Some Important Facts about the Bubonic Plague in Bombay.

THE bubonic plague, which is unhappily forced into prominence at the present time, derives its name from the fact that swellings, or *buboes*, supervene should the patient live until the second or third day after the onset of the disease. These buboes may be very small, or they may attain to the size of a hen's egg. After their appearance the fever usually subsides, the skin acts very freely, and the pulse falls. The buboes may end in resolution, but more often either they point and break naturally, or surgical interference is necessary.

The incubation period of the disease is from three to five days. The acute stage, in common with other febrile diseases, is ushered in with rigors, pains, and lassitude. After this the temperature rises rapidly, often attaining to 106° or 107° Fahr. on the first day. Delirium, resembling that of typhus cases, frequently follows, and the patient sinks into the "typhoid state," his dry mouth, offensive breath, and prostrate condition proclaiming the virulence of the disease.

The Indian Medical Record says:---" The origin of the bubonic plague in Bombay still remains an unsolved mystery. There is no reliable evidence, no clear data, to prove its transmission from Hong-Kong, though that is probable, still the most careful inquiry by experts on the spot has resulted in the dictum that no facts have as yet been brought forward which emphatically indicate the *fons et origo* of the bubonic plague in Bombay. That it may have arisen *de novo* in the worst affected districts is as probable a conclusion as any, as the superlative filthiness of certain parts of Bombay has offered a most inviting habitat and a most fruitful nursing ground for such a calamitous visitation.

From careful and extensive inquiries we have instituted among leading medical men in Bombay, we find a very positive opinion expressed in regard to the infectiousness and contagiousness of the plague.

The consensus of medical opinion in Bombay leads to the belief that the plague is not infectious. It is reckoned by some as being contagious, in the phase of direct contagion by contact, as in the case of those suffering with wounds, abrasions, or open, broken surfaces of skin coming in close and intimate proximity with those afflicted with the disease, but even on this point there is a diversity of opinion, as the large majority of the doctors who are in constant attendance on the sufferers from

plague, deny that they have observed any such marked tendency towards contagion by contact, among attendants with broken surfaces of skin, becoming affected more than others. This point many doctors insist on as negatively proved by special observation. It must be held, however, that non-contagion by direct contact in such specified instances, is a remarkable contradiction to the generally accepted views of the medical profession. The belief of the profession in Bombay, seems drifting towards the conclusion that the spread of the plague is due to the entrance of the morbific germ or bacillus into the human system through the air passages; that, in other words, the disease is chiefly airborne.

Allowing that this supposition is correct, it is a remarkable fact that the plague bacillus has not been discovered in food-stuffs or in material or dust, taken from infected localities and infected buildings, but the specific bacillus has been seen and identified by a number of observers in the bodies of rats, the common house-fly, bugs, fleas, ants, and such like vermin. (We do not find the busy, much maligned and notoriously wicked, mosquito, cited on the list of the iniquitous vermin tribe of Bombay.) It is presumed that contagion is conveyed from house to house by these pests, which in the case of some of them, directly transplant the poison from their bodies into the human system by If this process of inoculation by a inoculation. kind of vaccination is the true method of entrance, it is strange that the axillary glands are not as much affected as the inguinal glands, for in the persons of the poorer classes of natives, who wear little or no clothing, the upper extremities are as much exposed to the bites or inoculations of these vermin as the lower extremities, yet it happens as an unvarying experience that the glands of the groin are the parts mostly affected by bubonic disease.

The erratic character of the plague in its attacks is a very marked feature of the outbreak in Bombay, and in this the disease intimately resembles cholera. It will take its origin in a pestiferous and filthy district, and not spread to an adjacent track with as markedly insanitary environments. It will skip over whole lines of streets, and show itself in a somewhat distant and not altogether insalubrious region, sanitarily speaking. It has been seen to infect a house under the strictest sanitary regulations, but the habitat of the plague, it has been abundantly demonstrated in the Bombay experiences, is the filth laden area, where sunlight and ventilation are vanishing factors.

The presence of plague in healthy houses might, we think, be easily accounted for by the ingress and egress of native servants, who

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