

495. CANNABIS SATIVA, *Linn.* CANNABIS INDICA. Indian Hemp. *Nat. Ord.* Urticeæ, grown in India. The dried flowering tops of the female plant, from which the resin has not been removed (*Gunjah*). *Churrus* is the Hindústani name of the resinous exudation from the leaves, stems, and flowers; and *Bang*, *Subjee*, or *Sidhee*, that of the larger leaves and capsules without the stalks. *Hashish* (*Arab.*) consists of the dried tops and tender parts of the plant collected immediately after inflorescence.

Med. Prop. and Action. The intoxicating properties of Indian Hemp appear to have been known for a long period in the East; but its medicinal qualities were first investigated by Sir W. O'Shaughnessy, in 1838. The first effect of a large dose, he ob-

serves, is decidedly stimulant, producing increased arterial action and a great exhilaration of spirits; the patient is very talkative, singing songs, asking for food, and declaring himself in perfect health. This state gradually passing off, is followed by a complete state of catalepsy, which lasts for some hours, and then subsides, leaving the patient without headache, pain, or any other ill consequence. In all the cases in which it was tried, the effects were closely analogous; alleviation of pain in most, remarkable increase of appetite, unequivocal aphrodisia, and great mental cheerfulness. The pupils were freely contractible on the approach of light. In those who habituate themselves greatly to its use, or in those who try it for the first time, there occasionally occurs a species of insanity closely resembling delirium tremens. This state is at once recognized by the strange balancing gait of the patient, a constant rubbing of the hands, perpetual giggling, and a propensity to caress the bystanders. The eye wears an expression of cunning and merriment; there is no increase of heat or frequency of the circulation; the skin and functions remain natural. In a few instances the patients are violent, in many highly aphrodisiac, and all voraciously hungry. A blister to the nape of the neck, antimonials, and salines are sufficient to remove this state. Dr. Anstie (p. 189) draws an interesting comparison between the inebriation caused by hashish and that by alcohol and chloroform. Upon the brain of civilized men, he remarks, this narcotic rarely works so as to produce that fierce uncontrollable outburst of passion which is so often witnessed in the drunkenness due to either of the other two agents. Its effects upon the mind are almost equally decisive as regards the obliteration or disturbance of the consciousness of surrounding circumstances as those of alcohol or chloroform; but instead of violent bursts of passion, a placid, self-complacent vanity is developed, which makes the subject of it feel himself the greatest being, physically and mentally, in the universe. Yet even hashish, taken by the half savage of some wild Oriental tribe, has as powerful an influence in letting loose fierce passions as the rawest whisky has upon the most brutish navy. After extensive trials with Indian hemp, Dr. Clendenning* characterizes it as "a soporific or hypnotic, in conciliating sleep; as an anodyne, in lulling irritation; as an antispasmodic in checking cough and cramp; and as a nervine stimulant, in removing languor and anxiety." Much variety of opinion has been expressed as to the hypnotic powers of Indian hemp. The fact seems to be that it is not, in the true sense of the word, a narcotic, but that by its powerful anodyne operation it relieves pain and spasm so effectually that sleep becomes possible; it is thus *indirectly* soporific. The great objection to its use is the uncertainty of its operation; some constitutions being little affected by it. A dose which will produce powerful effects in one individual, will perhaps exercise little or no influence on another. Dr. Bryant† found the tincture (℞xx every four hours) act effectually as a diuretic, especially when diuresis had been first established by other remedies; it seemed then to maintain the action already begun. Drs. Ballard and Garrod (p. 41) observed that it communicates a peculiar odor to the urine when taken internally; but subsequent writers mention no such effect. According to Dr. Christison, it possesses the power of inducing uterine contractions in labor. Larger doses are stated by O'Shaughnessy to be required in cold than in hot climates to produce the equivalent effects. Its effects appear to reside in an acrid resin, *Cannabin*.

Dose: Of the Extract, gr. ¼–gr. j. *Of the Tincture* (Extract of Indian Hemp, oz. j, Rect. Sp. Oj), ℞v–xx.

496. *Therapeutic Uses. Nervous and Spasmodic Diseases.* In *Tetanus*, cannabis has been largely employed, but with varying results. The trials with it in twenty-six cases, by Dr. Laurie,‡ of Glasgow, tended to show that it possesses little or no influence; whilst the results obtained by

* Med.-Chir. Trans., vol. xxvi.

