reference was made to the practice of introducing iodoform or other gauze into the uterus to serve the useful purpose of keeping diseased surfaces separate, and so to allow a quicker return to the normal condition.

An interesting discussion followed the reading of this paper.

II.—EXHIBITION OF BOOKS, INSTRUMENTS, AND SPECIMENS.

Dr. James W. Allan exhibited a number of interesting drawings illustrative of various forms of disease.

Dr. Alexander Paterson showed copies of the works of Scultetus and John of Goddesden (*Rosa Anglica*).

Dr. T. W. Jenkins showed (1) the 1678 translation of the works of Ambroise Paré; (2) forceps for introducing gauze into the uterine cavity.

REVIEWS.

Modern Developments of Harvey's Work: The Harveian Oration, 1894, Delivered before the Royal College of Physicians, 18th October, 1894. By T. LAUDER BRUNTON, M.D., F.R.S. London: Macmillan & Co.

THOSE who read with delight, nearly four years ago, his lecture *On the Method of Zadig in Medicine*, will welcome this oration by Dr. Lauder Brunton. The less serious aspect of medicine, however, is not touched upon to the same extent in this as in the earlier essay—partly, perhaps, on account of the circumstances under which the Harveian oration of 1894 was delivered. The Royal College of Physicians was still mourning the loss of its late President, Sir Andrew Clark, and the sense of this loss seems to be ever present to the mind of the orator. A year has elapsed since Dr. Brunton spoke, and more of the mighty have fallen. Two of the foremost leaders of science, whose work was eulogised by the orator, were living then, and are now departed; Ludwig died in April and Pasteur in September of last year.

The annual oration which bears his name was instituted by Harvey at the Royal College of Physicians in order to commemorate the benefactors of the College. It is not necessary, therefore, that Harvey himself should be commemorated more than others. Dr. Lauder Brunton accordingly selected different portions of Harvey's work, and showed the

great advances that have been made on Harvey's results by more recent investigators.

Soon after the outset the orator warns us how the past is often forgotten in undue glorification of the present. For instance, it was discovered about twenty years ago, by independent observation, that the *venæ cavæ* and pulmonary veins possess the power of contraction. Yet this fact was known to Haller almost one hundred and forty years ago.

Harvey knew that drugs applied externally are absorbed, and act on the body; but, curiously enough, their action when injected into the blood appears to have been first tried by Sir Christopher Wren, the architect of St. Paul's.

Dr. Brunton pays a well-deserved tribute to the memory of the late Professor Sharpey, and also to the work and character of Ludwig. We shall quote here some of the words he uses with regard to the latter, one of his own masters (now deceased):—"Like Sharpey, Ludwig is a great teacher, and, like the great architects of the Middle Ages—who built the wonderful cathedrals which all admire, and whose builder's name no man knows—Ludwig has been content to sink his own name in his anxiety for the progress of his work, and in his desire to aid his pupils. The researches which have appeared under these pupils' names have been in many instances, perhaps in most, not only suggested by Ludwig, but carried out experimentally with his own hands, and the paper which recorded the results finally written by himself. In the papers which have appeared under his pupils' names, we find their obligations to the master recorded in such terms as 'unter Mitwirkung.' But no one except those who have worked with him can understand what such 'co-operation' meant" (pp. 13, 14).

Dr. Brunton deals at some length with the nervous mechanism of the heart and blood-vessels, and particularly of the muscular vessels. He well compares the heart—with its independent power of contraction, controlled, however, by accelerator and inhibitory nerves—to a horse which is capable of going independently, and whose pace is yet increased or diminished by the spur or rein of its rider.

Three principal methods of increasing the flow of blood through the muscles are employed in the treatment of heart disease:—(1) absolute rest in bed with massage; (2) graduated movements of the muscles of the limbs and body while the patient stands still (Schott's method); (3) graduated exercises in walking and climbing (Oertel's method). Harvey was acquainted with a certain kind of massage, for he tells of a

man who "fell into a strange disorder, suffering from extreme compression and pain in the heart and breast, from which he only received some little relief at last when the whole of his chest was pummelled by a strong man, as the baker kneads dough" (p. 28).

A reference is made to the zymogens and antitoxins. This, however, is somewhat brief, for facts here are not yet so definitely ascertained, and fancy comes more into play.

Finally, the orator concludes his able address by exhorting the Fellows of the College to follow the example of Harvey and of their late President by continuing in mutual love and affection among themselves.

The Dynamics of Life: An Address delivered before the Medical Society of Manchester, 3rd October, 1894. By W. R. GOWERS, M.D., F.R.S. London: J. and A. Churchill.

ALL that comes from Dr. Gowers, versatile as he is, is welcome. He is a neurologist and a clinician of the highest order. He was, we understand, the first Fellow of the Royal Society whose etchings obtained a place on the walls of the Royal Academy. He has more recently been exerting himself to secure a position for phonography as one of the methods of clinical medicine, and now he comes before us in the rôle of natural philosopher.

Truth to tell, this essay or address, delivered though it was to a medical society, is no light reading. Its pages cannot be hastily scanned, but must be read slowly, and with care, if the meaning is to be fully grasped. The fundamental idea takes us back many years, to the time when we read Tyndall's treatise on the philosophic generalisation that heat is a mode of motion; and though Herbert Spencer is not named in this essay, its perusal has induced us to glance again through certain portions of the "First Principles."

It is perhaps well to point out now, as Dr. Gowers does only towards the close of the essay, that the title is somewhat misleading. It is not the dynamics of life itself that is studied, but "the dynamical processes which occur under the influence of life." The author starts with the assumption that all the elementary physical forces—sound, light, heat, electricity, &c.—are modes of motion. The movement is of the molecules, submolecules, and atoms which make up the mass that is giving off sound, heat, &c. Alterations in the physical condition of a body—in its temperature, electrical