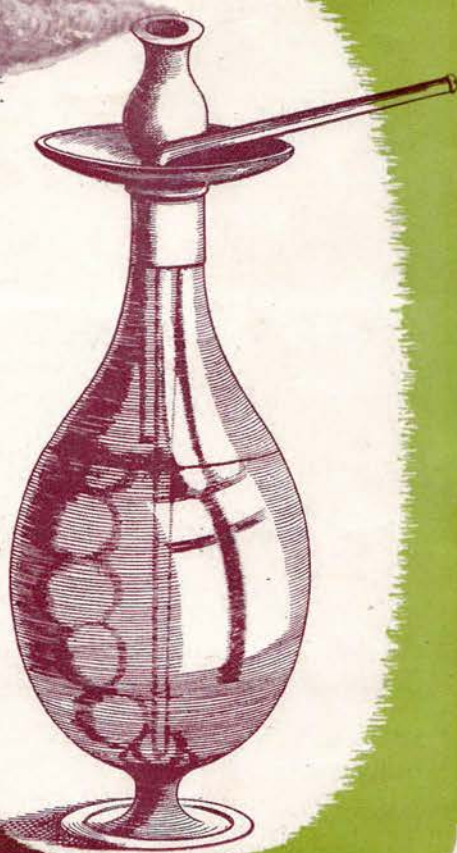
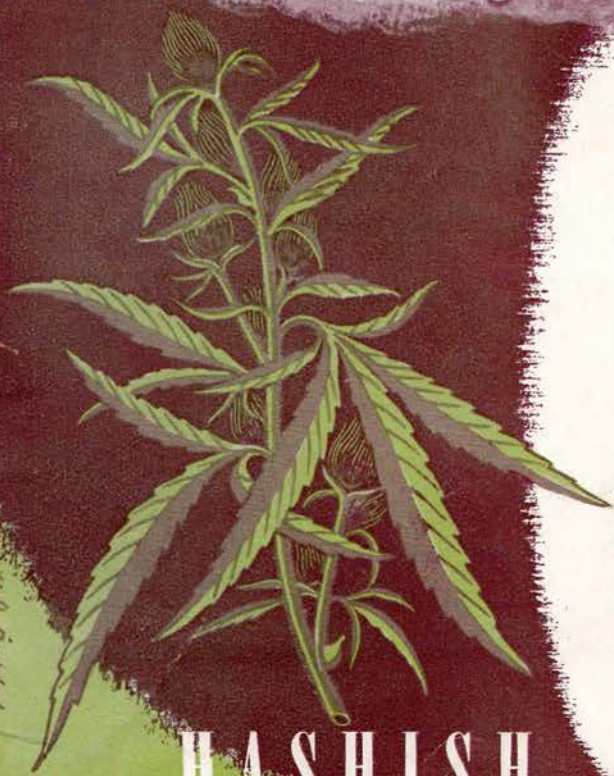
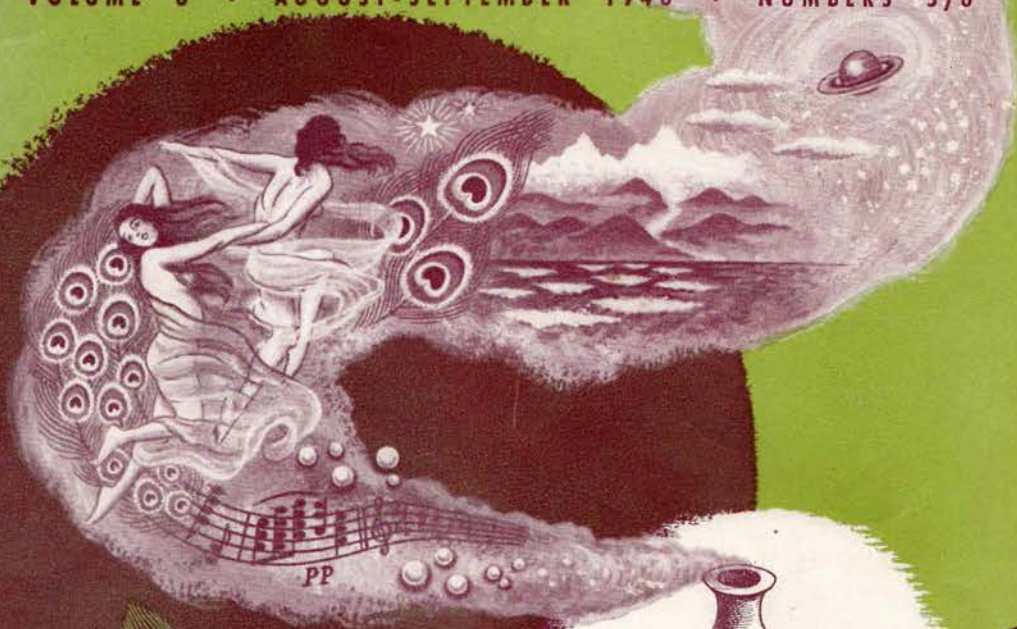


# Ciba Symposia

VOLUME 8 • AUGUST-SEPTEMBER 1946 • NUMBERS 5/6



HASHISH

W. J. B. 1946



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# Ciba Symposia

VOLUME 8  
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# HASHISH: A DRUG AND A DREAM

VICTOR ROBINSON, M.D.

AILING man has ransacked the world to find balms to ease him of his pains. And this is only natural, for what doth it profit a man if he gain the whole world and lose his digestion? Let but the tiniest nerve be inflamed, and it will bend the proudest spirit: humble is a hero with a toothache! It is doubtful if Buddha himself could have maintained his equanimity with a bit of dust on his conjunctiva. Caesar had a fever — and the eye that awed the world did lose its lustre, and the tongue that bade the Romans write his speeches in their books cried like a sick girl. Our flesh is heir to many ills, and alas when the heritage falls due. Even pride and prejudice are then forgotten, and Irishmen in need of purgatives are willing to use rhubarb grown on English soil, while the foreign Colombo gathered by the feral natives in the untamed forests of Quilimani is consumed by ladies who never saw anything wilder than a Fabian Socialist.

The modern descendant of Hippocrates draws his *materia medica* from the uttermost ends of the earth: linseed from busy Holland, and floretted marigold from the exotic Levant; cuckoo's cap from little Helvetia, and pepper-elder from ample Brazil; biting cubebs from spicy Borneo and fringed lichens from raw-winded Iceland; sweet flag from the ponds of Burma, coto bark from the thickets of Bolivia, sleeping nightshade from the woods of Algeria, brownish rhatany from the sands of Peru, purple crocus from the pastures of Greece, aromatic vanilla from the groves of Mexico, golden seal from the retreats of Canada, knotty aleppo from the plains of Kirghiz, fever-tree from the hills of Tasmania, white saunders from the mountains of Massassar. Idols are broken boldly nowadays, but the daughter of Aesculapius does not

fear, for Hygeia knows she will always have a frenzied world of worshippers to kneel at her every shrine in every land.

All the reservoirs of nature have been tapped to yield medicines for man. From the mineral kingdom we take the alkali metals, the nitrogen group, the compounds of oxygen, the healing waters, the halogens, the nitrate of silver, the sulphate of copper, the carbonate of sodium, the chloride of mercury, the hydroxide of potassium, the acetate of lead, the citrate of lithium, the oxide of calcium, and similar salts of half a hundred elements from Aluminium to Zincum.

From the vegetable kingdom we extract the potent alkaloid; all things that blossom and bloom, we knead them as we list: the broad rhizome of iris, the wrinkled root of lappa, the inspissated juice of aloes, the flower-heads of anthemis, the outer rind of orange, the inner bark of cinnamon, the thin arillode of macis, the dense sclerotium of ergot, the ovoid kernel of nutmeg, the pitted seed of rapa, the pale spores of club-moss, the spongy pith of sassafras, the bitter wood of quassia, the smoothish bark of juglans, the unripe fruit of hemlock, the fleshy bulb of scilla, the brittle leaves of senna, the velvet thallus of agaric, the balsamic resin of benzoin, the scaly strobiles of hops, the styles and stigmas of zea.

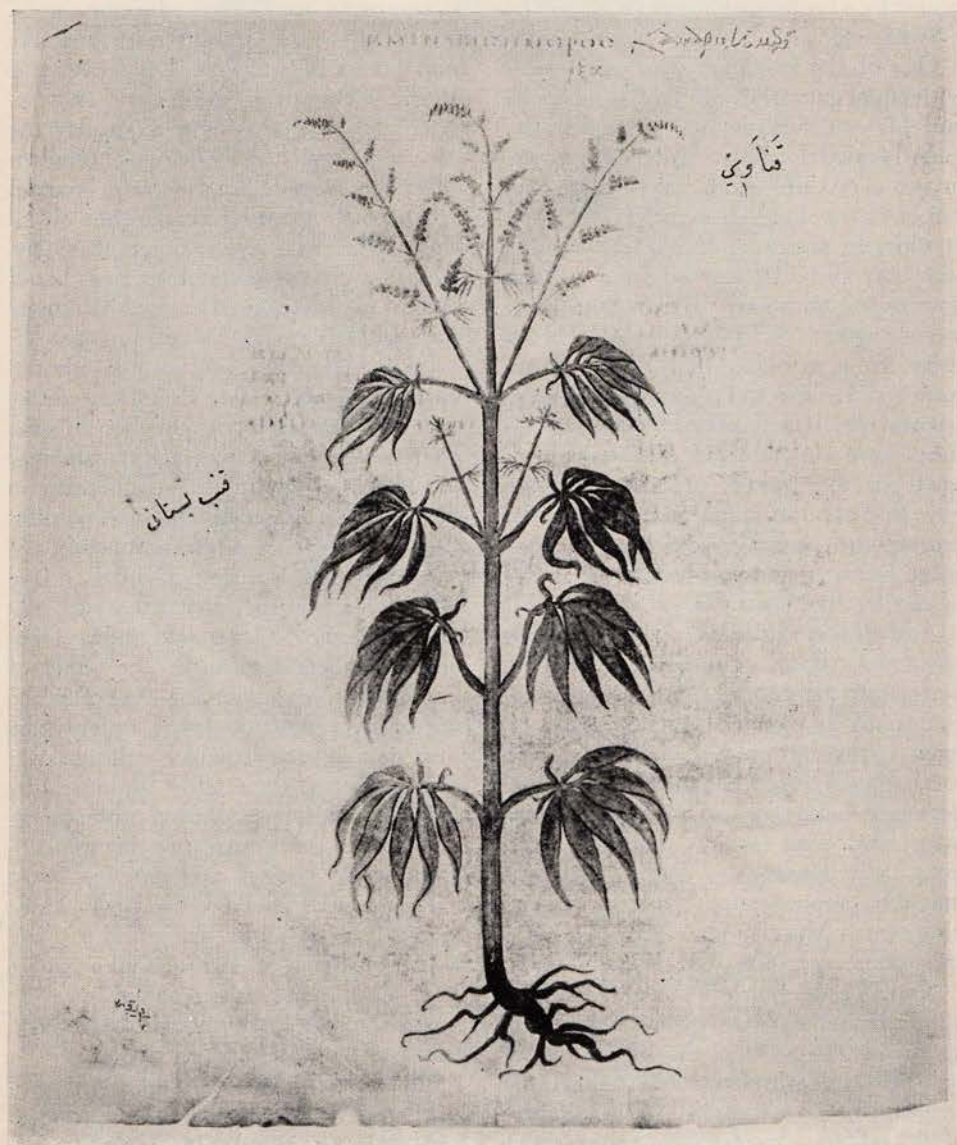
The animal kingdom has likewise been forced to bring tribute to its highest brother: we use in medicine the blood-sucking leech, the natural emulsion from the mammary glands of the cow, the internal fat from the abdomen of the hog, the coppery-green Spanish fly, the globular excrements of the leaping antelope, the fixed oil from the livers of the cod, the fresh bile of the stolid ox, the vitellus of the hen's egg, the fatty substance from the



huge head of the sperm-whale, the odorous secretion of the musk-deer, the swimming-bladder of regal fish, the inner layer of the oyster-shell, the branched skeleton of the red polyp, the dried follicles of the boring beaver, the bony horns of the crimson deer, the thyroid glands of the simple sheep, the

coagulated serum from the blood of the horse, the wax and honey from the hive of the busy bee, and even the unspeakable genus of *Blatta* was used as a diuretic and for dropsy just because Bogomolov found a crystalline principle in these insects.

