Two of these Benoît standards gave different results at different times. For instance, one whose resistance had been designated as 1.00045 legal ohms by Benoît, showed, when first filled, the same resistance in terms of the Cambridge standards; the next day its resistance was found to be 1.00071, and, on flowing the mercury back and forth through it, it rose to 1.00080. The tube was examined, but no trace of an air bubble was seen. It was then cleaned and filled again, and afterwards gave consistent results, the mean being .99990 legal ohms, though the same precautions were taken in the first filling as in the last. This result indicates the uncertainty of mercury standards, and the extreme care that is required to obtain consistent results. Every mercury standard should be made of such a form that the tube can not only be washed, but wiped out by some mechanical means. It is important to notice that the rate at which the resistance of mercury varies with the temperature has been examined lately by Mr. Glazebrook, and he finds that the rate of change diminishes rapidly as we approach 0°; the average change between 0° and 5° being .000834, while between 0° and 15° it is .000879.

CHOLERA PROSPECTS FOR ENGLAND.

IN regard to the prospect of the cholera reaching England this season, the *Lancet* of Oct. 24 says: We have now reached a period when we may fairly form a judgment as to the more immediate cholera prospects for England. Although cholera in Europe usually follows certain definite rules as to climate and season, yet it deviates from these sufficiently often to impart an element of uncertainty to any opinion concerning its movements. But notwithstanding this, the chances of any extension of the present epidemic to this country are now so remote that we may fairly conclude that we have for a third year escaped from the danger with which we have been threatened. It is true that in 1884 our greatest danger did not arrive until Paris had become infected, and that this did not take place until we were well into the first week of November; but, on the other hand, the extent and the area of diffusion of cholera in France was last year far greater than it has been this year, and cholera deaths occurred in 1884, both at Toulon and Marseilles, until about the end of November. This year, on the contrary, France has practically been free from cholera for some time, and the main risk we have to contend with lies in our shipping relations with Spain and Sicily, and these are limited both in amount and in the number of home ports concerned. So, also, we have had evidence that the vigilance and activity which have been exercised by our port authorities with regard to any such importations have been successful, even when, in a few occasional instances, there was reason to believe that isolated cases of the disease had found their way to our shores. And, further, the danger from places in the south of Europe, which are still infected, is every week becoming less by reason of a general subsidence of the epidemic. On the whole, therefore, we may with a considerable degree of confidence conclude that we have another season before us during which we may, unhindered by any element of panic, go on maturing our preparations to withstand such danger of cholera importation as may recur next year; and we have the satisfaction of knowing that the preparations needed are precisely those which will tend to diminish mortality from other causes than cholera, and that the needed expenditure will in the end tend to our prosperity.

ARTIFICIAL PROPAGATION AND CULTIVATION OF OYSTERS IN FLOATS.[1]

WITHOUT expressing any opinion as to the value of the process of 'fattening' oysters by placing them for a few days in cars floating in fresh water, I wish to point out that there is no similarity between this process and the process of propagation which is here described.

My attention was first called to the value of floating cars in oyster culture by Mr. William Armstrong of Hampton, Virginia, who informed me in 1884 that 'seed' oysters, which he had placed in floating cars in the mouth of Hampton Creek, grew more rapidly, and were of a better shape and more marketable, than those which grew from seed planted on the bottom in the usual way.

One of the results of my study in 1879, of the development of the oyster, was the discovery that there is a period of several hours, immediately after the embryo acquires its locomotor cilia, when it swims at the surface, and this is the period when it is swept into contact with collectors. As soon as the shell appears, the larva is dragged down by its weight, and either settles to the bottom and dies, or swims for a time near the bottom. The tendency to swim at the surface is an adaptation for securing wide distribution by means of the winds and currents which sweep the young oysters against solid bodies which may serve for attachment; and the greatest danger to which the oyster is exposed, at any part of its life, is that it may not, at the swimming stage, find a clean, hard surface for attachment.

[1] From *Johns Hopkins university circulars*, October.