hours they began to grow shells and stayed near the bottom of the glass, forming layers. So sturdy were the shells thus quickly formed that they could be heard grating against each other when stirred.

At this stage of development the embryo oysters began to feed. Hitherto they had lived on the nutriment stored within the eggs. The uneaten food decays and kills the oysters unless removed. Consequently Prof. Nelson has devised a little shallow "claire," as he terms it, a sort of harbor dug out of the bank of the creek which runs past the laboratory, and covered with a roof. The bottom is covered with sand, and is so high as to be exposed at every low tide. This is to renew the water with each tide, but there is enough left to keep the fry alive.

It was at this stage of the oyster's development that Prof. Nelson encountered one of his hardest problems—that of keeping the tiny "fry" from escaping from the "claire"—and he is still working to perfect the gate which he now uses. The finest bolting cloth he could obtain was too wide in mesh to retain them. Finally he hit on a gate made of absorbent cotton quilted between two sheets of wire netting, but it is unfortunately too tight to allow the water to pass through it freely and still retain the oysters. The manufacture of a proper gate is the problem laid out for next summer.

"The difficulty hitherto has been to raise oyster fry in abundance that would live on until they got their shells, but now I believe this has been mastered," said Prof. Nelson. "The oystermen want me to supply them with spawn guaranteed to 'set' on their shells, planted in their planting grounds. In other words, they want seed by the bucketful instead of by the bushel."

"One bucketful should contain enough embryos, if all alive, to supply all the seed a man would need, but the difficulty would be to distribute it just at the moment it was going to set and distribute itself evenly on the thousands of bushels of shells. But that is a matter easily remedied."

With the problem of raising the embryo worked out, the propagation of the bivalve, in which New Jersey has over \$2,000,000 invested, and Delaware, Maryland, Virginia and several other states an equal amount, has been successfully solved.—Chicago Record-Herald.

## Botanical Director

Nathaniel Lord Britton, director of the New York Botanical Gardens, Jamaica, for the Chunchona Botanical station in the Blue mountains for the purpose of establishing a laboratory and conducting researches among tropical flora.



FOWLER BASE BALL TEAM AT FREMONT.



GENERAL JAMES RUSH LINCOLN, WHO WILL COMMAND THE NATIONAL GUARD AT THE FORT RILEY MANEUVERS.



OLD GRAND CENTRAL HOTEL, OMAHA.—THE SHACK AT THE LEFT OF THE PICTURE WAS THE HOME OF THOMAS MURRAY AT THE TIME THE PHOTOGRAPH WAS TAKEN IN 1873.