Little does it matter by whom the heal-



The oldest known picture of hemp. From an illustrated Dioscorides manuscript (*Constantinopolitanus*). Vienna, National Library.



ing agent was ushered in, for mankind in its frantic search for health asks not the creed or color of its medical savior: Piosis-sewa was introduced into medicine by the redskins, buchu by the Hottentots, quassia by a Negro slave, zinc valerianate by a French prince, krameria by a Spanish refugee, ipecac by the Brazilian aborigines, guaiac by a syphilitic warrior, aspidium by a Swiss widow.

One of the few men who could wear with equal grace the laurels of both Apollo and his son Aesculapius, wrote the frequently-quoted words: "Medicine appropriates everything from every source that can be of the slightest use to anybody who is ailing in any way, or like to be ailing from any cause. It learned from a monk how to use antimony, from a Jesuit how to cure agues, from a friar how to cut for stone, from a soldier how to treat gout, from a sailor how to keep off scurvy, from a postmaster how to sound the Eustachian tube, from a dairy-maid how to prevent small-pox, and from an old market-woman how to catch the itch-insect. It borrowed acupuncture and the moxa from the Japanese heathen, and was taught the use of lobelia by the American savage."

And all these substances are daily being powdered, sifted, granulated, desiccated, percolated, macerated, distilled, sublimed, comminuted, dissolved, precipitated, filtered, strained, expressed, clarified, crystallized, ignited, fused, calcined, torrifed and deflagrated into powders, pills, wafers, capsules, ampoules, extracts, tinctures, infusions, decoctions, syrups, cordials, essences, magmas, suppositories, tablets, troches, ointments, plasters, abstracts, liniments, collodions, cataplasms and so on and so on.

And all these finished preparations have a most laudable object in view — the eradication of disease and the alleviation of pain. Ah, this is indeed a quest worth the striving for! To accomplish the quadrature of the circle, or to ferret out the secret of perpetual motion, may be highly interesting, though of problematical value only;

but when a clammy sweat bathes the brow, and the delicate nerves twitch till the tortured human frame shakes in anguish, how important it is to be able to lift the veil from a condition like this! He who conquers disease is greater than the builder of cities or the creator of empires. His value is above the poets, statesmen cannot be compared unto him, educators equal him not in worth. A careful economist like John Stuart Mill tells us it is doubtful if all the labor-saving machinery ever invented has lessened for a single day the work of a single human being — but when a discovery is made in medicine it becomes a sun which sheds its beneficence on all who suffer. The sick pauper of to-day, lying in a charity hospital, receives better medical treatment than the sick potentate of yesterday lying in his costly palace.

Yet so far medical science has only unhorsed, not overthrown, its ancient antagonist. In spite of all the remedies, in spite of all the research, mankind as yet possesses no satisfactory antidote for suffering; it knows no drug which can give pain its *congé* for more than a transient period.

But although the time of relief be limited, the simple fact that there are substances which do have some power over pain is sufficient to make the study of narcotism highly important. And of all the narcotics — a narcotic being roughly defined as a substance which relieves pain and produces excitability followed by sleep — none is more alluring to the imagination than the intoxicating hemp-plant, scientifically known as *Cannabis sativa* and popularly famed as *hashish* — those strange flowering-tops that appeal to a pot-bellied bushman of Australia who smokes them in a pipe of animal tusks, and to so hyper-esoteric a *littérateur* as Charles Baudelaire of the Celestial City of Art.

But hashish is far more than a drug; it is a dream; it is even more than a dream, for it is an escape for both the most primitive and the most sophisticated of human beings. Never was this better stated than





*Cannabis sativa* L. At the left, the male plant; at the right, the female plant.

by John Addington Symonds (1840-93), the sick master of English who was doomed by tuberculosis to live in exile on a mountain, but whose own prose and whose translation of the sonnets of Michael Angelo are imperishable:

"What is left for us modern men? We cannot be Greek now. The cypress of knowledge springs, and withers when it comes in sight of Troy; the cypress of pleasure likewise, if it has not died already at the root of cankering Calvinism; the cypress of religion is tottering. What is left? Science, for those who are scientific. Art for artists; and all literary men are artists in a way. But science falls not to the lot of all; Art is hardly worth pursuing

now. What is left? Hasheesh, I think: Hasheesh of one form or another. We can dull the pangs of the present by living the past again in reveries or learned studies, by illusions of the fancy and a life of self-indulgent dreaming. Take down the perfumed scrolls; open, unroll, peruse, digest, intoxicate your spirit with the flavor. Behold, here is the Athens of Plato in your narcotic visions; Buddha and his anchorites appear; the raptures of St. Francis and the fire-oblations of St. Dominic; the phantasms of mythologies; the birth-throes of religion, the neurotism of chivalry, the passion of past poems; all pass before you in your Maya world of hasheesh, which is criticism."



# CONCERNING CANNABIS INDICA

VICTOR ROBINSON, M.D.

THE habitat of the hemp-plant is extensive: not by the hand of man were the seeds sown that gave it birth near the Caspian Sea, where it wildly flourishes on the banks of the immense Volga—that mighty river ever stupendously rolling through a limitless continent; it climbs the Altai range and thrives where the Himalaya rears its stony head ten thousand feet on high; it extends to Persia, and China knows it; the Congo River and the hot Zambesi bathe it in Africa, it is not a stranger in sunny France, and how well it thrives in Kentucky the numerous readers of the *Reign of Law* will ever remember.

In the 17th century Rumphius noticed that there were differences between the hemp grown in India and the hemp grown in Europe. In the 19th century Lamarck accepted these distinctions, and believing the Indian hemp to be a separate species, agreed in calling it *Cannabis indica*, as distinct from the *Cannabis sativa* of Linnaeus and Willdenow. But it is now conceded that from a botanical standpoint the variations are by no means certain or important enough to warrant the maintenance of Indian hemp as a species distinct from common hemp. And as the greater includes the lesser, in botany as well as in geometry, its botanical name is *Cannabis sativa*, with *Cannabis indica* as one variety, just as *Cannabis americana* is another variety.

The hemp grown in Russia is of a fibrous quality, and was largely used for the gallows—to hang the opponents of despotism. In England many a bold highwayman has been embraced by it the last moment of his roving life, and has thus philanthropically given his mother-tongue a chance to enrich itself. For instance, a hempie means a rascal for whom the hemp grows; a hempen collar means the hang-

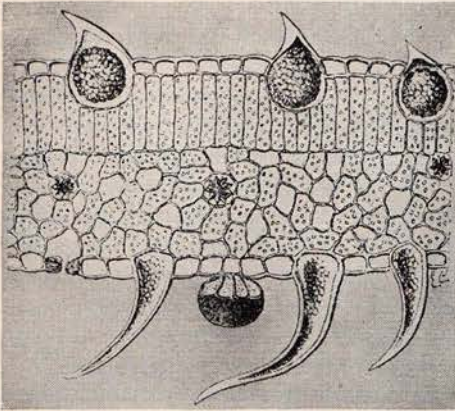
man's noose; a hempen widow means one whose husband has been hanged; to sow hemp means to live in a manner likely to lead to the gallows. Rope, however, is not the only use to which the fibers can be put; they are extensively employed in clothing, and in the manufacture of paper.

The plant is also cultivated for its seeds, which contain a large quantity of oil, and is therefore used in pharmacy for emulsions, and in the domestic arts because of its drying properties. But the seeds are



A picture of *Cannabis sativa* L., var. *indica*, taken from the HERBARIUM AMBOINENSE of G. E. Rumphius (1627-1702), Amsterdam, 1741-1755. Rumphius designated the plant on the left as the male, and that on the right as the female.





Transverse section through a leaf of *Cannabis sativa*, var. *indica*. On the lower part of the leaf one sees distinctly the rounded glandular heads filled with resin. After Planchon-Collin.

chiefly used as a favorite food for birds. In fact, some birds consume them to excess, which should lead us to suspect that these seeds, though they cannot intoxicate us, have a narcotic effect on the feathered creatures, making them dream of a happy birdland where there are no gilded cages, and where men are gunless and women hatless. The seeds also contain sugar and considerable albumin, making them very nutritious; rabbits eat them readily. They are consumed also by some human beings, but are not as good as the sunflower seeds which Marianka ceaselessly and carelessly crunched, while Olenine looked upon her moving lips with a lover's despair.

The medicinal hemp — the hemp with the potent narcotic principles — is *Cannabis indica*. In this case we have an example of compensation that would have made Emerson's eyes glisten, for although the fibrous texture of hemp disappears under a southern sun, to make up for the loss there is secreted a resin — Churrus. This resin is collected in a most singular manner. During the hot season, according to Dr. O'Shaughnessy, men clothed in leather run violently through the hemp-fields and brush forcibly against the plants. The soft, sticky resin adheres to the garments, and

is later scraped off and kneaded into balls. Dr. McKinnon informed Dr. O'Shaughnessy that in the province of Nepal even the leather attire is dispensed with, and that the natives run naked through the hemp fields, gathering the resin on their bare bodies.

When the larger leaves turn brown and fall to the ground, it is an indication of the approach of maturity. The flowering tops are then cut off, and subjected to a process of rolling and treading by trained human feet. The hemp is placed on a hard floor surrounded by a rail; the natives take hold of a revolving post, march around and around, singing the while, and press the plants in a technical manner. Whether the perspiration which drips from their unshod organs of locomotion works any chemical change in the composition of *Cannabis* has not yet been determined by E. M. Holmes or E. W. Dixon.

