

been, so far : Moscow, St. Petersburg, Paris, Hamburg, Havre, and Antwerp. How did cholera pass from St. Petersburg to Paris without, so to speak, stopping at stations by the way? Political sympathy, it is true, exists between Russia and France. The Psychical Society might suggest that it was communicated by telepathy, but sanitary science admits no such conception. Neither should it hesitate to recognize that such a transit could not be checked by any quarantine or *cordon militaire*. The latter measure was fully tried in Europe as long ago as 1831-32, with absolute failure ; at Vienna, for example.

An *instantia crucis* against the dependence of the migration of cholera upon transmission by the channels of human intercourse occurred in France in 1884. The outbreak at Marseilles and Toulon in June of that year was made the occasion of a scrutinizing investigation. There was then no cholera elsewhere nearer than India. The Chief of the Naval Bureau of Health and the Admiralty Inspector, Rochard, declared officially that the disease was not brought by any vessels from elsewhere.

Dr. Brouardel made a special visit of inquiry to the infected cities. His conclusion, as reported to the Académie de Médecine, was published in a letter from Paris to the *London Times*, July 4th, 1884. It was to the effect that the two sailors first taken ill had not been to sea for five years, and had no communication with other vessels ; and that the same was true of a person who died of cholera at the Lycée in Marseilles, June 21st, about a week after the two sailors were attacked. Brouardel affirmed decidedly that (notwithstanding a charge made against a vessel from China, all on board of it being well after a voyage of forty-five days) it was impossible for any vessel to have brought the infection to Marseilles and Toulon. Yet 5000 deaths occurred in France, mostly in those two cities, in June, July, and August, 1884.

In the *American Journal of the Medical Sciences*, July, 1873, Dr. E. M. Estrazulas presented important testimony showing that an epidemic of cholera beginning in Paraguay in 1866, and continuing as an endemic for three years, could not have been imported by human intercourse, by ships or otherwise ; the peculiar circumstance of the war with Brazil making this impossible.

As to the possibility of the personal contagion of cholera in any other way than through the entrance of the stools into drinking water, some facts, now generally forgotten, but on record, may be here recalled. Dr. Austin Flint well contrasted cholera, in this respect, with typhus, smallpox, and scarlet fever.¹ In Moscow,² in 1831, 587 patients affected with cholera were admitted into a hospital containing 860 patients of other

¹ Practice of Medicine, p. 425.

² Brigham : History of Cholera, p. 324.