

the treatment of cholera as well as a highly effective prophylactic against it.

A SHORT NOTE ON THE IMPROVEMENT OF THE POONA WATER-SUPPLY BY SIMPLE STORAGE.

By DR. J. L. PINTO, D.P.H.,

Asst. Director of Public Health, Poona.

THE raw water from the canal before being admitted into the Paterson coagulating tanks or filters is allowed to settle for a few days. The water is first pumped through a duct into a large settling tank. There are five such tanks. They are connected with one another and a constant level is maintained in all. The capacity of each tank is 1.2 million gallons; the total capacity being 6 million gallons. The daily draw is about 2 million gallons. Hence theoretically the water settles for about 3 days before entering the Paterson filters. The engineer in charge, however, states that the actual time taken by the water to traverse the series of tanks is about 60 hours. Thus in each tank there is a settlement of approximately 12 hours. It was noticed that the raw water at its entry to the Paterson filters was considerably improved by mere settlement. To determine, therefore, the amount of improvement during its course, a series of samples were taken daily for four days,—two from each tank. The points selected for taking these samples were somewhere near the inlet and outlet of each tank. The samples were tested for total colonies on agar and bile salt agar, as well as for lactose fermentors. The average result for the four days (October 12, 13, 16 and 17) of samples at each point were as follows:—

Settling Tanks.	TOTAL COLONIES.		Percentage reduction calculated on count of 1st tank at inlet.	
	Ordinary Agar.	B. S. Agar.	Agar.	B. S. Agar.
I Tank				
Inlet ..	425.50	119.75
Outlet ..	422.50	106.00	0.70.	11.43
II Tank				
Inlet ..	416.66	98.75	2.07	17.53
Outlet ..	398.00	78.50	6.46	33.61
III Tank				
Inlet ..	285.00	50.00	33.02	58.25
Outlet ..	280.25	53.00	34.13	55.74
IV Tank				
Inlet ..	175.50	57.50	58.75	73.03
Outlet ..	208.25	42.00	51.05	64.92
V Tank				
Inlet ..	133.25	22.50	68.73	81.17
Outlet ..	108.25	19.50	74.55	83.71

The lactose fermentors gave almost uniform results in samples from all the tanks. On 12th October (1st day), they were all found positive in 10 c.c., except one sample of Tank I from its inlet, which was positive in 1 c.c. On the 13th they were all positive in 10 c.c. On the 16th they showed none in 10 c.c. and on the 17th positive in 1 c.c.

The filtered water on these four days (October 12, 13, 16 and 17) gave an average result of 8.50 colonies on agar and 0.50 on bile salt agar, thus showing a reduction of 98 per cent. and 99.58 per cent. respectively on the counts of the Tank I at inlet (raw water).

The chlorinated water for the same days gave an average of three colonies on agar and none in bile salt agar.

The results tabulated show a gradual reduction in bacterial content in the water from tank to tank, amounting to 0.7 per cent. during its settlement in the first tank, and attaining to practically 75 per cent. purification in the last tank, at the outlet, as judged by colonies.

Therefore it may be concluded that the amount of improvement of Poona water by the mere process of settlement for about 3 days is nearly 75 per cent. before it undergoes the further process of purification by filtration and chlorination. It may be noted that this would not necessarily apply during the monsoon when the raw water is loaded with colloidal clay and when the problems of purification differ somewhat from those obtained during the non-monsoon months.

A Mirror of Hospital Practice.

A FURTHER NOTE ON MYIASIS OF THE FRONTAL SINUS.

By MAJOR R. E. WRIGHT, I.M.S.,

Govt. Ophthalmic Hospital, Madras.

IN the *Indian Medical Gazette* for February 1921, I published in conjunction with Major W. S. Patton, I.M.S., some "Notes on Myiasis of the Frontal Sinus." If I am not mistaken it was the first human case ever published in which the flies were hatched from the larvæ. It may be of interest to record a second case now:—

C., age 1 year, of Saidapet, was brought to the Government Ophthalmic Hospital, Madras, on 19-9-22 with a suppurating sinus over the middle of the left eyebrow. The left side of the forehead and nose were extensively inflamed and œdematous. The lids on this side were much swollen and closed, and there was excoriation of the skin all round the orbit. The eye-ball itself was in good condition. The sinus in the brow showed a punched out edge