It is not surprising to learn that dealing in hashish is a Government monopoly, and that heavy punishment is meted out to those offenders who buy or sell it with-



Hashish cake from Tauris. After C. Hartwich.



out permission. "The importation of it into Egypt is so strongly interdicted," explains the *Dispensatory of the United States*, "that the mere possession of it is a penal offense; we found it, however, readily procurable. It is said to be brought into the country in pigs' bladders, in the Indo-European steamers, and thrown out at night during the passage into the Suez Canal, to be picked up by the boats of confederates." This deplorable state of affairs is apt to remind us of our own temperance towns—where there are always some individuals who possess the faculty of obtaining whiskey *ad libitum*.

*Cannabis sativa* is a member of the *Moraceae* or Mulberry family, which family was formerly an order of apetalous dicotyledonous trees or shrubs, but is now

reduced to a tribe of the *Urticaceae* or Nettle family which embraces 110 genera and 1500 species.

*Cannabis* is an annual herb, and thus endures but one year, because instead of storing away nutritious matter in underground bulbs and tubers like the industrious biennials or perennials, it exultingly expends its new-born energy in the production of beautiful blossoms and the maturation of fruit and seed. "This completed," says Asa Gray, "the exhausted and not at all replenished individual perishes."

Sexually, hemp is dioecious, which means that its staminate and pistillate organs are not on the same plant. When cultivated for its narcotic properties, only the flowering tops of the unfertilized female plants are used, and the male plants are eradicated with great care, as it is claimed that a single one can spoil an entire field. The process of weeding out the males is performed by an expert called a *poddar*, who brings to his work a conscious technical skill, and an unconscious but interesting argument in illustration of what Lester F. Ward has described as the Androcentric World View, for the *poddar* deliberately reverses the names of the sexes, and designates the useful females as males, and calls the rejected males the females. If we had such impudent *poddars* in the animal world, no doubt the valuable Miss Jane Addams would be metamorphosed into James, while the unnecessary Mr. Anthony Comstock would be adorned with a feminine appellation.

*Cannabis* is from 4 to 12 feet in height; its stem is angular, branching, and covered with matted hairs; its leaves are palmate and, therefore, roughly resemble an open hand; its leaflets are lance-shaped, possessing margins dentated with saw-like teeth; its flowers are yellow and axillary, the male cluster being a raceme and therefore pedicelled, and the female a spike and consequently sessile or stemless; the five male organs or stamens contain pendulous double-celled sacs or anthers; the two fe-



Hashish cake packaged for shipment. From Tripoli.



The Devas (gods) and the Asouras (demons) churn the Sea of Milk. The Mountain Mandora serves as a handmill, and the serpent Vasonky is used as a rope to turn the mill. A tortoise, the incarnation of Vishnu, bears on its back the mountain on top of which is shown Vishnu in the form of a human being. According to legend, hairs, torn from the tortoise by the vehement movements, give birth to certain herbs such as hashish. After a Hindu picture at the Musée Guimet, Paris.



male organs or pistils have glandular stigmas, the stigma being the spot where fertilization occurs; the fruit is a gray nut or achene, each containing a single oily seed; the whole plant is covered with a scarcely visible down; the roughness of the leaves and stem is due to the silica, which is a characteristic of the plants of the *Moraceae*.

Not much need be said of the microscopical characteristics of hemp, for although the powder contains several histological elements, as pollen grains, glands,

crystals, resin, fibres, vessels, stone cells, epidermis, parenchyma — indicating presence of stem, leaf, flower, seed — its characteristic hairs or trichomes with their cystolith deposits are of sufficient diagnostic value to make it readily recognizable.

Unfortunately, when we come to the chemical constituents of Cannabis, certainty is at an end. As Dorvault's *L'Officine* says, "La composition chimique du cannabis indica est mal connue." The conquests of man are peculiar: he lays a cable under the roaring ocean, and he

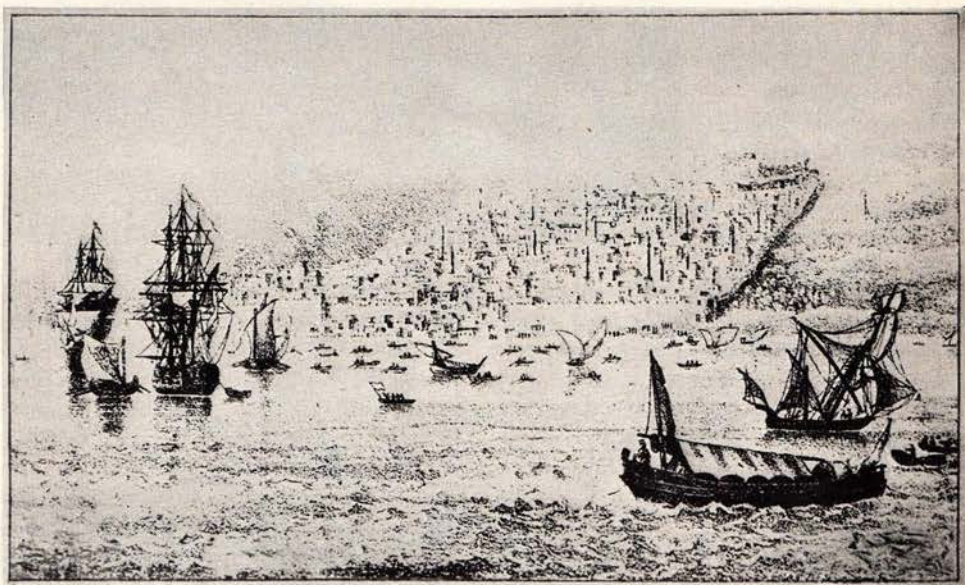


flashes his messages through limitless miles of space; beneath the surface of the earth he rides on an iron horse, and bird-like he sails through the trackless air. But put this common drug before him and he cannot determine its chemical composition. The careful experimenters and the expert assayers are balked.

"I have extracted an alkaloid from hasheesh," says Preobraschensky, "and it is potent." "No, we have found the active constituent," say T. and H. Smith; "it is the resin cannabin." "No," says Personne, "I have isolated the important ingredient; it is the amber-colored volatile oil, cannabene." "Oh, no," says Fraenkel, "I have discovered the active principle — it is a phenol aldehyde." "No, indeed," say Wood, Spivey and Easterfield, "it is we who have separated the only active ingredient — it is a red oil, cannabinol." "Oh, not at all," says Hamilton, "not one of these is the active constituent; in fact, the active constituent has not yet been isolated." In such an arena, where the

masters dispute, it behooves the amateur to speak with a stammering tongue.

That doubt should prevail on this subject is all the more remarkable when we consider that hemp has been known from a time whereof the mind of man runneth not to the contrary — to use a phrase which seems to delight the lawyers. In the *Odyssey*, a thousand years before the advent of the Christian era, Homer sang of the assuager of grief or Nepenthes, which is believed to have been the hemp-plant. Hemp thus comes ushered into history, held in the beautiful hand of Helen. Hesychius relates that the Thracian women made sheets of hemp. Pliny says hemp was known to the Romans, who manufactured cordage from it. The Father of History relates that the Scythians threw the seeds of hemp on red-hot stones, and bathed themselves in the vapor, crying with exultation. Moschion records that the ship, *Syracusia*, built for Hiero — kinsman of Archimedes — was rigged with hempen ropes. In the most ancient of all Hindu



Salonika, a city that played an important rôle as a port for the export of hashish toward the end of the 18th century. After a drawing by Esprit-Marie Consin ry (1747-1833).





The god Indra whose favorite beverage, "soma," is reported to contain hemp. Bronze statuette originally from Bengal.

the fiery sun glared angrily upon Mother Earth as if he wished to wither up her breasts, Haider stepped out from his cloister and walked alone to the fields. All around him lay the vegetation weary and without life, but one plant danced in the heat with joy. Haider plucked it, partook of it, and returned to the monastery a happier man. The monks who saw him immediately noticed the change in their chief. He encouraged conversation, and acted boisterously. He then led his companions to the fields, and the holy men partook of the hashish, and were transformed from austere ascetics into jolly good fellows. At the death of Haider, in conformity with his desire, his disciples planted the hemp in an arbor around his tomb.

In that portion of the Chinese herbal, *Rh-ya*, which was written 500 B.C., the seed and flower-bearing kinds of hemp are noticed. In the first century, Dioscorides — the most renowned of the ancient writers on materia medica — recommended the



A water-bottle which forms part of a "houka" (Hindu water-pipe) from Haiderabad. This vessel is made from a metallic alloy called "bidri" after Bidar, the chief locality where it is manufactured.

medical works, the *Susruta Samhita*, hemp is recommended for catarrh. The Pandit Moodoosudun Gooptu found in the *Rajniguntū* a clear account of hemp. A Sanskrit work on materia medica, *Rajbulubha*, alludes to the use of hemp in gonorrhea. According to Kamalakantha Vidyānātha, hemp was early forbidden to pious Brahmins. The old Arabic and Persian writers made numerous references to cannabis, and declared its narcotic properties were discovered by Haider. Haider was a rigid monk who built a monastery on the mountains between Nishābor and Ramah. For ten years he never left his hermitage, never indulged in even a fleeting moment's pleasure. One burning summer's day when



seeds in the form of a cataplasm to soothe inflammation. In the second century, Galen wrote that it was customary to give hemp to guests at banquets to promote hilarity and happiness. At the beginning of the third century, the physician Hoa-Thoa used hemp as an anesthetic in surgical operations. In the 13th century, garments of hemp became common throughout Southern Europe, and it may well be that Beatrice herself wore it when Dante first saw the maiden in her father's house.



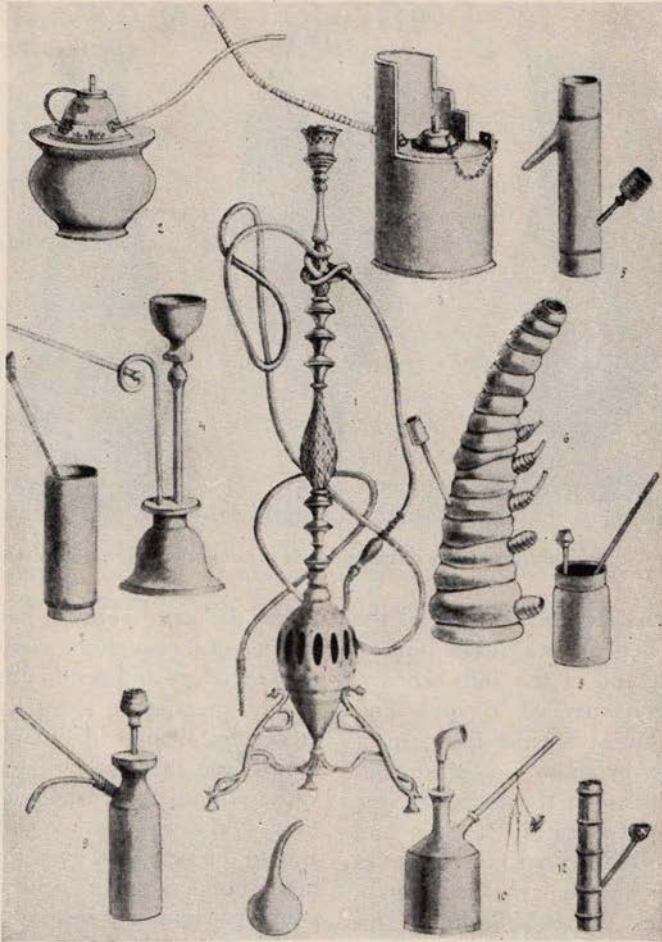
*Little boxes ornamented with jewels, in which hashish is kept. Hindu work of the nineteenth century.*

There is a remarkable episode in the history of hashish, indicating how the character of a people may be affected by the surrounding vegetation. Mohammedanism, like all other theologies, has been rent by schisms, and the question as to who was the legitimate successor of the Prophet split this Oriental faith into two great sects — the Sunnis and the Shiah. The latter were the heretics, as they considered Mohammed's son-in-law the true caliph. The Shiah themselves were further subdivided into several parties, the Ismaelites being the most important. The Ismaelites were especially powerful in Persia, and later — through the instrumentality of an escaped prisoner who seized the throne — gained a firm foothold in Egypt. A grand lodge was formed in the city of Cairo — on the banks of the river whose ancient waters heard the hammering at the quarries for the rearing of the Great Pyramid. Many rules were now made by the Ismael-

ites, and the petty race of perishable men was much flustered, while the immortal Nile flowed indifferently from its equatorial cradle, refreshing the crimson water-lilies, bathing the reeds that lined its shore, and wetting the sands where the thoughtful Sphinx opens not its lips.

