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## APPENDIX TO DR. KNIGHT'S REPORT ON SAWDUST AND FISH LIFE.

BACTERIOLOGICAL EXAMINATION OF SAWDUST WATER IN SHADE AND IN SUNSHINE.

Examination of sawdust water in aquarium made July 31st, 1902.

- Two agar plates made. The first averaged 3,300 colonies of bacteria per cubic centimetre. None of the colonies were spirilla which were present in large numbers in direct microscopic examination of the water. The chief colonies were those of a spore bearing bacillus, a variety evidently of B. Subtilis; also a few sarcinae, particularly one like Sarcina Lutea. The second plate averaged 3,570 colonies per cubic centimetre. In general characters they were the same as in the first plate.
- AUGUST 4TH, 1902. Water in aquarium. Agar plates averaged 3,570 colonies per cubic centimetre. These were in all respects like those of July 31st.
- Same water in sunlight since July 31st. Agar plates average 4,200 colonies per cubic centimetre. These colonies contain the same bacteria as in the aquarium water, but in fewer numbers. Further, there is present a fluorescent bacillus, making up half the number of colonies present.
- AUGUST 8TH, 1902. Water in aquarium. Agar plates develop 7,870 colonies per cubic centimetre. These colonies are of the same type as those found on previous plates with the addition of about 1,000 colonies of B. Mesentericus Vulgatus per cubic centimetre.
- Water in sunlight. Agar plates develop 37,070 colonies per cubic centimetre. These
  consist mainly of B. Fluorescens Liquescens; also of Sarcina Lutea, and an occasional colony of B. Subtilis.

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