From numerous examinations of the Oder water before and after filtration, Hulwa concludes, that, with the exception of occasional disturbances at times of high water, the impurities of the river-water are so far removed by the process of filtration as to furnish a drinking-water almost above suspicion. In order to remove the fine particles of clay which give to the water, in times of flood, an opalescent appearance which filtration will not remove, Hulwa recommended treating the water, before filtration, with alum in the proportion of from one to ten parts of alum to a hundred thousand parts of water (by weight), according to the degree of turbidity of the water. This use of alum, which is becoming very common on a smaller scale, has not been adopted at Breslau. At the time of Hulwa's examinations, the sewage of Breslau all ran into the Oder opposite and below the city, in anticipation of the completion of the sewage-farms now in use. The study of the effect of this discharge upon the stream is perhaps the most interesting part of the document. Although the volume of sewage is, on the average, only $\frac{1}{148}$ of the volume of river-water, and in times of flood only $\frac{1}{637}$, the river opposite and just below the city gives abundant evidence of pollution, — pollution which becomes less and less marked as the stream flows. Thirty-two kilometres below the city neither chemical nor microscopical examination was able to show any evidence that the water was not quite as suitable for water-supply (after filtration) as the water from the same stream above the city at the present pumping-works. Hulwa is of the opinion that the natural purifying agencies are quite sufficient to take care of the amount of sewage which was then discharged into the river, and that, *a fortiori*, the effluent from the sewage-farms may be safely disposed of in that way. He is careful, however, to admit the possibility of overloading this or any other stream, and of calling upon the natural agencies to do more than they are capable of doing. He thus agrees with most experts who have studied this matter, that the discharge of sewage or other polluting matters into a stream is not to be decided in all cases by an absolute prohibition, but that the size of the stream, the proportion of polluting matters, and other circumstances, must be taken into consideration.

THE CONSUMPTIVE PERIOD.

HIPPOCRATES declared that consumption gathers the greatest number of victims between the ages of 25 and 35 years, and the same observation holds true to-day.

As a first and natural deduction from this fact, the opinion has obtained, that men are more susceptible to consumption between 20 and 35, and that, passing this period, they gradually acquire an immunity from the disease.

A more careful study of the statistics, however, reveals a fallacy in this reasoning. Hitherto it has been the custom to reckon the mortality of each period of life as a fraction of the entire mortality of all ages. By this method it is shown merely that during certain decades of life more individuals die of phthisis than during other decades. This amounts, however, simply to saying that within these periods of life a greater number of people are living. The total number of deaths from any disease, at any given age, must be greater or less, according to the number of people existing at that age; and a large proportion of mankind are from 20 to 35 years old. In order, therefore, to determine the individual risk of consumption at any specified time of life, it is necessary to know the whole number of persons living at that age, and then compute the percentage of them who die of consumption.

Figuring in this manner, Würzburg estimated the annual percentage of mortality from phthisis at different periods of life in Prussia, and he found the following table for every 10,000 persons living at each period: —

AGE.	MEN.	WOMEN.	AGE.	MEN.	WOMEN.
0-1	24.95	21.92	25-30	40.04	33.58
1-2	20.27	20.55	30-40	44.25	38.12
2-3	12.09	12.94	40-50	57.10	40.10
3-5	6.49	7.18	50-60	82.38	54.48
5-10	4.07	5.26	60-70	112.25	76.09
10-15	4.35	7.38	70-80	75.23	50.03
15-20	17.87	18.87	Over 80	31.71	21.01
20-25	34.77	25.93			

From this table it is seen that a large phthisis mortality prevails during the first year of life; thence it descends to a minimum between 5 and 15 years of age; from this point it increases with rapid strides, until, between 60 and 70 years, it reaches the high figures of 112.25 per every 10,000 living beings of that age: in other words, these figures mean that a man's liability to death by consumption increases from puberty till 70 years of age.

The companion column of the phthisis mortality of women shows that they are more frequent victims during childhood, but during the third decade and thereafter their relative liability is diminished.

These figures of Würzburg are confirmed in their main features by the investigations of Lehmann in Copenhagen, and of Schmitz in Bonn. Lehmann also extended his query to the relative duration of phthisis at different ages, and found that under 20 years of age more than 75% of phthisis patients die within a year. This rapid progress of the disease diminishes with increasing years until at least one-half of the cases terminating after 55 years of age present a record from three to many years' duration. It follows from this that a portion of the increased phthisis mortality of advanced years is due to cases which have lasted over from the earlier decades.

Die schwindsuchtssterblichkeit in den dänischen städten im verhältniss zu der lebenden bevölkerung in den verschiedenen altersklassen und geschlechtern. Von Dr. JULIUS LEHMANN. (Ergänzungshefte zum Centralbl. allg. gesundh., 18 p., pl. 8°. Bonn, 1884.)

Ueber den einfluss des geschlectes und des lebensalters auf die schwindsuchtssterblichkeit. Von Dr. JACOB SCHMITZ. Bonn, 1884.