In the course of time this lodge was visited by the clever Ismaelite, Hassan Ben Sabbah — a boyhood friend of Omar Khayyám — who was received with acclamation. Hassan soon received enough honors to excite jealousy, and while plotting for more power was defeated and forced to disappear from Egypt, but, after traveling awhile, he settled near Kuhistan. He gathered around him a considerable number of followers, and by strategy, in 1090, captured the powerful Persian fortress of Alamut. Hassan now introduced a new feature into his society — the employment of secret murder against all enemies. It was the sheikh of this organization who loomed large in medieval folk-lore as the Old Man of the Mountains. Many young men became disciples, and willingly performed the bloody work. These youths were known as the *Fedais* or Devoted Ones. When a Devoted One was selected to commit the murder, he was first stupefied with hashish, and while in this state was brought into the magnificent gardens of the sheikh. All the sensual and stimulating pleasures of the erotic Orient surrounded the excited youth and, exalted by the delicious hypnotic he had taken, the hot-blooded fanatic felt that the gates of Heaven were already ajar, and heard them swing open on their golden hinges. When the effect of the drug disappeared and the Devoted One was reduced to his normal condition, he was informed that through the generosity of his superior he had been permitted to foretaste the delights of Paradise. The Devoted One believed this readily enough — disciples are always credulous — and therefore was eager to die or to kill at a word from his master. From these



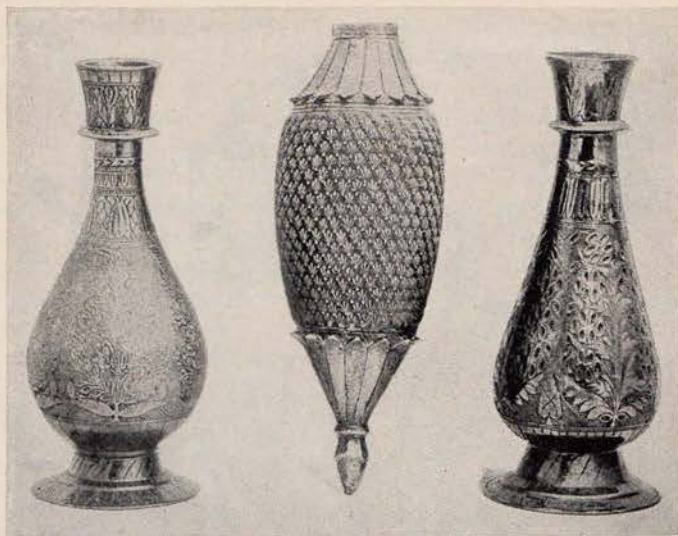


*Types of Asiatic water-pipes that are often used for hashish smoking. The long pipe is made of brass and comes from Mecca. After C. Hartwich.*

hashish-eaters, the Arabic name of which is *hashshashin*, was derived the term "assassin." It is not known at what date the epithet was first applied to other secret slayers. The Assassins soon became a terrible scourge, and the very sands of the desert almost learned to tremble before them. Many an unprepared breast felt their daggers, and many a surprised stomach tried in vain to vomit up their poisons. Prince and caliph they struck down, and more than one haughty chief paid tribute to the Old Man of the Mountains. During the invasion of Palestine by the Crusaders,

the Syrian branch of the Assassins reached its bloody zenith, and who shall say how many high-born damsels wept for knightly shields that lay low in the dust of Lebanon? The power of the Assassins was destroyed in Persia about the middle of the 13th century, and some years later the Mameluke sultan of Egypt exterminated them in Syria. But just as there are still some who pray for the revival of the Spanish Inquisition, so some remnants of the Assassins yet linger between the Tigris River and the Mount of Taurus — but what of that? The Old Man of the Mountains now





Brass "houka" bottles richly engraved and ornamented, Benares. Vienna.

sleeps in Death's Valley, and not all the hashish from Bengal could exalt him.

Towards the end of the 18th century, when Napoleon invaded Egypt — and grew philosophic as he met the gaze of the prehistoric pyramids — hashish was brought prominently to the notice of Europeans by the accounts of De Sacy and Rouger. By this time its narcotic properties must have been known to the Occidentals, for as far back as 1690 Berlu, in his *Treasury of Drugs*, described it as "of an infatuating quality and pernicious use." Nevertheless, its introduction into the pharmacopeias of Europe and the United States is due mainly to the elaborate experimentation carried on during 1839 and several succeeding years by the talented Dr. William B. O'Shaughnessy, Professor of Chemistry in the Medical College of Calcutta. This brings us to the physiological action of cannabis. It primarily stimulates the brain, has a mydriatic effect upon the pupil, slightly accelerates the pulse, sometimes quickens and sometimes retards breathing, produces a ravenous appetite, increases the amount of urine, and augments the contractions of the

uterus. In other words, it has an effect on the nervous, respiratory, circulatory, digestive, excretory and genito-urinary systems.

As a therapeutic agent hashish has its eulogizers, though like many other drugs it has been replaced by later remedies in various disorders for which it was formerly used. Old drugs, like old folks, must give way to the new, and even the therapeutic masterbuilders must beware when the young generation of healing-agents knocks on the door of health.

In medicinal doses Cannabis has been used as an aphrodisiac, for neuralgia, to quiet maniacs, for the cure of chronic alcoholism and morphine and chloral addiction for mental depression, hysteria, softening of the brain, nervous vomiting, for distressing cough, for St. Vitus' dance, and for the falling sickness so successfully simulated by Kipling's Sleary — epileptic fits of a most appalling kind. It is used in spasm of the bladder, in migraine, and when the dreaded *Bacillus tetanus* makes the muscles rigid. It is a uterine tonic, and a remedy in the headaches and hemorrhages occurring at the final cessation of

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# EXPERIMENTS WITH HASHISH

VICTOR ROBINSON, M.D.

Idiosyncrasy may not be the star performer, but it certainly plays an important rôle in the therapeutic drama. No drug in the entire materia medica is capable of producing such a diversity of effects as *Cannabis indica*. "Of the action of hashish," writes Alfred Stillé, "many and various descriptions have been given which differ so widely among themselves that they would scarcely be supposed to apply to the same agent, had we not every day a no less remarkable instance of the same kind before us in the case of alcohol. As the latter enlivens or saddens, excites or depresses, fills with tenderness, or urges to brutality, imparts vigor and activity, or nauseates and weakens, so does the former give rise to even a still greater variety of phenomena, according to the natural disposition of the person, and his existing state of mind, the quantity of the drug, and the combinations in which it is taken."

*Cannabis* is certainly the coquette of drugdom. It is because of the unending variety of its action that the writer experimented with hashish and a few of the cases are here reported:

## *Experiment with Mr. A.*

Mr. A. took 25 minims of the fluid extract of *Cannabis indica* (U.S.P.) in the presence of some ladies. An hour passed without results. A second hour followed without any noticeable result. The third hour promised to be equally fruitless, and as it was already late in the evening, the ladies said good-by. No sooner did they leave the room than the characteristic hashish-laugh rang out. The hemp was doing its work. In a shrill voice Mr. A. was exclaiming: "What foo-oolish people, what foo-oo-ool-ish people to leave just when the show is beginning." The ladies

came back. And it was a show. Mr. A. made socialistic speeches, and argued warmly for the cause of Woman Suffrage. He grew most affectionate and insisted on holding a lady's hand. His face was flushed, his eyes were half closed, his abdomen seemed uneasy, but his spirit was happy. He sang, he rhymed, he declaimed, he whistled, he mimicked, he acted. He pleaded so passionately for the rights of Humanity that it seemed he was using up the resources of his system. But he was tireless. With both hands he gesticulated, and would brook no interruption.

Peculiar ideas suggested themselves. For instance, he said something was "sheer nonsense," and then reasoned as follows: "Since shears are the same as scissors, instead of sheer nonsense I can say scissors nonsense." He also said, "I will give you a kick in the tickle"—and was much amused by the expression.

At all times he recognized those about him, and remained conscious of his surroundings. When the approach of dawn forced the ladies to depart, Mr. A. uttered a Rabelaisian jest, and immediately exclaimed triumphantly, "I wouldn't have said that if the ladies were here for a million dollars." Someone yawned deeply, and being displeased by the unexpected appearance of a gaping orifice, Mr. A. melodramatically gave utterance to this Gorky-like phrase: "From the depths of dirtiness and despair there rose a sickly odorous yawn"—and instantly he remarked that the first portion of this sentence was alliterative! Note that consciousness and intoxication can exist in the same brain simultaneously. The next day he remembered all that occurred, was in excellent spirits, laughed much and easily, and felt himself above the petty things of this world.



*Experiment with Mr. B.*

On May 19, 1910, this world was excited over the visit of Halley's comet. It is pleasant to remember that the celestial guest attracted considerable newspaper attention. On the evening of this day, at 10 o'clock, Mr. B., a court stenographer, took 45 minims. At 11:30 the effects of the drug became apparent, and Mr. B. lost consciousness of his surroundings to such an extent that he imagined himself an inhabitant of Sir Edmund Halley's nebulous planet. He despised the earth and the dwellers thereon; he called it a miserable little flea-bite, and claimed its place in the cosmos was no more important than a flea-jump. With a scornful finger he pointed downward, and said in a voice full of contempt, "That little joke down there, called the earth."

Pointing to an onlooker he said, "You're a fine fellow, you're the smartest man in the city, you've got the god in you, but the best thoughts you write are low compared to the things we think up here." A little later he condescended to take this individual up with him, and said, "We're up in the realm now, and we'll make money when we get down on that measly earth again; they respect Mr. B. on earth."

He imitated how Magistrate Butts calls a prisoner to the bar. "Butts," he explained, "is the best of them. Butts — Butts — cigarette-butts." If this irreverent line fell beneath the dignified eyes of His Honor, instead of rebuking his devoted stenographer for contempt of court, it is hoped he recalled that under the influence of narcotics men are mentally irresponsible.