† L'Union Méd., 1857.

‡ London and Ed. Monthly Journ., Nov. 1844.

O'Shaughnessy,* Prof. Miller,† of Edinburgh, and Dr. Chuckerbutty,‡ of Calcutta, are such as to warrant a belief that it is a remedy of real value in these cases; and Dr. Miller observes, that in those cases in which it failed to cure, it never failed to afford relief. He advises gr. iij of the extract or gutt. xxx of the tincture, every half hour, hour, or two hours, the object being to produce and maintain narcotism. At the same time he gave purgatives, and applied cold to the spine. Dr. Chuckerbutty gave in his cases ℥xxx–xl of the tincture every two or three hours. The results, on the whole, are encouraging. O'Shaughnessy mentions a case of *Hydrophobia*, in which the extract, in large doses, afforded great temporary relief, though the result was fatal.

497. In *Chorea*, it has been thought useful, but Dr. Radcliffe and Dr. Hillier (p. 236) think slightly of its power. Dr. Douglas,§ however, relates a case in which it proved successful; ℥vj of the tincture every two hours. He considers that small and often-repeated doses, like the above, are more safe and effective than larger doses at longer intervals. In the *Sleeplessness attendant on severe Chorea*, Dr. Oxley|| states that he has found the tincture more effectual than any other hypnotic. He prescribes ℥x for a child æt. 7, and so on. In *Epilepsy*, it has also been advised, but Dr. Russell Reynolds (ii, p. 280) states that though it has been found to relieve headache and restlessness, it has not cured nor notably relieved epilepsy.

498. In *Delirium Tremens*, O'Shaughnessy, after an extensive trial with cannabis, reported highly of its powers, but it does not appear to have come into general use. A case in which its effects were very manifest is related by Mr. H. J. Tyrrell,¶ after three doses of ℥xxx of the tincture every third hour; opium in this case was contraindicated, and capsicum had failed. When there is any reason, from the quality of the pulse, to believe that the circulation is much enfeebled, Dr. Anstie (ii, p. 91) regards Indian hemp as preferable to opium, and from it, he states, he has seen excellent results. He prescribes gr. $\frac{1}{4}$ – $\frac{1}{2}$ of a good extract. In *Nocturnal Delirium occurring in Softening of the Brain*, judicious administration of liquid nourishment, with small quantities of wine, may suffice to give relief. Should this fail, the most useful medicine is Ext. Cannabis, in doses of gr. $\frac{1}{4}$ – $\frac{1}{2}$. (Drs. Russell Reynolds and Bastian)**

499. In *Sciatica, Tic Douloureux, and other forms of Neuralgia*, Indian hemp ranks next in value to morphia and atropia (*q. v.*). It has been especially brought forward by Dr. Reynolds. Of a good extract, gr. $\frac{1}{4}$ to gr. $\frac{1}{2}$, rarely gr. j, in the form of pill, is very effective in some forms of neuralgia, particularly in *Clavus hystericus* and *Migraina*. Even in the severest and most intractable forms it often palliates greatly. It should be given every night, whether there be pain or not. (Dr. Anstie, ii, p. 749.) Dr. Fuller (p. 458) states that the tincture (℥xij–xx) often allays

* Bengal Disp., p. 598.

† Brit. and For. Med.-Chir. Rev., Jan. 1851.

‡ Ind. Ann. of Med. Sci., July, 1868.

§ Edin. Med. Journ., March, 1869.

|| Liverpool Med. and Surg. Reports, 1868.

¶ Med. Press, March 13, 1867.

** Reynolds's System of Med., vol. ii, p. 477.

pain and produces repose after other sedatives have failed. Its action, however, as he justly remarks, is capricious. Mr. Donovan* quotes several cases in which it was of unequivocal benefit.

500. *In Chronic Rheumatism*, when opiates disagree or fail to give relief, recourse may be had to Indian hemp. Dr. Fuller mentions some cases in which it produced speedy and complete relief, when other remedies had failed to induce sleep. Caution, however, is necessary in its use; if it fails in producing a narcotic effect, it is apt, even in doses of $\text{xxxij}-\text{xv}$ of the tincture, to produce considerable excitement; hence it should be restricted to cases accompanied by nervous exhaustion. It is applicable to the very cases in which opium, belladonna, and other pure narcotics so often prove useless; whilst in cases characterized by nervous excitement, hot skin, or hurried pulse, it proves rather hurtful than beneficial. (Fuller, p. 424.)

