

of the sewage impurities dissolved in the same quantity of unfrozen water of the lake. This ice also showed the presence of bacteria in great abundance, retarded somewhat in their growth by the ice, but not destroyed by it. It is perhaps needless to say that this ice was pronounced totally unfit for any purposes where it is liable to come in contact with food or drink. The ice from the Erie canal was also condemned, while there was not sufficient evidence to warrant a condemnation of that from Cazenovia Lake. The report, valuable for what has already been mentioned, is still more so by reason of the numerous references to instances in which impure ice has been the cause of dysentery and other diseases. The earliest of these was that at Rye Beach, N.H., reported by Dr. A. H. Nichols of Boston in 1875, in which there broke out among the guests of a large hotel at that place an epidemic of gastro-enteritis, caused by impure ice from a filthy pond. Another instance of sickness caused by impure ice, referred to in the report, is that of an epidemic of dysentery which occurred in 1879 at Washington, Conn., investigated by Dr. Brown of that place and by Dr. Raymond of Brooklyn. The ice had been gathered from a pond which had been used as a wallowing-ground by the pigs. Other instances are quoted of the injurious effects of impure ice upon the public health, and sufficient evidence given to show, that, in the process of freezing, water does not purify itself. The report, taken as a whole, is a very valuable contribution to this subject, and a complete refutation of the old idea that all ice must of necessity be pure.

COLOR-BLINDNESS AMONG RAILWAY EMPLOYEES.

DR. B. JOY JEFFRIES, at the last meeting of the American ophthalmological society, called attention to the total failure on the part of the Massachusetts authorities to enforce the law passed in that state in 1881, by which railroad companies are prohibited from employing persons who are color-blind, or whose sight is defective, in positions requiring them to distinguish form or color signals, unless such persons have been certified by some competent person employed and paid by the company as not disqualified for such positions by color-blindness or other defective sight. A penalty of a hundred dollars is affixed for each violation of the act. In reference to the enforcement of the law, Dr. Jeffries says that "it is practically as dead a letter as the liquor laws." Numerous cases are cited which have come under the care of the speaker in which the law has been

grossly violated. In one case a brakeman who had been on a road three years had been tested as to his vision by the train-despatcher, who had asked him how many knobs there were on an adjacent telegraph-pole, telling him his vision was as good as any one on the road. Another instance of the manner in which the law is violated was that of a gateman who applied to Dr. Jeffries for a certificate for blindness contracted in the army, in order that he might obtain a pension from the government. Although this man was so blind from atrophy of the optic nerve that he groped his way into the doctor's office, yet he was on duty as a gateman at an important railroad-crossing, having a certificate from the examiner of the railroad company "that he is not disqualified by defective sight." The man himself acknowledged that he was completely blind in the sun, and could not see people at his crossing. A number of instances are given where engineers and conductors were employed by railroad companies, although they were completely color-blind. Something of the same negligence seems to exist in the licensing of pilots. One pilot who could not recognize a colored side-light held in the sun six feet before his face was examined by a marine hospital surgeon, and reported as *partially* color-blind. This enabled him to be further examined by the local inspectors, who passed him by their tests, and the man has a full license. In commenting on this case, Dr. Jeffries well asks, "How many more are there?" The matter is one of such grave importance, involving as it does the life and limb of every traveller by land and sea, that the Ophthalmological society could be of no greater benefit to their fellow-beings than in calling the attention of the authorities to these gross violations of the statute, and protesting against their continuance.

COMMISSIONER HADLEY'S SECOND ANNUAL REPORT.

PROFESSOR RICHMOND M. SMITH, writing in the *Political science quarterly* a few months ago, said, in his article examining the various state labor bureaus and their methods, that "the business of collecting statistics successfully is one which requires a great deal of experience, besides knowledge and administrative ability, on the part of the chief," and for the lack of that experience he found the reports of most of the chiefs defective both in method and in results. When Professor Hadley of Yale college was appointed, two years ago, chief of the Connecticut bureau of labor statistics, it was foreseen that statistics collected by one of his ability and experience in handling