By this time Mr. B.'s vanity was enormous. "God, Mark Twain and I are chums," he remarked casually. "God is wise, and I am wise. And to think that people *dictate* to me!"

He imagined he had material for a great book. "I'm giving you the thoughts; slap them down, we'll make a fortune and go whacks. We'll make a million. I'll get half

and you'll get half. With half a million we'll take it easy for a while on this measly earth. We'll live till a hundred and two, and then we'll skedaddle didoo. At one hundred and two it will be said of Mr. B. that he shuffled off this mortal coil. We'll skip into the great idea — hooray! hooray! Take down everything that is significant — with an accent on the *cant* — Immanuel Kant was a wise man, and I'm a wise man; I am wise, because I'm wise." In spite of all the gabble concerning the volume that was to bring fame and fortune; not even one line was dictated by the inspired author. In fact he never got beyond the title: "Wise is God; God is Wise."

Later came a variation in the form of a hissing sound which was meant to be an imitation of the whizzing of Halley's comet; there was a wild swinging of the sheets as a welcome to the President; some hashish-laughter, and the utterance of this original epigram: Shakespeare, seltzer-beer, be cheerful.

A little later all variations ceased, for the subject became the victim of a fixed idea. He became thoroughly imbued with the great idea that the right attitude to preserve towards life is to take all things on earth as a joke. Hundreds and hundreds and hundreds of times he repeated: "The idea of the great idea, the idea of the great idea, the idea of the great idea." No question could steer him out of this track. "Who's up on this comet? Any pretty girls there?" he was asked. "The great idea is up there," was the answer.

"Where would you fall if you fell off the comet?"

"I'd fall into the great idea."

"What do you do when you want to eat and have no money?"

"You have to get the idea."

"When will you get married?"

"When I get the idea."

Midnight came, and he was still talking about his great idea. At one o'clock everyone was bored. "If you don't talk about



anything else except the idea, we'll have to quit," he was warned.

"Yes," he replied, "we'll all quit, we'll all be wrapped up in the great idea." He took out his handkerchief to blow his nose, remarking, "The idea of my nose." A spectator approached him. "Don't interfere," he cried, "I'm off with the great idea." The spectators began to descend the stairs. When halfway down they stopped to listen. Mr. B. was still a monomaniac. As he was still harping on the idea of the great idea, it was time to go to bed.

In the morning his countenance was ashen, which formed a marked contrast to its extreme flushed appearance the evening before. He should have slept longer, but the thought of the duties to be performed for Judge Butts made it necessary to arouse him. The human touch may have cast him down from the glorious Halley's comet to the little flea-bite of an earth, besides jarring the idea of the great idea, but instead of manifesting anger, he smiled and extended his hand cordially, as if he had been absent for a long time. The effects of the drug had not entirely disappeared, and his friends at work thought him drunk, and asked with whom he had been out all night. Mr. B. was in first-class spirits, he bubbled over with idealism, and felt a contempt for all commercial transactions. He claimed he was the American Bernard Shaw, and looked upon the universe as a joke of the gods. While adding some figures of considerable importance—as salaries depended upon the results—a superintendent passed. Mr. B. pointed to the column that needed balancing, and asked, "This is all a joke, isn't it?" Not appreciating the etiology of the query, the superintendent nodded and passed on.

#### *Experiment with Mr. C.*

One midnight, while preparing to retire, it occurred to Mr. C. that this was a good time for him to try hashish. As he received no discouragement, 30 minims were

forthwith swallowed, with the result that he had an unusual night. It must be remarked that over the bed on which he lay hangs a portrait of Ralph Waldo Emerson. For an hour and a quarter he discussed decadent poetry, and Marx's influence on the revolutionary youth of Russia. The conversation was interrupted by the hashish-laugh.

It had begun: the flood of laughter was loose, the deluge of mirth poured forth, the cascade of cachinnation rushed on till it swelled into a torrent of humor while the waves of snickering and tittering mingled with the freshets of hilarity and jollity till the whole flowed into a marvelous Niagara of merriment. What a pity the audience was so small! What a shame the old humorists could not be present! How the belly of Aristophanes would have thundered a loud *papapappax*, how Scarron would have grinned, how Sydney Smith would have enjoyed, how Tom Moore would have held his aching sides, how Rabelais would have raised the rafters with his loud ho-ho-hos! Mr. C. was a Leyden-jar of laughter, charged to the limit.

"I feel a satisfaction," he says, "in seeing Emerson's picture, as I always felt like laughing at him." Rolls on the bed and laughs uncontrollably. "It makes my face tired," he explains. In reply to a question, he answers that he enjoys laughing. Begins to expound something, but is stopped by a laughing fit. Says he would like to have his photo taken now, and then laughs immoderately. Remarks that it doesn't seem so much like laughing as like letting wind out of a bag. Says it is worthwhile staying up to see such a show. Giggles terrifically. "Open the window, as I am using up all the air." Laughs loud and long. Strangely enough his laughter begins to sound exactly like that of a stage Negro. He recognizes this and says: "I'se laughin' now jes' like a colored man." He is extraordinarily comical. From top to bottom his body is shaking with laughter. He twirls



his arms, kicks his feet, and exemplifies Milton's "light, fantastic toe."

"I feel as if any way I put my leg I have to keep it. If I stuck it in the air and kept it there—wouldn't that be funny?" Loud laughter. Imitates the music of a military band. His eyes glisten with pleasure, his whole countenance is beaming, and he seems infinitely delighted with himself. "Forward march!" he exclaims. He plays a fife and beats a drum: Boom! Boom! Boom! Says sternly, "I don't want this band to play a patriotic air, not even in my sleep."

"Ladies and gentlemen, I tell you a story. You think I'm a fool, don't you?" Laughter. "This reminds me of a story." Laughter. "O what a fool am I!" Laughter. "I'm going to tell that story," he says determinedly. Makes several attempts, but it is a difficult feat, on account of the frequent outbursts of laughter, and because it is next to impossible for him to concentrate his thoughts. At last he gets this out: "A man said he hadn't laughed so much since his mother-in-law died. Oh, how funny!"

"Mr. C.: Imitation of laughter. Pretty good, eh?" Makes a speech, imitates the gestures, and bows as politely as it is possible for one who is stretched out in bed.

"This would be a good dope to try on a fellow who is accused of having no sense of humor. Oh, I'm getting funnier every minute."

"Emerson, O you, you were a kid once, too, weren't you? I don't believe you ever were. If I had a rotten egg I'd throw it at you."

"There's a blue phosphorescent light in your face . . ."

"I'd rather laugh than vomit any day." Strikes the bowl which was placed near him in case the *Cannabis* produced emesis. "But I'm not a dog and I'll not return to my vomit. That Biblical dog was a fool."

"I've been doing all sorts of laughter. Couldn't you have a system of prosody, and divide it off into feet like poetry, and

have a Laughing Poet whose contributions would be accepted by the comic papers?" Whistles and sings and drums rhythmically with his fingertips on the bowl.

When one of his statements is confirmed, he says, "Don't be butting in, this is my show." Points his finger and laughs. Sensations must be very acute, for while hearing someone clearing his throat to say something, but before uttering anything, he exclaims: "There you go, butting in again. But don't be afraid, I'm not getting pugnacious; it all ends in laughter." But for a moment he does become quarrelsome.

"I had a good thought, but I don't know what's best: to stick to the thought, or stick to the laughter?"

"If Chauncey Depew would be wrecked in the New York Central, wouldn't that be funny? Would it be poetic justice? No, it would be the justice of laughter. Oh, it would be the laughter of the gods!" He raises himself and swings his arm dramatically. Laughter leaps from his insides as if it were a geyser spouting up, and rushes from his lips as if it were a cataract bounding down a boulder.

He theorizes about egoism and Max Stirner, but it is difficult to jot down the reflection in its entirety. He says his auditor has no sense of humor to sit there taking notes, instead of joining him in laughing.

"Of course you understand why I am laughing. But your old cook—if she hears me, she'll send for the police."

"It's too bad that when I'm having such a good time, I should be troubled by a dry taste in the mouth. It's another evidence that the world was created by a lunatic. There is always some little thing that interferes."

Talks sensibly awhile, and then says impatiently: "I want to stop all this talking, and get to laughing again. I'm not complaining about the effects from hashish, because I consider it worth everything."

"Oh, tell me, pretty maiden, why can't a little canary bird whistle a symphony, for



instance, Tschaikowsky's *Le Pathétique*?" Whistles, waves his hand fantastically. "As little as I know about music, not having been gifted by Nature in that direction" — twists his arms in a grotesque manner — "I'm able to get a bunch out of Tschaikowsky. I don't mean Comrade Tschaikowsky, the revolutionist in Russia, I mean Peter Ilich Tschaikowsky. The itch of that Ilich — it seems like a personal ailment, it sounds insulting."

Throws a piece of paper, but says, "Don't be afraid, I'll break no bones."

He is asked to tell the time. He gazes intently at the clock, and says, "I want to get it exactly on the fraction of a second. But it changes so quickly, I can't." Gives it up in disgust.

Claims a heavy feeling is creeping over him, and wonders if it is due to increased blood-pressure. "But what am I beginning to talk serious for? I could keep on laughing for a couple of weeks, except that I don't want to keep you up."

"If Spencer had been more of a sport and had taken some of this stuff, he would have had material for his essay, *The Physiology of Laughter*." To see a man drugged with hashish quoting the profoundest of synthetic philosophers is too much for the gravity of his auditor, and for a moment he screams with laughter.

"Ah, I'm beginning to get light again. It's much nicer to be light and delicate. To be a filmy butterfly, and float in fancy" — his face assumes an expression of poetic beauty, and he speculates whether man should live a life of beauty or of duty.

"Oh, I'm willing to laugh. . . ." Throws off the blankets and cries. "Throw off the bonds of all existence!"

He is asked what day it is. "I hope," says he, with a melodramatic wave of the hand. "I will express the modest hope, that in accordance to my wishes, and in conformity to my desires, it is Sunday night! Sunday night! Sunday night!" Sits up, looks roguishly, and laughs. "I feel a metalliferous touch within me. I'd rather have a cramp

in my leg than in my brain. Some people would call this a brain-camp, wouldn't they?" Laughs and kicks up his legs.

"If you got erotic while laughing, wouldn't it be blasphemy? Worse than laughing in church."

"Have no illusions of death yet. I am still in a position to laugh death in the face, to laugh death in the face, to laugh . . ." — and he proves it. He claps his hands together merrily.

Has a lucid moment, looks at the clock, and says simply and correctly, "10 to 3."

Imitates a Frenchman most admirably, accent, gestures, and so forth.

The door opens, and an inmate — who has found it impossible to sleep with a roaring volcano in the house — enters. Mr. C. is requested to repeat his reflections about Chauncey Depew and the Grand Central. Mr. C. is highly pleased, and gazes over the story with intense zest. He enlarges it, and claims Depew has got Elbert Hubbard beat as a hypocrite. He says all who believe Depew deserves to be killed should signify it by saying Aye, and then he himself, as if he were a whole assembly, shouts out, Aye! Aye! Aye! "The Ayes have it," he announces with the air of a man who has just won an important victory. His visitors laugh heartily. There is no limit to Mr. C.'s happiness. "That's right," he says, "it's good, take it down, old man."

