manner of performing the different operations. One large plate is peculiarly interesting. It represents the manner of removing the leg below the knee-joint. The surgeons are dressed in wigs and tails, laced coats, and knee-breeches. The patient is seated in a large arm-chair ; one assistant holds the limb above the knee, a second holds the foot. and the operator is represented as sawing through the bone. We are told that the "antient surgeons," in amputating the foot at the tarsus or metatarsus, used a large chisel and mallet, o' and sometimes a large pair of cutting pincers, and then treated and healed the wound with balsams. But Heister in his voluminous work improves upon the practice of the "antient surgeons." He advises that the dressings of the stump be made with a pledgit of lint, with small linen compresses upon the ends of the divided arteries, previously secured by ligature. But, he adds, that, in his own opinion, it would be better to apply no compresses to the arteries or bone. Although such full directions are given throughout Heister's book, we do not find therein any reference made to the rate of mortality occurring after operations as then performed. It was stated, long before even the days of Heister, that a surgeon skilled in his art was "more than armies to the public weal." If that were the case in remote times, the surgeon of the present day must be worth more than many armies to the public weal. For, perhaps, there is scarcely any department of science and art in which greater advances have been made during recent periods.

Mr. Frederick Page, surgeon to the Royal Infirmary, Newcastle-on-Tyne, has reprinted from the "Northumberland and Durham Medical Society's Transactions," his report on the results of major operations treated antiseptically in the Royal Infirmary during the eleven years and nine months ending December 31st, 1889. Mr. Page includes the following under the heading major operations, viz., double amputations, hip joint, thigh, knee joint, leg, ankle joint, shoulder joint, arm, forearm, and wrist. The total number of amputations during the period noted above is 536, with 42 deaths. or a mortality of 7.8 per cent. 201 were operated upon for injury with 25 deaths, or 12.4 per cent. 335 amputations were for disease, and 17 patients died, or 5 per cent. During the year 1889 it was found necessary to perform 54 major amputations. On two occasions a double operation was performed. Five patients died and all the others recovered. The mortality is, therefore, 9 6 per cent. Twenty more of the operations were for disease, and two patients died. No death followed an amputation performed for disease in the years 1888 and 1887, so that during the last three years there were 101 consecutive amputations for disease with only two deaths. Mr. Page observes "a better result can hardly be looked for." Evidently Mr. Page attributes a considerable proportion of success to antiseptic treatment. Recently there has been rather a disposition to place less confidence in antiseptics, and more in perfect cleanliness, which, however, is practically antiseptic treatment. But as compared with surgery, in the days of Heister, there are other reasons besides antiseptics which tend to success. These are the use of anæsthetics, improved instruments and ligatures, improved methods of applying the latter, greater skill on the part of the operator, and not delaying operation till the case is hopeless.

THERAPEUTICS.

CANNABIS INDICA.

Dr. J. Russell Reynolds, physician-in-ordinary to Her Majesty's household, has published his experience on the therapeutical uses and toxic effects of Cannabis indica, or Indian hemp. After thirty years' experience of the drug, Dr. Russell Reynolds speaks with a considerable amount of authority. Some of the most markedly valuable results are obtained in certain mental conditions. In senile insomnia, with wandering, Dr. Reynolds has found nothing comparable in utility to Indian hemp extract, in doses of one-quarter to one-third of a grain. In the night restlessness of patients with general paralysis it has proved of eminent utility. But in alcoholic delirium and in melancholia it is not recommended. In painful maladies it is very useful. Neuralgia, periodic or not, often yields to it, even after long durations. Very many victims of migraine have for years kept their sufferings in abeyance by taking hemp at the moment of threatening of an attack. It is also a valuable adjunct to mercury, iodine, or other drugs, but Dr. Reynolds has found hemp almost useless in sciatica, myalqia, pleurodynia and lumbago. The pains that occur only on movement do not, in Dr. Reynolds' experience, receive relief from Indian hemp. It has proved useless also for gastrodynia, enteralgia, and almost all hysterical pains. But it has relieved the lightning pains of the ataxic patient, and also the tingling numbress, anæsthesia, and formication common in the limbs of gouty people. In clonic spasms, whether of

