of matriculates and graduates for each year, and the percentage of graduates to matriculates. These tables show the effect of the schedule of minimum requirements of the Illinois Board after the session of 1882-83. In 1882-83 the total number of medical students in the United States was 12,274, while in 1884-85 it was 10,987; and the 12,000 mark was not reached again until 1887-88. The percentage of graduates to matriculates in the United States has fallen from 35.8 in 1981-82 to 21 in 1890. The percentage in Canada has not reached 24 in ten years.

That portion of the Report devoted to institutions and regulations in foreign countries contains in full the requirements of the examining boards in Great Britain, with the names of all the medical schools and of all the hospitals in which instruction is given. The requirements as to preliminary education in foreign countries are given for purposes of comparison, as well as the requirements for graduation and for the license to practice. The course of study and the semesters in which the various subjects should be taken up, as advised in the German universities, as well as a description of the German method of examining for the license to practice, are given in full. In addition, the correct names and locations of foreign medical institutions are given.

The Johns Hopkins Hospital Reports.—Report in Gynecology, I. By Howard A. Kelly, M.D. Contents: 1. The Gynecological Operating Room and the Antiseptic and Aseptic Rules in Force; II. The Laparotomies Performed from October 16, 1889, to March 3, 1890; III. The Report of the Autopsies in Two Cases Dying in the Gynecological Wards without Operation: IV. Composite Temperature and Pulse Charts of Forty Cases of Abdominal Section; V. The Management of the Drainage Tube in Abdominal Surgery; The Gonococcus in Pyosalpinx; VII. Tuberculosis of the Fallopian Tubes and Peritoneum—Ovarian Tumor; VIII. General Gynecological Operations from October 15, 1889, to March 4, 1890; IX. Report of the Urinary Examination of Ninety-one Gynecological Cases; X. Ligature of the Trunks of the Uterine and Ovarian Arteries as a Means of Checking Hemorrhage from the Uterus, etc.; XI. Carcinoma of the Cervix Uteri in the Negress; XII. Elephantiasis of the Clitoris; XIV. Kolpo-Ureterotomy—Incision of the Ureter through the Vagina, for the Treatment of Ureteral Stricture; XV. Record of Deaths following Gynecological Operations. Baltimore: The Johns Hopkins Press, 1890.

This small work of 250 pages marks a new era in the literature of hospital reports. As will be seen by the perusal of the table of contents, an immense amount of interesting and valuable material is introduced under one heading or another. One of the most interesting chapters is the illustrated description of the operating room, which is acknowledged by all who have seen it to be as nearly perfect as ingenuity and money can make it. One can see in reading this chapter that Dr. Howard Kelly of Baltimore is thoroughly imbued with the spirit of Dr. August Martin of Berlin, under whom he has recently studied. As he says, the working rules are antiseptics up to the beginning of the operation, aseptics throughout the operation and preservation of the aseptic state after the operation. After describing the building and the room, he mentions one thousand and one details which are

essential towards attaining these ends, details, we may add, which owing to their cost have hitherto rarely if ever been attainable in any one institution. More dependence is placed upon sterilization by heat than upon disinfection by chemicals, in the preparation of the patients, instruments and dressings, while soap and water and the nail brush used during ten minutes at least are depended upon to a great extent in the preparation of the operators and the patients. The abdominal sections are beautifully tabulated, so that one can see at a glance the age of the patients, the nature of the disease, the kind of operation, including the difficulties encountered, whether a drainage tube was used, how long, time consumed by the operations, the temperature if over 100, whether there were any stitch hole abscesses, and whether the patients recovered or died. Following the tabulated list is an analysis of cases in which the peculiarities of each case are briefly but thoroughly gone into, and the practical deductions are given. The careful perusal of this chapter by every abdominal surgeon cannot fail to be of the greatest possible value. The chapter on the temperature charts and management of the drainage tubes are also intensely interesting. In the former we see that the temperature after the simplest and most uncomplicated cases is always higher than in health, while after the removal of pustubes it may remain as high as 101° to 102° without causing anxiety. The rest of the report is equally interesting, and we trust that Dr. Howard Kelly will continue from time to time to disseminate the valuable experience he acquires, and thus save other operators from purchasing their experience at the price of human

PRINCIPLES OF SURGERY. By N. Senn, M. D., Ph. D., Milwaukee, Wis., Professor of Principles of Surgery and Surgical pathology in the Rush Medical College, Chicago, Ill., etc. Illustrated with 109 wood-engravings. Philadelphia and London: Z. A. Davis, Publisher, 1890. Price \$4.50 in cloth; sheep, \$5.50.

After perusing this work on several different occasions we have come to the conclusion that it is a remarkable work by a man of unusual ability. We have never seen anything like it before. As the author says, the recent great discoveries relating to the etiology and pathology of surgical diseases have made the text books of only a few years ago old and almost worthless. The author has devoted a large part of his work to the study of bacteria. teria, giving them their true place in the causation of surgical diseases. The work treats exhaustively of the pathology, etiology, and treatment of the surgical germ diseases, but does not touch upon fractures, dislocation, etc. In other words it is a work on the principles but not on the practice of surgery. It embraces inflammation, necrosis, suppuration, septicemia, pyæmia, erysipelas, tetanus, hydrophobia, surgical tuberculosis, actinimycosis, anthrax, and glanders. Many of the references and illustrations are taken from German authors which are not readily accessible to English speaking students. These subjects are handled by the author as we have never seen them treated before, so that this work is more suitable for the professor than the student. The author seems to have had a very large personal experience, which is freely made use of in the text, besides which he is familiar with almost all that has been written in English and German on the above topics. We con-