He cannot bear a moment's abstinence from laughter. "Cast aside all irrelevant hypotheses, and get to the laughing. I proclaim the supremacy of the laugh, laughter inextinguishable, laughter eternal, the divine laughter of the gods."

His second visitor leaves the room. "Everything has a comic element if you look at it right. It seemed to me that he went down into the cellar because he couldn't sleep on account of all my foolishness." He wallows in amusement, but at the same time expresses regret that he is preventing us from sleeping, and says next time he will take hashish in the daytime.



The second visitor re-enters, and desires to feel his pulse. At first Mr. C. objects vehemently to being touched, but then smiles the sweetest of smiles, and with the demeanor of a martyred Bruno marching to the stake, stretches forth his hand, saying, "In the interests of science I am willing," but after a few seconds Mr. C. pulls his hand impatiently away, and exclaims angrily, "You've been holding it half an hour."

"Come on in, the hashish is fine! You laugh and laugh and laugh and laugh like an imbecile. Who can laugh in more ways than me? Not any fellow that I can see."

Begins to philosophize about savages, but loses the thread of his thoughts. He is reminded what he was talking about; he thinks a moment; taps his forehead significantly, and says, "There was a laugh there before, and now I've lost it."

"Every tick of the clock is another instant that you're wasting time over all this foolishness."

"Laughter is indisputable and for its own sake. I proclaim the laugh for the laugh's sake." The English tongue is insufficient for him; he coins words of his own: "Laughfinity!" he shouts. "Laughinosity!" he screams. "The whole world is a blooming joke."

"Which is best," he asks innocently, "the laughing Goddess, or the Goddess of Laughter." "The Laughing Goddess," is the answer. Exultation shines through the dilated pupils of the questioner, as he responds, "I knew I would catch you. The Laughing Goddess reminds you by the association of ideas of the laughing hyena, and then instead of being the goddess presiding over the divine function of laughter, she becomes a laughing stock."

He is asked something about figures. "Figures," he answers, "are intellectually beneath me. In short, I would never be a great mathematician. Yet I appreciate the metaphysics of mathematics. I adore, I prostrate myself before mathematics as long as there are no figures in it." Hearing

laughter, he explains, "Yet this isn't so foolish as it seems. Up to a certain point in geometry there are no figures."

"I would have talked more sensibly if Emerson had not been there." Bangs his legs against the edge of the bed; he is asked if he hurt himself. "Not on a material plane; it was a psychic jar of which you cannot conceive."

Speaks in a declamatory tone: "I am all the time on the border-line between Science and Folly. Which god shall ye follow, young man?"

He is told he can stop laughing if he wishes. "No, sir," comes the emphatic response, "not if you lived in my world. It is a categorical imperative in the world of hashish: Thou shalt laugh."

It is already four o'clock in the morning. The spectator is loathe to leave this frolicsome dynamo of blithesomeness, this continuous current of good cheer, this generator of joyousness, but there is work to be done in the world, for which sleep is necessary, so with a last look at his Mirthful Majesty, he is left alone in his glory and his giggles.

Four hours later, the intellectual merry-andrew who criticizes the Concord Transcendentalist and juggles philosophic conceptions even under the effects of dope, is motionless. Lassitude has usurped the throne of laughter.

#### *Experiment with Mr. C. (Subject's Report)*

Mr. C. has written the following memorandum of the subjective features of his experience:

The first symptom which told me that the drug was beginning to take effect was a feeling of extreme lightness. I seemed to be hollowing out inside, in some magical manner, until I became a mere shell, ready to float away into space. This was soon succeeded, in one of the breathless intervals of my prodigious laughter, by a diametrically opposite sensation of extreme solidity and leaden weight. It seemed to



me that I had changed into metal of some sort. There was a metallic taste in my mouth; in some inexplicable way the surfaces of my body seemed to communicate to my consciousness a metalliferous feeling; and I imagined that if struck I would give forth a metallic ring. This heavy and metallic feeling traveled rapidly upwards from the feet to the chest, where it stopped, leaving my head free for the issuance of the storms of laughter. Most of the time my arms and legs seemed to be so leaden that it required Herculean effort to move them, but under any special stimulus, such as the entrance of a third person, the vagrant conception of a new idea, or an unusually hearty fit of laughing, this feeling of unliftable heaviness in the limbs and torso would be forgotten and I would move freely, waving my arms with great vigor and enthusiasm.

Throughout the experiment I experienced a peculiar double consciousness. I was perfectly aware that my laughter, etc., was the result of having taken the drug, yet I was powerless to stop it, nor did I care to do so, for I enjoyed it as thoroughly as if it had arisen from natural causes. In the same way the extension of the sense of time induced by the drug was in itself indubitable and as cogent as any normal evidence of the senses, yet I remained able to convince myself at any moment by reflection that my sense of time was fallacious. I divided these impressions into hashish-time and real time. But in their alterations, so rapid as to seem simultaneous, both these standards of time seemed equally valid. For instance, once or twice when my friend spoke of something I had said a second before, I was impatient and replied: "What do you want to go back to that for? That was a long time ago. What's the use of going back into the past?" At the next moment, however, I would recognize, purely as a matter of logic, that he was replying to the sentence before the last that I had uttered, and would thus realize that the remark to

which he referred was separated from the present only by a moment's interval. I did not, however, at any time on this occasion, attain the state sometimes reached in the second stage of hashish intoxication in which mere time disappears in an eternity wherein ages rush by like ephemera; nor did I experience any magnification of the sense of space, my experiences in regard to such extensions being confined to an intermittent multiplication of the sense of time.

When my laughter began it seemed for an instant to be mechanical, as if produced by some external power which forced air in and out of my lungs; it seemed for an instant to proceed from the body rather than from the mind; to be, in its inception, merely physical laughter without a corresponding psychic state of amusement. But this was only momentary. After the first few moments I enjoyed laughing immensely. I felt an inclination to joke as well as to laugh, and I remember saying: "I am going to have some reason for this laughing, so I will tell a story; if I have to laugh anyway, I'm going to supply good reasons for doing so, as it would be idiotic to laugh about nothing." I thereupon proceeded to relate an anecdote. Although I knew that my condition was the result of the drug, I was nevertheless filled with a genuine sense of profound hilarity, an eager desire to impart similar merriment to others, and a feeling of immense geniality and mirth, accompanied by sentiments of the most expansive good-will.

Against the effects of the drug, much as I enjoyed and yielded to it, there was opposed a preconceived intention. I had determined to tell my friend, Victor Robinson, who was taking notes of my condition, just how I felt; had determined to supply as much data as possible in regard to my sensations. The result was that I repeatedly summoned all the rational energy that remained to me, and fought desperately to express the thoughts that came to me, whether ridiculous or analytical. Some-



times when I felt myself slipping away again into laughter or dreaminess I summoned all my strength to say what I had in mind, and would lose the thread of my thought and could not remember what I wanted to say, but would return to it again and again with the utmost determination and tenacity until I succeeded in saying what I wished to — sometimes an observation about my sensations, often only a jest about my condition. I believe that this acted as a great resistant to the effect of the drug. The energy of the drug was dissipated, I think, in overcoming my will to observe and analyze my sensations, and it was probably for this reason that I did not pass very far on this occasion into the second stage in which laughter gives place to grandiose visions and charming hallucinations.

After my friend turned out the light and left the room, my laughter gradually subsided into a few final gurgles of ineffable mirth and benevolence, and after a period of the amorous visions sometimes induced by this philtre from the land of harems, I fell into a sound sleep after my three hours of continuous and exhausting laughter.

I awoke next morning after seven hours' sleep, with a ravenous appetite, which I think was probably as much due to the great expenditure of energy in laughing as to any direct effect of the drug itself. I was also very thirsty and my skin was parched and burning. Although I immediately dressed and went down to breakfast, I felt very drowsy and disinclined to physical exertion or mental concentration. And while no longer given to causeless laughter, I felt a lingering merriment and was easily moved to chuckling. I slept several hours in the afternoon and after dinner I slept all evening, awaking at 11 P.M., when I arose feeling very much refreshed and entirely normal, and went out to get another meal, being still hungry. I should say that the immediate after-effect, the reaction from the stimulation of hashish, is not much greater, except for the drowsi-

ness, than that following the common or beer garden variety of intoxication. My memory of what I said and did while under the hashish was complete and accurate.

#### *Experiment of Dr. X. (Subject's Report)*

On March 4, 1910, I came home, feeling very tired. I found that some *Cannabis indica* which I had expected had arrived. After supper, while finishing up an article, I began to debate with myself whether I should join the hashish-eaters that night. The argument ended in my taking 20 minims at 9 o'clock. I was alone in the room, and no one was aware that I had yielded to temptation. An hour later I wrote in my memoranda book: Absolutely no effect. At 10:30, I completed my article, and entered this note: No effect at all from the hemp. By this time I was exhausted, and being convinced that the hashish would not act, I went to bed in disappointment. I fell asleep immediately.

I hear music. There is something strange about this music. I have not heard such music before. The anthem is far away, but in its very faintness there is a lure. In the soft surge and swell of the minor notes there breathes a harmony that ravishes the sense of sound. A resonant organ, with a stop of sapphire and a diapason of opal, diffuses endless octaves from star to star. All the moonbeams form strings to vibrate the perfect pitch, and this entrancing unison is poured into my enchanted ears. Under such a spell, who can remain in a bed? The magic of that melody bewitches my soul. I begin to rise horizontally from my couch. No walls impede my progress, and I float into the outside air. Sweeter and sweeter grows the music, it bears me higher and higher, and I float in tune with the infinite — under the turquoise heavens where globules of mercury are glittering.

I become an unhindered wanderer through unending space. No airship can go here, I say. I am astonished at the vastness of Infinity. I always knew it was large, I argue, but I never dreamed it was as



huge as this. I desire to know how fast I am floating through the air, and I calculate that it must be about a billion miles a second.

I am transported to wonderland. I walk in streets where gold is dirt, and I have no desire to gather it. I wonder whether it is worthwhile to explore the canals of Mars, or rock myself on the rings of Saturn, but before I can decide, a thousand other fancies enter my excited brain.

I wish to see if I can concentrate my mind sufficiently to recite something, and I succeed in correctly quoting this stanza from a favorite poem which I am perpetually re-reading:

"Come into the garden, Maud,  
For the black bat, night, has flown,  
Come into the garden, Maud,  
I am here at the gate alone;  
And the woodbine spices are wafted  
abroad,  
And the musk of the rose is blown."

It occurs to me that it is high honor for Tennyson to have his poetry quoted in Heaven.

I turn, I twist, I twirl. I melt, I fade, I dissolve. No diaphanous cloud is so light and airy as I. I admire the ease with which I float. My gracefulness fills me with delight. My body is not subject to the law of gravitation. I sail dreamily along, lost in exquisite intoxication.

New scenes of wonder continually unravel themselves before my astonished eyes. I say to myself that if I could only record one one-thousandth of the ideas which come to me every second, I would be considered a greater poet than Milton.