501. *In Asthma*, it has obtained some reputation, which, from its physiological action, Dr. Hyde Salter† observes, may be well deserved, but in the few cases in which he gave it a trial, it proved a complete failure. *In Hay Fever and Hay Asthma*, Dr. Mackenzie‡ states that he has seen such favorable effects from Indian hemp, in cases of morbid irritability of the nervous system, that he is induced to recommend a trial of it in the present disease. *In Senile Catarrh*, it is highly spoken of by Dr. Waring-Curran,§ as a sedative and expectorant. He prescribes the following mixture: R. T. Cannabis fij , P. Trag. Co. ʒj , Æther Chloric ʒjss. , Aq. Anisi ad ʒvj . M. Dose, fl. oz. j every second hour.

502. *In Menorrhagia and Uterine Hemorrhage*, the tincture of hemp, in doses of gutt. v-x, thrice daily, has been successfully employed by Dr. Churchill,|| of Dublin, on the recommendation of Dr. Macguire. Dr. Churchill, after an extensive trial of its virtues, states that it was productive of extraordinary success, both in the number relieved and the rapidity of cure. *In impending Abortion*, he also found it very effectual in several cases. Dr. McClintock found it capable of controlling hemorrhage arising from the presence of fibrous tumors of the uterus. *In Cancer of the Uterus*, Dr. Graily Hewitt (p. 379) remarks that Indian hemp, in many cases, undoubtedly exercises a marked influence in allaying or preventing pain. Like others, however, he finds it affect different individuals very unequally. *In Dysmenorrhœa*, he also regards it as a valuable medicine in certain cases (p. 443).

503. *In lingering and protracted Labors depending upon Atony of the Uterus, and Insufficiency of Uterine Contractions*, Dr. Christison¶ found the tincture of Indian hemp highly serviceable. He relates several cases in which it was given with unequivocal effect. He gave it in doses of gutt. xxx, and remarks that in none of the instances in which he administered it, were the ordinary physiological effects produced; there was no

* Dublin Med. Journ., vol. xxvi, p. 401.

† On Asthma, p. 242.

‡ London Journ. of Med., July, 1851.

§ Med. Press, Sept. 9, 1868.

|| Midwifery, p. 64.

¶ Monthly Journ. of Med. Sci., 1851.

excitement or intoxicating action, and there did not seem to be the least tendency to sleep. Compared with ergot of rye, he observes: 1. While the effect of the ergot does not come on for some considerable time, that of hemp, if it is to appear, is observed within two or three minutes; 2. The action of ergot is of a lasting character; that of hemp is confined to a few pains, shortly after its administration; 3. The action of hemp is more energetic, and perhaps more certainly induced, than that of ergot.

504. *In violent Palpitation of the Heart*, Dr. Christison found the Indian hemp succeed when all other remedies had failed to afford relief. He quotes a case of twenty-one years' standing in which it had a very beneficial effect.

505. *In Eczema, with intense itching*, when morphia in large doses not only failed to procure sleep, but appeared to aggravate the severity of the pruritus, the tincture, in doses of gutt. xxv, induced sleep and comparative ease. It was continued every night for six weeks, without increasing the original dose, until the eruption was nearly removed, but the itching continued as before when the patient was awake. (Christison.) It might prove useful in *Prurigo Pudendi Muliebris*.

506. *In Cholera*, Indian hemp has been highly spoken of, especially by Dr. Willeman,* of Cairo, who relates several cases successfully treated with the tincture in repeated doses of ℞x-xxx. Sir W. O'Shaughnessy considered that there was no remedy equal to it in the treatment of the disease amongst Europeans; he found it fail with the natives. Perhaps it has fallen into unmerited neglect.

507. *In Ulcer of the Stomach*, Dr. Brinton (p. 190) remarks that the extract of hemp sometimes answers admirably as a sedative; indeed, he adds, were its effects more uniform, it might often be advantageously substituted for opium itself.

508. *In Hysteria*, Indian hemp has proved of service when other remedies have failed, but in the majority of cases it is of little use. (Dr. Russell Reynolds.)

509. *In Dropsical Affections*, the tincture (℞xx every four hours) proved effectual as a diuretic in the hands of Dr. Bryan (op. cit.); and in *Bright's Disease* it seems occasionally of service, especially when blood is present in the urine, but except as a palliative it is of little use.

* Med. Times, vol. xix, p. 58.