

## *Society Proceedings.*

### ST. JOHN MEDICAL SOCIETY.

Regular meetings were held Dec. 4th and 18th.

At the former meeting Dr. MacAlpine read a paper on Small-pox. He gave a very careful review of some 400 cases under his own personal observation, at the Kings Co. Hospital, New York, and dwelt at length on the treatment of the above disease, carried out at that hospital. He also mentioned the difficulties which were experienced in the diagnosis of several of the cases.

At the latter meeting, held Dec. 18th, Dr. Inches gave an address on "Phlegmasia Dolens." He quoted 3 recent cases in his own personal experience, all severe and diagnosis difficult. Many theories were advanced as to the real cause of the disease. Dr. Inches is of the opinion that the disease is not always due to septic absorption because it sometimes occurs before confinement, as well as during the second or third week after confinement, and because the left leg alone is nearly always affected. The subject was discussed by most of those present.

At the same meeting Dr. March read a paper, taking as his subject "The Physician and the Microscope." After the discourse, which was very interesting, Dr. March gave a practical demonstration on the use of the microscope, showing among other things, the pneumococcus, gonococcus, bacterium tuberculosis, comma bacillus, &c. The instrument used was an Acme, No. 5, made by Queen & Co., of Philadelphia.

F. G. ESSON, Sec'y.

## *Selections.*

### THE CARTWRIGHT LECTURES ON VITAL AND MEDICAL STATISTICS,

*Delivered before the Alumni Association of the College of Physicians and Surgeons, New York, Nov. 14th, 20th and 22nd, 1889,*

BY JOHN S. BILLINGS, M. D., LL.D., U. S. Army.

(These lectures by one peculiarly able, by reason of his official position and his personal talents, to deal authoritatively and exhaustively with the subject, are of so great interest and value that we purpose placing an abstract before our readers. We wish to preserve their completeness as far as space will allow, so we propose to give only an instalment of the abstract in this issue and to continue it in our next.

The most of the article will be a reprint from the *New York Medical Journal*. We are the more desirous of presenting it as it is a subject of which most medical men have not the detailed understanding that we believe they would like to have.—Ed.)

#### LECTURE I (ABSTRACT.)

I PURPOSE in these lectures to speak of vital and medical statistics, and of some of their relations to each other and to scientific and practical medicine and sanitation. The discussion will include such points as character of the data required; methods of obtaining them by the census, by registration, and in other ways; relations of physicians to

this kind of work; methods of compilation and forms of publication; the best existing sources of such data; and some of the more common fallacies in drawing conclusions from the data as ordinarily published.

These and other points will be considered in their practical application to certain questions which, I hope, may be of interest to you, both as citizens and as physicians, as for example: Is the average longevity of man in civilized countries increasing? What data are required to practically judge of the relative healthfulness of different localities, or of the same locality at different times? What are the relations of certain forms of disease to race, to climate, to locality, to occupation? What is the relative tendency to increase of population in this country in the white and colored races? What is the statistical evidence with regard to improvement in practical therapeutics as arrived at from hospital data, from death rates in obstetric practice, etc.?

Statistics and discussions of statistical methods are, as a rule, dry and uninteresting subjects, and it is with very considerable doubt and hesitation that such a topic has been selected for these lectures. I have no new discoveries to announce, and those who are practically familiar with statistical research will find some of my statements rather elementary; but the subject is not one which lies within the ordinary range of medical studies, the data are widely scattered in literature, and I hope, at least, to be able to remind you of some of the numerous points which you may have once known, but which may have been forgotten owing to the pressure of other studies and duties.

Statistics are somewhat like old medical journals, or like revolvers in newly opened mining districts. Most men rarely use them, and find it troublesome to preserve them so as to have them easy of access; but when they do want them they want them badly.

There are many fallacies and errors connected with vital and medical statistics as ordinarily collected and used, and it is highly desirable that the physician should be aware of the more important of these, since he is constantly appealed to for decisions as to their true significance and value. "It is as easy to tell lies with figures as with words, and bigger ones"; but while we occasionally meet with deliberate falsifications of the records, made for the purpose of magnifying or diminishing the apparent mortality or prevalence of a particular disease in a given locality, or to maintain an anti-vaccination thesis, these are not so frequent as are the errors of involuntary misstatement and misinterpretation into which those not familiar with methods of collecting and tabulating statistics are so liable to fall. Those who are not familiar with the methods of obtaining and compiling statistics of this kind are apt to be unduly credulous or unreasonably skeptical as to their real use and value—to use the first figures which come to hand, and thence derive conclusions which are not warranted, or to reject the plain teaching of carefully compiled statistics in favor of general assertions which have no firm foundation, but which are in accord with preconceived opinions. My experience with those seeking statistical data is that the majority begin by looking for those data which are in favor of some particular conclusion with which they commence, rather than by selecting data with reference to their probable completeness and accuracy, and accepting the conclusions which may be legitimately drawn from them, whatever they may be.

Those who are engaged in the collection and compilation of official mortality and vital statistics are often at first the most skeptical as to their accuracy and utility, for their attention is so frequently and forcibly drawn to errors in the