I am on the top of a high mountain-peak. I am alone — only the romantic night envelops me. From a distant valley I hear the gentle tinkling of cow-bells. I float downwards, and find immense fields in which peacocks' tails are growing. They wave slowly, to better exhibit their dazzling ocelli, and I revel in the gorgeous colors. I pass over mountains and I sail over seas. I am the monarch of the air.

I hear the songs of women. Thousands of maidens pass near me, they bend their bodies in the most charming curves, and scatter beautiful flowers in my fragrant path. Some faces are strange, some I knew on earth, but all are lovely. They smile, and sing and dance. Their bare feet glorify the firmament. It is more than flesh can stand. I grow sensual unto satyriasis. The aphrodisiac effect is astonishing in its intensity. I enjoy all the women of the world. I pursue countless maidens through the confines of Heaven. A delicious warmth suffuses my whole body. Hot and blissful I float through the universe, consumed with a resistless passion. And in the midst of this unexampled and unexpected orgy, I think of the case reported by the German Dr. Reidel, about a drug-clerk who took a huge dose of hashish to enjoy voluptuous visions, but who heard not even the rustle of Aphrodite's garment, and I laugh at him in scorn and derision.

I sigh deeply, open my eyes, and find myself sitting with one foot in bed, and the other on my desk. I am bathed in warm sweat which is pleasant. But my head aches, and there is a feeling in my stomach which I recognize and detest. It is nausea. I pull the basket near me, and await the inevitable result. At the same time I feel like begging for mercy, for I have traveled so far and so long, and I am tired beyond limit and I need a rest. The fatal moment approaches, and I lower my head for the easier deposition of the rising burden. And my head seems monstrously huge, and weighted with lead. At last the deed is done, and I lean back on the pillow.

I hear my sister come home from the opera. I wish to call her. My sister's name is Margaret, I try to say it, but I cannot. The effort is too much. I sigh in despair. It occurs to me that I may achieve better results if I compromise on Marge, as this contains one syllable instead of three. Again I am defeated. I am too weary to exert myself to any extent, but I am determined. I make up my mind to collect all



my strength, and call out: Marge. The result is a fizzle. No sound issues from my lips. My lips do not move. I give it up. My head falls on my breast, utterly exhausted and devoid of all energy.

Again my brain teems. Again I hear that high and heavenly harmony, again I float to the outposts of the universe and beyond, again I see the dancing maidens with their soft yielding bodies, white and warm. I am excited unto ecstasy. I feel myself a brother to the Oriental, for the same drug which gives him joy is now acting on me. I am conscious all the time, and I say to myself in a knowing way with a suspicion of a smile: All these visions because of 20 minims of *Cannabis indica*. My only regret is that the trances are ceaseless. I wish respite, but for answer I find myself floating over an immense ocean. Then the vision grows so wond'rous, that body and soul I give myself up to it, and I taste the fabled joys of Paradise. Ah, what this night is worth!

The music fades, the beauteous girls are gone, and I float no more. But the black rubber covering of my typewriter glows like a chunk of yellow phosphorus. By one door stands a skeleton with a luminous abdomen and brandishes a wooden sword. By the other door a little red devil keeps guard. I open my eyes wide, I close them tight, but these spectres will not vanish. I know they are not real, I know I see them because I took hashish, but they annoy me nevertheless. I become uncomfortable, even frightened. I make a superhuman effort, and succeed in getting up and lighting the gas. It is two o'clock. Everything is the way it should be, except that in the basket I notice the remains of an orange — somewhat the worse for wear.

I feel relieved, and fall asleep. Something is handling me, and I start in fright. I open my eyes and see my father. He has returned from a meeting at the Academy of Medicine and, surprised at seeing a light in my room at such a time, has entered. He surmises what I have done, and is anxious to know what quantity I have

taken. I should have answered, with a wink, *quantum sufficit*, but I have no inclination for conversation; on hearing the question repeated, I answer, "Twenty minims." He tells me I look as pale as a ghost, and brings me a glass of water. I drink it, become quite normal, and thus ends the most wonderful night of my entire existence.

In the morning my capacity for happiness is considerably increased. I have an excellent appetite, the coffee I sip is nectar, and the white bread, ambrosia. I take my camera, and walk to Central Park. It is a glorious day. Everyone I meet is idealized. The lake never looked so placid before. I enter the hothouses, and a gaudy-colored insect buzzing among the lovely flowers fills me with joy. I am too languid to take any pictures; to set the focus, to use the proper stop, to locate the image, to press the bulb — all these seem Herculean feats which I dare not even attempt. But I walk and walk, without apparent effort, and my mind eagerly dwells on the brilliant pagentry of the night before. I do not wish to forget my frenzied nocturnal revelry upon the vast dome of the broad blue heavens. I wish to remember forever the floating, the mercury-globules, the peacock-feathers, the colors, the music, the women. In memory I enjoy the carnival again.

"For the brave Meiamoun," writes Théophile Gautier, "Cleopatra danced; she was apparelled in a robe of green, open at either side; castanets were attached to her alabaster hands. . . . Poised on the pink tips of her little feet, she approached swiftly to graze his forehead with a kiss; then she recommenced her wond'rous art, and flitted around him, now backward-leaning, with head reversed, eyes half-closed, arms lifelessly relaxed, locks uncurled and loose-hanging like a bacchante of Mount Menelaus; now again active, animated, laughing, fluttering, more tireless and capricious in her movements than the pilfering bee. Heart-consuming love, sensual

(Continued on page 404)



## TWO CELEBRATED HASHISH EATERS

W. REININGER

THE investigations on hashish and its effects that the physician J. J. Moreau de Tours carried out around 1840 led to the rise of a hashish fashion (*mode du hachich*) among the bohemians of Paris to which a number of artists became addicted for some time. Of these, we must mention the poets Théophile Gautier (1811-1872) and Charles Baudelaire (1821-1867) who published observations gathered in the course of experiments that they carried out by consuming hashish as was done in their circle. Quite apart from their literary value, these notes have some scientific importance since they are concerned with the determination of the effects of hashish. The first article published by Théophile Gautier in the journal *La Presse*, entitled "Le Club des Hachichins," was even reproduced by Moreau in his monograph on hashish that appeared in 1845 to characterize a kind of intoxication typical of hashish.

The "Club des Hachichins" founded by Gautier held its meeting at the Hôtel Pimodan on the Ile Saint-Louis. Gautier, and much later Baudelaire, occupied attic rooms in it for several years. It was Moreau who provided Gautier with the first samples of hashish. This is how the poet described his first hashish intoxication: "At the end of several minutes, a general numbness spread through me! It seemed to me that my body dissolved and became transparent. In my chest I saw very clearly the hashish that I had eaten, in the form of an emerald that gave off millions of tiny sparkles. My eyelashes grew longer and longer without stopping, and like gold threads rolled up on little ivory spinning wheels that revolved completely alone with dazzling rapidity. Around me streamed and rolled precious stones of all



*Théophile Gautier (1811-1872). After an engraving by Paul Adolphe Rajon (1842-1888).*

colors. In space, flower patterns branched off ceaselessly in such a way that I know of nothing better with which to compare them than the play of a kaleidoscope. At certain moments, I saw my comrades again, but they were distorted; they appeared as half men, half plants, with the thoughtful air of an ibis, standing on an ostrich foot and beating their wings. So strange was this sight that I was convulsed with laughter in my corner and in order to join in the buffoonery of this spectacle I began to throw my pillows in the air, catching them again, and making them go around with the rapidity of an Indian juggler. One of these gentlemen began to





Charles Baudelaire (1821-1867). After a contemporary engraving.

converse with me in Italian, but which the hashish by its omnipotence translated into Spanish for me. The questions and answers were almost reasonable and dealt with trivial matters, with theatrical and literary news.

The first bout reached its end. After several minutes, I had recovered completely my composure, without a headache or any of the symptoms that accompany intoxication produced by wine, and greatly astonished by what had happened. — Hardly had half an hour passed when I again fell under the sway of hashish. This time the vision was more complicated and extraordinary. In an atmosphere of confusedly flitting lights there were thousands of swarming butterflies whose wings rustled like fans. Gigantic flowers with crystal calices, enormous hollyhocks, gold and silver lilies rose and opened around me with a crackling like a bouquet of fireworks. My hearing was prodigiously developed: I heard the sound of colors. Green, red, blue, and yellow sounds came to me in perfectly distinct waves. A glass that was upset, a creaking armchair, a

softly spoken word vibrated and reechoed in me like the rumbling of thunder. My own voice seemed to me so powerful and loud that I dared not speak for fear of causing the walls to collapse or of making myself burst like a bomb. More than five hundred clocks sang the time with their flute-like, coppery, silvery voices. Each flowered object emitted a sound of a harmonica or of an aeolian harp. I swam or rather floated in an ocean of sound in which, like islands of light, were motifs from *Lucia* or the *Barber* (of Seville). Never had such waves of bliss filled my being. I was so much a part of the wave, so far from myself and so devoid of my own being, this odious witness which accompanies us everywhere, that I understood for the first time what the existence of elementary spirits, of angels and souls separated from the body may be like. I was like a sponge in the middle of the sea; each moment waves of happiness traversed me, entering and leaving by my pores, for I had become permeable and, to the tiniest capillary vessel, my entire being was injected with the color of the fantastic milieu in which I was plunged. Sounds, perfumes, light came to me through multitudes of tubes as thin as hairs, in which I heard the whistle of magnetic currents. — According to my calculation, this state lasted about three hundred years, for the sensations were so numerous and followed each other so closely that any real appreciation of time became impossible. — The attack passed, and I saw that it had lasted a quarter of an hour.

What is distinctive of hashish intoxication is that it is not continuous. It seizes one and leaves one; you rise to the sky and come back to earth without transition. — As in madness, one has moments of lucidity. — A third attack, the last and the most bizarre ended my oriental soirée; in this last one I had double vision. — Two images of each object were reflected on my retina and produced a complete symmetry. But soon the magic paste, completely di-





Self-portrait of Baudelaire at the time when he began to use hashish.

gested, acted with great power on my brain and I became completely mad for an hour. All the pantagruelion dreams passed through my fantasy: ibises, bridled geese, unicorns, griffins, incubus, entire menageries of monstrous dreams trotted, skipped, fluttered about, yelped and squeaked through the room. . . . The visions became so queer and whimsical that I was seized by a desire to draw them, and to make in less than five minutes a portrait of the doctor . . . (probably Dr. Moreau de Tours), as he appeared to me, seated at the piano in a Turkish costume with the sun in the back of his jacket. The notes were represented as escaping from the piano in the form of firework rockets and capriciously corkscrewed spirals. Another sketch bearing this caption — an animal of the future — represented a live locomotive with a swan's neck ending in the face of a serpent from which spurted clouds of smoke and with

monstrous paws composed of wheels and pulleys. Each pair of paws was accompanied by a pair of wings, and on the tail of the animal one saw the Mercury of antiquity who acknowledged himself vanquished despite his winged heels. Thanks to the hashish I was able to make a portrait of an elf from nature. Until the present I only heard them groaning and moving about in the night in my old buffet. . . ."

