

SOME CURIOUS OYSTER GROWTHS.

The accompanying illustrations show some of the vagaries of that most interesting of mollusks—the oyster. In the months of July and August, countless millions of young oysters are spawned and cast loose in the water upon the beds of bays, sounds, and rivers. Myriads of these young oysters fail to survive, and the probability is that, although from ten to sixty million young may be spawned by each bivalve, but a few individuals of these numerous millions find a suitable resting place on which to make their permanent abode, and are either lost in the mud or destroyed by the waves, to the mercy of which they are left by their parent.

One of the most important parts of oyster culture consists in supplying suitable materials for these young oysters—termed the “set” or “spat” in the parlance of the industry—to lodge and grow upon. Various materials, such as gravel, shells, crushed stone, and the like, are used for this purpose. In some places, in shallow water, brush has been effectively employed, and it has been found that a young oyster will attach itself to a small stick and grow quite readily with the latter embedded in its shell. Old oyster shells have, however, been

found the most suitable for the purpose, since, by the time the oyster matures, the shells disintegrate. Consequently such old shells, dredged by hand from the oyster beds of past ages, and found embedded in the mud at the mouths of rivers, are generally made use of for the “set” to catch upon.

The proclivity of the oyster to make its home on anything that comes handy is very well shown in our illustrations, which were made from photographs of oyster curios in the possession of the United States Fish Commission at Washington. Undoubtedly the most curious instance of oyster lodgment is that showing a bivalve reposing on a set of false teeth. This particular set of teeth, which was dredged up from the bottom of Chesapeake Bay, has had several claimants since it was put on exhibition. The facility with which oysters attach themselves to leather is shown by the pictures of a child's shoe and an old boot, both very well covered; while the colony of these mollusks established upon an old lantern, shows how useful such objects may still be below the surface when their mission above it has been accomplished. From the bottle specimen, it would seem that as the young oysters grow and commence crowding each other, all but the few strongest-anchored ones lose their grip and are forced off by their mates. The oyster growing out of the bowl of an old clay pipe has the appearance of a puff of smoke just issuing, and is a veritable bit of nature's sculpture accomplished beneath the sea. The above are but a few of many interesting specimens of oyster-attachment dredged up from oyster beds, yet they give a complete demonstration of the readiness of this bivalve to attach itself to anything, and show, besides, some of the curiosities that are to be found beneath the surface of the water.

Sewage and Bacteria Beds.

At a recent meeting of the British Institute of Sanitary Engineers, held at Wolverhampton, England, a paper prepared by Dr. J. C. Thresh and Martin Priest, on the distribution of sewage on bacteria beds was the principal subject for discussion. The writers pointed out that it was now generally admitted that in the processes of sewage purification bacterial action was the most important factor with which they had to deal, and that the condition and quality of a sewage effluent would vary according to the different bacterial influences to which the sewage had been subjected. From the point of view of sewage purification, bacteria were divided into two classes, viz., anaerobes and aerobes, the anaerobes producing putrefaction fermentation, while the aerobes produced the true putrefaction, and it was the aerobic bacteria that they

must chiefly endeavor to cultivate and employ in their sewage schemes. If bacterial treatment was the main factor in sewage purification, the proper utilization of the bacteria beds was the crux of the whole problem. The best means for the distribution of sewage

the beds; and, third, the continuous, or sprinkler system.

Many installations of the contact system for some reasons had not proved satisfactory. As regards aeration, the contact beds compared very unfavorably with the sprinkler bed; because, while the contact bed is alternately filled and emptied, the continuous, or sprinkler, bed worked under constant aerobic conditions, with always an ample supply of oxygen. In conclusion, the writers pointed out that the bacterial system of purification merely improved the sewage from a chemical standpoint, and left it nearly as impure as before from the bacteriological standpoint, and possibly, therefore, quite as dangerous, so far as disseminating germs of typhoid fever, cholera, and other water-borne diseases were concerned. Alderman Gibbons opened the discussion and stated that at Wolverhampton they dealt with an average flow of 2,500,000 gallons every twenty-four hours,

and at times a much greater quantity. At the corporation sewage farm at Barnhurst they had had a tank working on the bacteria principle for thirty years, and Dr. Frankland, who had visited it, had said that the effluent was as pure as some of the water that was used for domestic purposes in London. Dr.

