in the latter conditions. It is well known that at various times spilepsy, idiocy, and some forms of insanity, have been treated by massage and gymnastics; but, fortunately, we now hear very little

of such therapeutical aberrations.

It appears to me that diseases of the brain and spinal cord must, on account of the anatomical situation of these organs, be inaccessible to the influence of massage, which can only be applicable to more superficial parts of the body. Apart from this, however, it is important to consider that many of the most important diseases of these organs are of an inflammatory or irritant character, either primarily or secondarily; and this should make it self-evident that massage should not be used for their treatment, even if the suffering parts could be reached by it. I will here only allude to many forms of cerebral paralysis from hæmorrhage, embolism, and thrombosis, which are followed by selerosing myelitis of the pyramidal strands; and most forms of primary lateral, posterior, or insular selerosis of the spinal cord.

It is only charitable to assume that the advocates of massage, who recommend their favourite procedure in such and similar cases, are somewhat at sea with regard to the pathology and diagnosis of dis-

eases of the nervous system.

That which may be good for developing and strengthening healthy muscles, or muscles which have been enfeebled by disuse or certain local morbid conditions, etc., is not for that reason suitable for the treatment of muscular paralysis owing to central disease. In most cases of lateral and insular sclerosis, which are, unfortunately, now much treated with massage and exercises, rest is indicated rather than active exertion; and overstraining of the enfeebled muscles acts prejudicially on the state of the nervous centres. I have recently seen quite a number of instances in which the central disease had been rendered palpably worse by procedures of this kind; and, in a case of cerebral paralysis which was some time ago under my care, the patient had, after four such sittings, been seized with collapse, which nearly carried him off.

CANNABIS INDICA.

BY G. C. WALLICH, M.D., Surgeon-Major, Retired List.

THE following facts, though bearing but indirectly upon those special medical uses of Indian hemp to which attention has been drawn in recent issues of the BRITISH MEDICAL JOURNAL, may serve in some measure to explain the conflicting estimates that have been formed of the general value of the drug by different observers.

My knowledge of Indian hemp as a therapeutic agent dates from the year 1838, when its properties were communicated to me in Calcutta by my friend Dr. W.B. O'Shaughnessy; and at his request, I made the sketch of the plant which is appended to his earliest memoir on the subject. During my subsequent service in India, I had many opportunities of testing the efficacy of Indian hemp in cases of cholera, tetanus, hydrophobia, and various minor disorders. But, though fully convinced of its value, like many other medical men, I soon became aware that the action of the drug was singularly uncertain, and that doses which in one locality produced a given effect, frequently failed to produce the same effect in another. Eventually it became manifest that this uncertain action was due to inherent differences in the composition of the resinous extract of the plant, incident on its being grown either in the plains or in the hill-districts of India. The drug had not, at this period, been supplied on indent to military hospitals at a distance from the Presidency; and those who wanted to employ it experimentally in their practice were, therefore, obliged to produce it for themselves from the native drug-dealers, either in the form of the crude dried plant or of the inspissated extract, which went by the native name of "churrus."

The fact which came to light was, that the therapeutic efficacy of the plant grown in the plains is very markedly inferior to that of the plant when produced in the hill-districts. I had no means at my command of ascertaining the particular conditions of soil, temperature, and mode of culture and preparation, upon which this superiority of the hill-plant is dependent; but it is now quite impossible to doubt that the conditions are of an analogous kind to those which, in a major degree, cause the same species of cannabis to produce a highly energetic medicinal ingredient in tropical and subtropical countries, whilst they exercise no such effect upon it when grown in our own temperate latitudes.

The fact of the superiority of the extract and mixture prepared from the hill-grown plant was, however, suggested to my mind by

what had been communicated to me in the years 1841 and 1842 by Dr. W. L. MacGregor, at Kurnal, a station then notorious for its extreme unhealthiness, and visited, at the period referred to, by consecutive outbreaks of cholera in its worst form, acute dysentery, and enteric fever.

Dr. MacGregor claimed to have successfully treated the two firstnamed of these formidable diseases by such enormous doses of "hill-opium" and croton-oil combined, that, had I not myself witnessed the results, I should have hesitated to vouch for their authenticity. Fortunately, those who would like to see a formal record of my friend's practice will find it in his work On the Principal Diseases affecting European and Native Soldiers in the North-Western Provinces of India, by Surgeon W. L. MacGregor, M.D., published in Calcutta in 1843. Meanwhile, it may interest the readers of the JOURNAL to learn that it was not unusual with him to give as much as "fifteen drops of croton-oil in the course of twenty minutes, or nineteen drachms of laudanum in the same number of successive hours, the doses of croton-oil being occasionally increased to twenty drops," without causing any untoward consequences whatever. Dr. MacGregor further states that "the smallest dose of opium given for sedative purposes in hypercatharsis, was from three to six grains; whilst in cholera it was given to a much greater extent."

On the merits or demerits of this practice I have no desire to express any opinion; but of this fact I still entertain a vivid recollection (and what I state can easily be confirmed by other medical officers who were stationed at Kurnal in the years named), that many cases did unquestionably survive and recover, if they did not actually owe their recovery to this supremely heroic treatment. Under any circumstances, it must, I think, tend to convince all who give the matter their serious thought, that there is even yet a good deal to be learned concerning the action of some of the most powerful known drugs upon the human organism, when it is already

under the fierce spell of some form of blood-poisoning.

WOOLSORTERS' DISEASE.

BY THOMAS WILMOT, L.R.C.P., M.R.C.S., Bradford.

THE following interesting case came under my observation. Wm. Hird, aged 41, a "carder," worked for eight weeks on night-turn, up to the 12th of May. He was a man of intemperate habits, but had always had very good health up to the time of the present illness. He was taken ill about mid-day on May 13th, but had no rigor or vomiting. I was called to see him about 4 A.M. on the 14th of May, and found him in the following condition.

He was lying on his right side, and breathing quickly, and complained of being very poorly and feeling a tightness across the chest; but he had no pain, and only a very slight cough; his ears; hands, and feet were bluish and cold, the skin was covered with a cold clammy perspiration; the temperature was subnormal in the axilla and rectum. The tongue was covered with a thick yellow fur, and he had a great thirst on him, was almost pulseless, and in a state of collapse, and was evidently in a dying condition. Physical examination revealed a few mucous râles over the chest, but no crepitation or dulness.

I came to the conclusion that the man was suffering from the form of blood-peisoning known as "woolsorters' disease." Dr. Bell saw the patient with me about 10.30 A.M. the same day, and agreed with me in my diagnosis. He was then rapidly sinking, and died an hour after our visit. Some blood was taken from the back of the hand, which did not flow at all freely; it was dark and stagnant. No bacilli were found in the blood taken before death. He lived about

twenty-eight hours from the onset.

I made a post mortem examination fifty-four hours after death, in the presence of Dr. Bell. His body was fairly well neurished; there was a slight discoloration at the upper part of the thorax (but considering the heat at the time, the body was in a good state of preservation). There were no external marks or bruises. The brain was healthy. On removing the sternum, I found a gelatinous kind of substance in the enterior mediastinum, of a yellow colour. Clear fluid flowed freely from both pleural cavities; the right contained between three and four pints, the left two or three pints. The right lung was collapsed, and the left was very slightly congested. There were no signs of inflammation in either the lungs or the pleura. The pericardium was full of clear fluid. On opening the heart, the cavities were found quite empty, the valves were natural; there was a distinct staining in the left ventricle, which was continued into the aorta. The blood was dark, and very fluid. The trachea contained a little frothy mucus; there was no enlargement of the