the epileptoid or choreoid type, it is useful. But in true chronic epilepsy it is useless. An attack of violent convulsions in an over-fed man, who has had a heavy supper, may be stopped by a full dose of hemp, if they do not cease after clearing the "primæ viæ." It is also a valuable remedy in the nocturnal cramps of old and gouty people In some cases it relieves spasmodic asthma, and is of great service in spasmodic dysmenorrhœa. The drug is one, however, liable to great variations of strength. For practical purposes its active principle has not been separated, and extracts and tinctures cannot be made uniform, because the hemp grown at different seasons and in different places varies. Individuals also differ widely as to their susceptibility to the action of hemp. For an adult, Dr. Reynolds always begins with one-fifth of a grain, and for a child one-tenth. The best form is the tincture, as pills become hard, and the tincture should be taken in drops on sugar or bread. The pharma copœia tincture contains one grain in twenty minims.

Now it has long been observed that cannabis indica does not affect all persons in a similar manner, and race and climate are also supposed to modify its influence. It has also been observed that women are more powerfully affected by the drug than men, to which Dr. Reynolds does not refer. Its effects have been compared with those of opium. But this comparison can scarcely be made, for the effects are very different. The leaves of the hemp plant are much used in the East, under the name of "bhang," for smoking and to make an infusion of. A resinous exudation from the plant called *churns* is made into sweetmeats. The very small leaves are known as gungah, and gungah has been termed in the Persian "the increaser of pleasure and the assuager of grief The hashish of the Arabs is made from the tender tops of the plant after flowering. It is supposed that the "Nepenthes of Homer was hemp, and that when "Bright Helen mixed a mirth-inspiring bowl," some part of the hemp plant was used by the fair compoundress. A person under the influence of Indian hemp is often affected much as if he were under alcohol. There is excitement, laughter, afterwards stupidity and insensibility. Before the latter conditions result, a characteristic sensation has been described, as if the brain were boiling over. Some time ago the value of cannabis in dica was tested by Fronmuller in 1,000 cases, with success in little more than half that number. Fronmuller said a large dose was required to produce a hypnotic effect, as much as eight grains of the spirituous extract.

It has been mentioned above that the pharmacopecial preparations, the tincture and the extract, differ in strength, and we do not see how this is to be avoided, for the active principle of the plant, whatever it may be, probably differs at various seasons. We are told in the B. P. to use the dried flowering or fruiting tops of the female plants of cannabis sativa, from which the resin has not been removed. We believe, however, that it would be better to use the resinous exudation alone, which would be more likely to afford constant results. We are not aware that this has been tried, although a cannabin taunas has been prepared from the hemp plant, which is said to be a useful hypnotic. When we have to deal with a medicine so likely to differ in strength as the pharmacopeial preparations of cannabis indica, and when we recollect that fear, idiosyncrasies, or constitutions, or temperaments, render the action of many drugs uncertain, Dr. Reynolds' caution about commencing with very small doses is not misplaced. It is better to test the patient's tolerance, and gradually increase the dose. For although the toxic effects of cannabis indica are usually recovered from, unpleasant results may be produced, some of which have already been mentioned. Death, however, from even large doses of Indian hemp is very rare. It is often used in India for the purpose of inducing insensibility in order to facilitate theft. The active principle is considered to be a resinous body, cannabin. It also contains a velatile oil, and probably a volatile alkaloid. Warden and Waddell are of opinion, from the results of experiments, that both the oil and alkaloid are inert. It is a subject which still requires investigation by the chemists.

THE PRACTITIONER'S BOOKSHELF.

[Books for Review should be sent to The EDITOR, The Lodge, Porchester Square, W.]

LEÇONS DE GYNÉCOLOGIE OPÉRATOIRE*.

