Dr. Heary F. Lyster illustrates the sanitary influence of drainage in cities, by reference to the history of health and disease in Detroit.

7. The Registration system of *Rhode Island* has long been regarded as one of the most perfect in the country. The small size of the State and the density of its population have undoubtedly much influence in producing this high degree of perfection. We believe, however, that much credit is due to the wise arrangement by which the conduct of the work is assigned to a committee of the State Medical Society. This committee changes but little from year to year, and is always composed of men known to possess liking and ability for researches in vital statistics.

Dr. Caswell directs attention to the fact that these statistics do not show that closeness of connection between deaths by cholera infantum, and elevation of temperature, which has been believed to exist in New York and elsewhere. Indeed, a table showing these facts for the hot months of nine successive years exhibits several very striking contradictions to the supposed rule.

The unusually cold April—coldest in forty-three years—was signalized by almost double the usual mortality from pneumonia.

Deaths by scarlatina were largely in excess of any previous year, reaching 10.9 per cent. of total mortality. Of 462, 312 occurred in the first half of the year. The most fatal months were June, 63, and January, 57; the least fatal, September, 18.

Dr. Caswell remarks that the relations of mortality and temperature are yet far from being fully ascertained.

Looking at the records of past years, a very gratifying and pretty regular diminution is apparent in the proportion of deaths due to consumption. The same tendency would seem to obtain in the case of typhoid fever.

Births were absolutely more numerous than ever before; relatively to population, less than the three years previous. These were in the proportion of 104.9 male to 100 female infants. This ratio of sexes has varied very singularly and greatly in different years, once leaping in succeeding years from 100.3 up to 112.9, again from 100.9 up to 108.6, and from 102.3 up to 110.5, with almost equally abrupt changes in the other direction.

Marriages were less numerous than in 1873. The proportion of those wholly American, as compared to foreign and mixed, decidedly diminished, while the percentage of the two latter increased.

Divorces seem to be increasing. They amounted in 1874 nearly to one-tenth the number of marriages.

It is a curious fact that, among the colored population, births, during the last fifteen years, have been gaining upon, equalling, and of late surpassing, the deaths. In other words, a natural increase now occurs where was formerly a tendency to extinction.

B. L. R.

ART. XLIX.—*The Cause of the Commencement of Parturition.* By CHARLES M. CROMBIE, M.B., M.C., Author of *Remarks on Midwifery to Midwives, etc.*, Fellow of Obstetrical Society of London, etc. 8vo. pp. 38. London: J. & A. Churchill, 1875.

PASSING over a large portion of the preliminary matter, we come down to the subject proper of the essay, i. e., the determining cause. Dr. C. believes, as has been taught by Dr. Braxton Hicks, that the uterus is active during the

whole pregnant state; and that it is also ready at any time to perform its muscular office of expelling its contents, as shown by its intermittent action; by the possibility of abortion at any period, either spontaneously or designedly; and by the continuance of expulsive contractions after the delivery of the fœtus, until the placenta and every clot of blood are expelled.

What prevents this activity of the uterus culminating in the expulsion of its contents before the termination of pregnancy, is believed by the author to lie in the antagonistic hydrastatic power of the liquor amnii. The final termination of this antagonism he attributes to a gradual absorption of this fluid, its diminishing volume in proportion to the size of the fœtus, allowing the latter to be more directly acted upon by muscular contractility; and, last of all, the disintegrating process, which ultimately separates the placenta from the uterus. Dr. Crombie believes that the existence of the fœtus in *utero* is a struggle maintained by the antagonism of opposite forces.

We are not prepared to accept this explanation in the measure in which it is offered to us, as we can hardly reconcile its teachings with the results of treatment, in postponing an active labour of ten hours, accompanied by a decided hemorrhage, at four and a half months, until the termination of the full period of gestation; or at the period of eight months, with the same result. The power of expulsion exists certainly in the uterus from a very early period of gestation; but this force is clearly on the increase as pregnancy advances; and is most active at the full development of the organ. Opium, in some instances, appears to possess the power of arresting premature uterine action, so that it ceases for the time, and may not be renewed until the normal period of parturition. We are of the opinion that the cause of uterine expulsive action lies in the nervous system, and is one of the mysteries connected with our organization which is beyond our mental comprehension. Our voluntary muscles have a certain power under the will, but how much greater is the contraction when influenced by the causes which produce the spasms of tetanus or epilepsy. We have seen "the intermittent action" of the uterus decidedly painful and threatening for several weeks together, but the woman did not abort. Why? Because the exciting cause is the nervous system, whatever it may have been, was less than that which determines the *full* force of the uterine contractions. We have seen a woman in labour on two consecutive nights, and delivered on the third, in whom the labour-pains ceased on the two intervening days. We cannot readily explain this upon the hypothesis of Dr. Crombie.

R. P. H.

ART. L.—*The Student's Guide to the Practice of Midwifery.* By LLOYD ROBERTS, M.D., M.R.C.P. London; Physician to St. Mary's Hospital, Manchester; and late Vice-President of the Obstetrical Society of London, etc. 12mo. pp. 317. Philadelphia: Lindsay & Blakiston, 1876.

DR. ROBERTS dedicates his little manual to the venerable Dr. Thomas Radford, honourable consulting physician of St. Mary's, and celebrated as one of the few successful performers of the Cæsarean operation in Great Britain, and author of a work upon the statistics of this operation in his own country.

The volume as presented by the American publishers is in good type, and generally well illustrated, many of the wood-cuts having an old familiar face, being carefully selected from more comprehensive works. We are glad to see also the compliment paid to Prof. Dalton of New York, in the use of his illus-