

100 pages. They are addressed specially, the one to ethnologists, the other to comparative anatomists; and to persons deserving of these honorable titles it would be superfluous to recommend them in detail.

ART. II.—*Sulla Causa specifica del Colera Asiatico, il suo processo patologico e la indicazione curativa che ne risulta.*
Memoria del Dott. FILIPPO PACINI. Firenze, 1865

A Treatise on the specific Cause of Cholera, its Pathology and Cure. By Dr. FILIPPO PACINI, Professor of Microscopical and Topographical Anatomy to the Medical School of the Institute at Florence, &c. Pp. 62.

THE present treatise adopts the view that cholera is attributable to the destructive action of parasites; the development of this opinion is aided by physiological interpretations, which have not yet found their way into print in an extended form, but of which we are now permitted such partial glimpses as seem necessary to the comprehension of the subject. They teach that the veins are the chief instruments of absorption, and that the so-called absorbent vessels are merely adjuvant and complementary, opening by free or expanded orifices into interstitial spaces or lacunæ in the web of the tissues, in similar manner to the veins of the invertebratæ. In fact, according to the author, lymphatic absorption is a myth, for it is merely by the circulatory impulse that the lymphatics are filled with any superfluity not absorbed by the veins. Dr. Pacini has observed that the operation of the parasites in cholera is primarily on the epithelium and villi, eroding the mucous membrane and laying bare the capillaries. In the general run of cases the epithelium and villi which have been subjected to a destructive process are thrown off during the premonitory diarrhœa, and are discoverable with a little difficulty even in the earliest dejections and vomited fluid, after which only plentiful shreds of mucus are to be met with in the stools; it is otherwise, however, in cases of extraordinary rapidity and urgency, in these the more abundant epithelium and villi are found without difficulty. The essential character of the disease is made to lie in the loss of fluid lymph; it is a true lymphorrhagia, not far different from hæmorrhage. The want of balance ensues between the processes of absorption and secretion: when once the critical border line is passed—when the scale has fallen on the wrong side, there is nothing to be looked for but death, except from the occurrence of that algid condition in which a blood-stasis forbids any further exudation of fluid. If a lapse of time and the vital powers now allow of

repair in the destroyed tissue, endosmosis will bring assistance to the vessels, and the process of absorption also in all parts of the frame will tend to restore the activity of the circulation; but in cases in which death rapidly ensues, the body is not the least attenuated by absorption, and the same fact is the cause of astonishment in cases of prompt recovery.

Owing to the extent of surface implicated by these parasites in the intestinal canal preventing absorption of fluid ingesta as well as repair of waste by food, the thirst in cholera is intense and unappeasable. Their destructive action is comparable to that of perforating ulcer, allowing for the minuteness of their abundant and incalculable erosions; the fact of the existence of parasites is based on Dr. Pacini's microscopical observations, and is favoured by those of certain German pathologists quoted by Gull in the 'Report on Epidemic Cholera,' p. 15, London, 1854; also by experimental inquiries on the atmosphere surrounding the choleraic, by Dr. Thompson, in the same report. Virchow also has drawn attention to certain diphtheritic exudations.

The treatise of Dr. Pacini is well written and keenly argued; on this account alone it is worthy of a perusal, apart from the originality of his observations. As regards treatment, it falls in with the view that astringent and antiseptic medicines constitute our main resource in cholera, accordingly, phenic acid or kreasote seems best to combine these qualities. Frictions, heat, or any direct interference with the algid condition, would be considered as opposed to the best chances of cure.