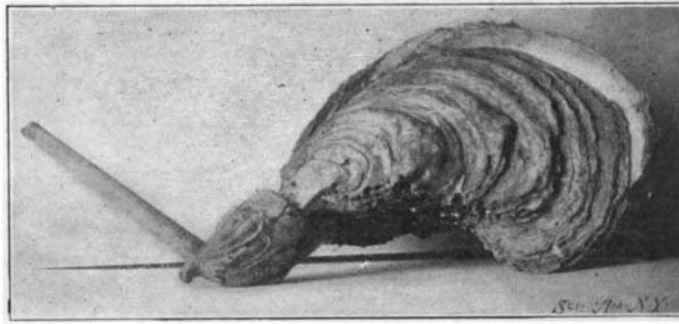
Reid said the Wolverhampton sewage works would compare favorably with any in England, so far as results were concerned.

The Well in the Tower of London.

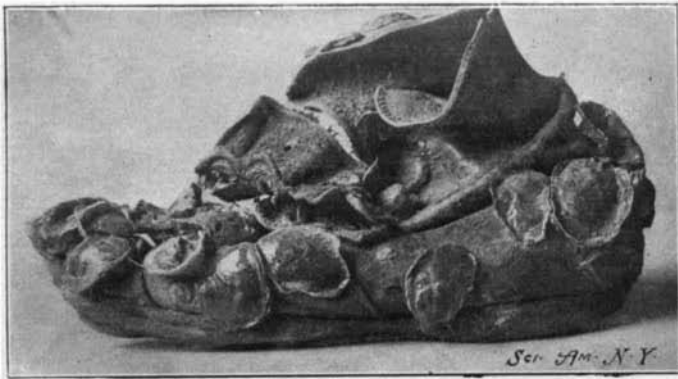
For ages antiquary after antiquary found himself baffled by a simple problem at the Tower. How, in the old days, did the garrison get a supply of drinking water? The antiquary could show you the original fireplace at which William the Conqueror warmed his hands, could point approximately to the spot on which the murdered Princes fell; he could lead you to the place where Henry VIII's queens were butchered, and to the tombstones that collapsed upon their poor bones; he knew the tiny dungeon in which Sir Walter Raleigh spent twelve dreadful years hidden from the light; and could have you in a twinkling in the stone dog-kennel where still remains the ring to which they chained Guy Fawkes. But how these unfortunates and their janitors drank, none could tell. The Thames hard by was not the source, they were sure. Organized search was vain. Then there came a thick-headed, unimaginative mason, to whom and his fellows the work of converting certain of the historic dungeons into storehouses for war material meant ninepence-halfpenny an hour and no more.

His pick struck through the flooring of the corridor from which the prisoners used to enter their cells. Behind these latter and corresponding with the main one, ran, and still remains, the little secret corridor along which eavesdropping officers tip-toed to listen to conversations between captives, for the purposes of evidence. A few blows from the pick brought to light the mouth of a pit. Sixty feet down was water—thirty feet of it. The mason had happened upon the historic well for which search had been made in vain for centuries! It was as perfect as the day that the Conqueror sunk it. To-day it still carries its thirty feet of sweet spring water, and should ever the Tower be beleaguered, its garrison would still be independent of outside supply. We have our holy wells, our miracle-working wells, and wells of medicinal waters. If this historic old shaft which the mason brought to light were distant ten thousand miles, Londoners would make pilgrimages to drink its waters.—St. James's Gazette.