These twenty five lessons constitute a complete course of operative gynecological lectures. We have looked through the volume from the preliminary chapter to the end, and have found it well up to date. The authors have not only done much original work themselves but have kept abreast of the times, and we notice that the names of authors of all countries and their methods of treatment are repeatedly quoted, often fully. In speaking of the method of Apostoli for the cure of fibroids it is stated that though several successful results ensued from its use, yet the amelioration produced was not so quick as when the faradic currents generated by the small apparatus of Gaiffe were used. Page 189. A considerable number of pessaries are figured, and the methods of placing some of them. Hodge's pessary for retroversion and Graily Hewitt's for anteversion are both recognized as most valuable instruments. Professor Valliet describes his ingenious instrument for pre-venting venting prolapsus; the action is practically that of a Hodge, but there is a double curve in the anterior portion, which tends to produce more support to the vesical portion of the vaginal wall. Lawson Tait's method of restoring the perinæum after rupture is described in extenso, with plates of the various steps of the operation. We note that the book contains no less than 200 illustrations. Some of these are remarkably good, but others are too blurred to make out the dotted lines and letters of explanation. As the work is got up merely stitched and in paper covers, like so many French text books, and as the cost is probably much less than a work of similar size published in this country, we must not be too particular with regard to this point. The authors are quite aware of the importance of antiseptics in gynecology, and the various methods of their use are noted in full. We find in this work a very full description of the treatment of uterine cancer. The authors state that Freund's concertion have besterectomy is, at present, that Freund's operation, laparo-hysterectomy is, at present, generally abandoned and ought only to be used when it is found that the inferior aperture is too small to extract the utering that the inferior aperture is too small to extract the uterine mass after it has been separated from below. Professor Vulliet in suitable cases uses the actual cautery; he

Par MM. Vulliet et Lutand. Paris : (A. Maloine, 1890.) Pp. 500. Edition deuxieme.

figures a lamp for heating the irons on the principle of the glass blower's apparatus, so that a number of cauteries can be heated at once. His method is to dilate the uterus and then by a combination of excision and cauterisation to clear away the carcinomatous growth. His statistics give an encouraging outlook to this form of operation. There is also a well-illustrated chapter on uterine massage, which method of cure is still tentatively before the profession. In conclusion, we consider this a most valuable work as giving a clear account of the state of this special branch of medicine in the schools of Geneva (Vulliet) and Paris (Lutaud). Certain chapters doubtless are more fully written than in similar works published in this country ; this, we take it, is because the racial habits of thought of our friends and neighbours across the sea are different from ours. We notice but few mistakes in the spelling of English names. University College, London, is, however called the College of the University of London, which it was originally, but has long ceased to be. There is a full index to the lessons and a list of the plates.

THE DISEASES AND DISORDERS OF THE OX.*

This is a popular book on the ox, especially with regard to bovine medicine, and, we should imagine, occupies such a place in veterinary science as the various "domestic medicines" do in human medicine. It is well written and fairly up to date, but it is spoilt by too much diffuseness and preachiness. In a book for use and practice we want to go straight to the point, not to wander off into the bye-paths of religious and philosophical disquisition. The Hendon cases of cow disease and their bearing on scarlet fever are fully noted. There is a fair account of the varieties of variola and the theories and practice of vaccination. The use of antiseptics is insisted on, but not enough. There ought to be, as far as possible, as much care taken to prevent germ disease in operations on animals as on man. We know it is confidently stated by some that domestic animals are not so susceptible to bacterial influences as that "superior animal" man is, but we are thoroughly sceptical as to this alleged immunity. Quite rightly, this book insists on the antiseptic plan with regard to parturient sheep. We remember a plague of puerperal septizmia in a valuable lambing flock which was stayed by moving the remaining ewes, which had to lamb down into a distant field, and making the shepherd purify his hands and arms with carbolic acid. In this case it was noted that whenever the ewe required aid, she invariably died in a few days after from fever, though those which, after moving, required the same assistance, remained healthy. The same shepherd attended both sets of ewes, only latterly he was disinfected. We made many post-mortems on those ewes, and they presented much the same appearances as are met with in the puerperal fever of women, while, as in the human cases, there is an intense power of poisoning existing in the corpse, which makes the shepherd very careful in "flawing," or skinning the sheep which have died from this disease. With regard to this point, the book should insist, over and over again, in the obstetrical operations on the cow depicted, that the operator ought to scrupulously cleanse his hands and arms with perchloride solution or other proper disinfectant before introducing his hand into the passages. We have known cases of puerperal fever in the cow produced by the want of these elementary principles of hygiene.

The chapter on anatomy is fragmentary rather than elementary; in a second edition this should be corrected. On the whole, we can commend the book as being an honest attempt to place before the public the state of knowledge with regard to the pathology of the ox in its relation to that of man, and also as a handy book of reference for the treatment of our bovine dependents.

* "The Diseases and Disorders of the Ox, with some account of the Diseases of the Sheep," by George Gresswell; and "Additions on Human and Comparative Pathology," by Dr. Albert Gresswell. (Lon-don: W. H. Allen and Co., 1889.)