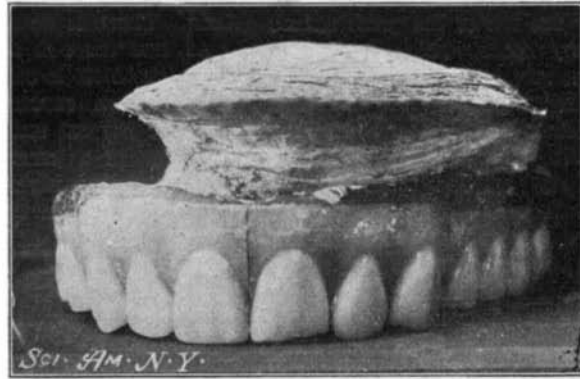
The Incandescent Mantle Company, of Detroit, Mich., is putting a mantle on the market which is said to have all the merits of the incandescent mantles now in use, with the additional advantage that it is much more substantial. While it is not indestructible, it is said to be the only one which can be handled without damage.



Oyster Fastened to a Pipe-bowl.

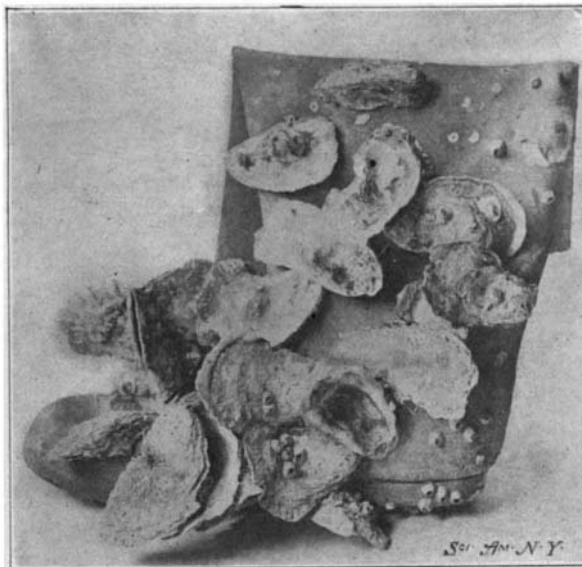


A Child's Shoe Covered With Oysters.

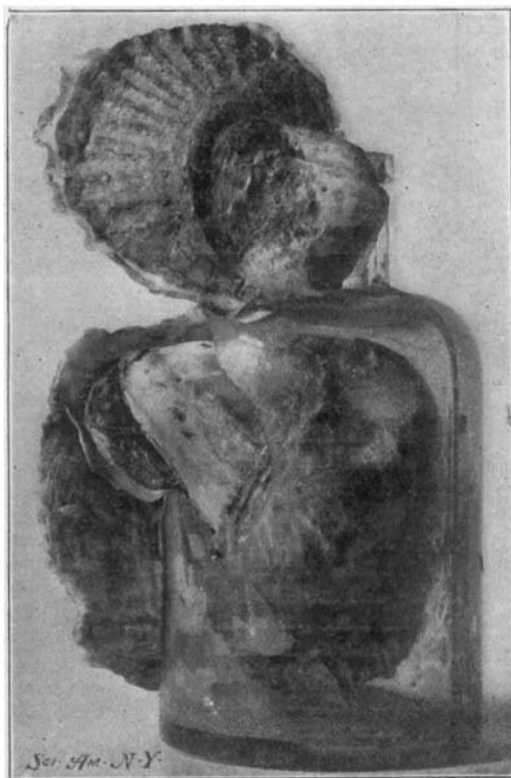


An Oyster Growing on a Set of False Teeth.

on bacteria beds were: First, the so-called contact beds, in which the beds are filled with sewage, allowed to stand a certain time, then run off, and the beds allowed to aerate; second, distribution by means of alternating siphons, with or without arrangements for distributing the sewage over the whole surface of



Oyster-Growth on a Boot.



Oysters Growing on a Bottle.



A Lantern Serving as a Hold for Barnacles and Oysters.

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