Under the same title, "Le Club des Hachichins," Théophile Gautier published another article on hashish in the *Revue des Deux Mondes* of February 1, 1846. This article, however, contains a great deal more literary embellishment than the one quoted above and which it seems



A pen and ink sketch of the poet Baudelaire made by himself in 1844 while under the influence of hashish. The disproportion of the person in relation to the column which rises in the same plane evidences the sensation of grandeur produced by hashish.



is in agreement with scientific observation. Nevertheless, Gautier's second article which is often mentioned in the literature has a certain importance for the history of hashish intoxication because of its exact descriptions of the milieu in which the Club met.

Charles Baudelaire, who was introduced into the Club des Hachichins in 1844 by the painter Joseph Ferdinand Boissard de Boisdenier (1813-1866) devoted to hashish a rather large study which first appeared in September, 1858, in the *Revue contemporaine* under the title, "De l'idéal artificiel," and which the poet republished two years later under the title "Le poème du hashish" in his book, *Les paradis artificiels*, of which it constituted the first part. Much later, Baudelaire presented a brief extract of this study in an article entitled "Du vin et du hashish, comparés comme moyens de multiplication de l'individualité."

As the *Paradis artificiels* of Baudelaire is well known, it will suffice to mention here the most characteristic passages that deal with hashish. In his historical exposé of hashish addiction and in his description of hashish intoxication, Baudelaire presents hardly any important new facts. That which gives this study a scientific value is the reflections of the author on the psychological attitude of the hashish eater and on the moral consequences of this passion. Under the heading, "L'Homme-Dieu," Baudelaire in the fourth paragraph of his essay presents an analysis, which is very interesting from the psychological point of view, of the exaltation of the personality aroused by the drug in the course of hashish intoxication, an exaltation which inspires, often to the point of madness, the feeling that one is about to become a truly all-powerful divinity. In the fifth paragraph, entitled "Morale," the poet explains this self-deification, which is manifested in hashish intoxication, by the desire of all hashish addicts to escape from the overwhelming reality of daily

life, and he arrives at this conclusion: "Every man who does not accept the conditions of life, sells his soul. It is easy to grasp the connection which exists between the satanic creations who are often devoted to stimulants. Man wanted to be God, but before long by virtue of an uncontrollable moral law, he fell even lower than his real nature. It is a soul which sells itself piece-meal."

Although Baudelaire in his writings almost always speaks of the experiences of his friends with hashish, and only rarely mentions his own trials, it can be said that most of the details that he presents rest on observations made on himself. Some of the biographers of Baudelaire have even suggested that one of the causes of his death was his abuse of opium and hashish, but recent researches seem to contradict this assertion. Nevertheless, it is fairly well established that at the end of 1844 the poet repeatedly used these two intoxicants although at very irregular intervals and in varied doses.

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## HISTORICAL NOTES

THE USE OF HASHISH  
IN A CULT

The explorer, Hermann von Wissmann (1853-1905), visited the Baloubas, a Bantu tribe of the Belgian Congo, as well as the tribes subject to them. He relates that in 1888 Kalamba-Moukenge, the Balouba chief, in order to strengthen the kingdom that he had founded by conquest, and to link together in one cult the diverse subjugated tribes, had the ancient fetishes burned publicly, and replaced the worship of these idols with a new ritual which consisted essentially in the smoking of hashish.

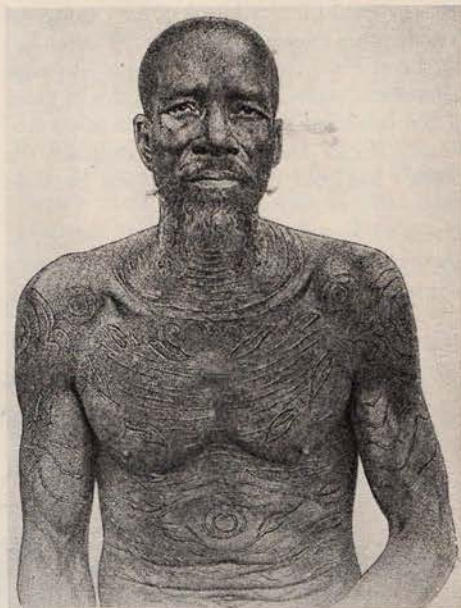
On all important occasions such as holidays, or the conclusion of a treaty or alliance, the Balouba smoke hemp in gourds which may be as much as one meter in circumference. In addition, the men gather each evening in the main square where they solemnly smoke hemp together. But hemp is also used for punishment. The delinquent is compelled to smoke a particularly strong portion until he loses consciousness. The subjects of Kalamba began to smoke hemp with such passion that they ended by calling themselves "bena-Ri-amba" (sons of hemp), after the name which this plant has in their language.

W. R.

\* \* \*

REMNANTS OF HEMP DATING  
FROM PREHISTORIC TIMES

were discovered in 1896 in northern Europe when the German archaeologist, Hermann Busse opened a tomb containing a funerary urn at Wilmersdorf (Brandenburg). The vessel in question contained sand in which were mixed remnants of plants. It dated from the 5th century B.C. The botanist, Ludwig Wittmaack (1839-1929), was able to find among this plant debris fragments of the seed and pericarp of *Cannabis sativa* L. At the session of the Berlin Society for Anthropology, Ethnology and Prehistory on May 15, 1897,



*The Negro chief, Kalamba-Moukenge, who instituted in his kingdom a new cult consisting chiefly of the smoking of hemp. After H. von Wissmann.*

Busse presented a report on his discovery and drew the conclusion that hemp had already been known in northern Europe in prehistoric times. But Rudolf Virchow (1821-1902), threw doubt on this interpretation that hemp had already been known in northern Europe at such an early time. He expressed the hypothesis that the hemp in question might have been introduced into the vase much later. The close examination of the place where the urn was found, and of its position, which Busse undertook at the time of discovery showed that this conjecture could be discarded. Furthermore, one must agree with C. Hartwich that hemp was already employed in northern Europe at the same time that it was by the Chinese and the Scythians for food and pleasure. All that remains is to determine whether hemp was imported from the Orient or whether it was already cultivated in the country.

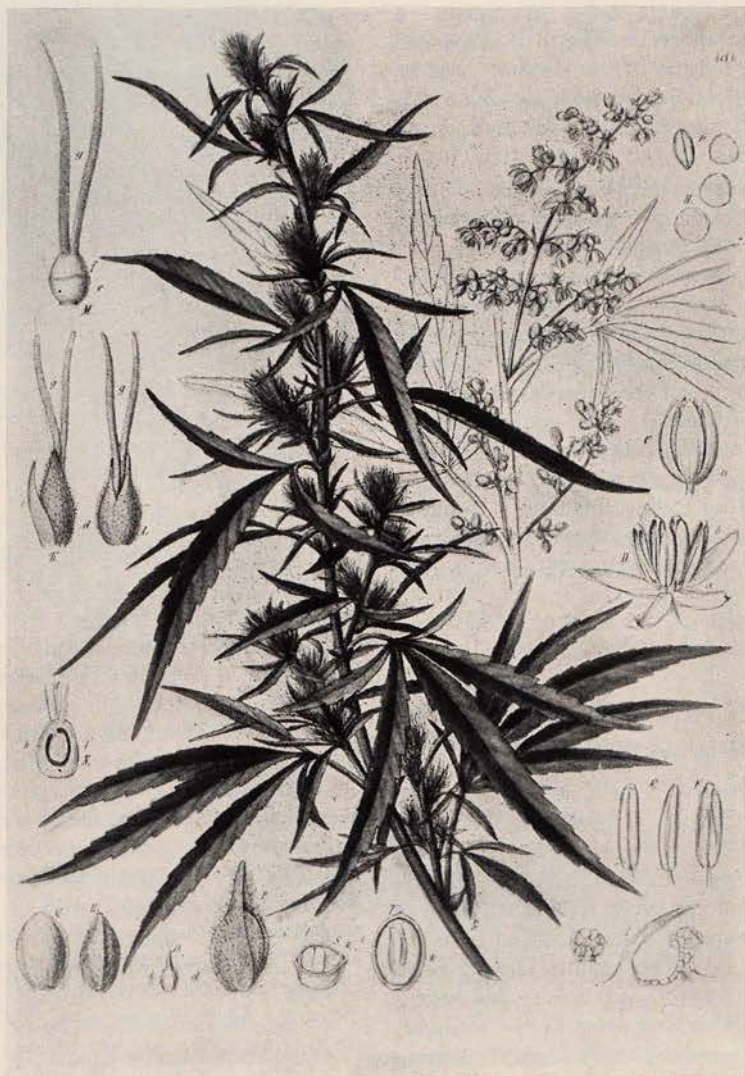
W. R.



## THE HERB "PANTAGRUELION"

of which Rabelais speaks at length in chapters 49/52 of the third book of his *Pantagruel* is none other than hemp (*Cannabis sativa* L.) M. Léon Faye, in his monograph, *Rabelais botaniste*, Angers, 1854, regards this as proof of the botanical knowledge of the celebrated French doctor and author. He contrasts the precise but cold description given by Can-

dolle (1778-1841) in his *Flore française* with the picture, full of life, drawn by Rabelais, as shown by the following passage: "The herb Pantagruelion hath a little root, somewhat hard and rough, roundish, terminating in an obtuse and very blunt point, and having some of its veins, strings, or filaments coloured with some spots of white, never fixeth itself into the ground above the profoundness almost of a cubit, or foot and a half. From the



The herb PANTAGRUELION, *Cannabis sativa* L.



root thereof proceedeth the only stalk, orbicular, cane-like, green without, whitish within, and hollow . . . full of long threads, straight, easy to be broken, jagged, snipped, nicked and notched a little after the manner of pillars and columns, slightly furrowed, chamfered, guttered and channeled and full of fibres, or hairs like strings, in which consisteth the chief value and dignity of the herb. . . . Its height is commonly five or six feet. Yet sometimes it is of such a tall growth, as doth surpass the length of a lance. . . .

"From the stalk of this Pantagruelion plant there issue forth several large and great branches, whose leaves have thrice as much length as breadth, always green, roughish, and rugged. . . . The figure and shape of the leaves thereof is not much different from that of those of the ash tree, or of agrimony. . . . These leaves are in equal and parallel distances spread around the stalk, by the number in every rank either of five or seven, nature having so highly favoured and cherished this plant, that she hath richly adorned it with these two odd, divine, and mysterious numbers. The smell thereof is somewhat strong, and not very pleasing to nice, tender, and delicate noses. The seed inclosed therein mounteth up to the very top of its stalk, and a little above it. This is a numerous herb: . . . Some of these plants are spherical, some rhomboid, and some of an oblong shape and all of these either black, bright-coloured, or tawny, rude to the touch and mantled with a quickly-blasted-away coat, yet such a one as is of a delicious taste and savour to all shrill and sweetly singing birds, . . . And although that of old amongst the Greeks there was certain kind of fritters, and pancakes, buns and tarts, made thereof, which commonly for a liquorish daintiness were presented on the table after supper, to delight the palate and make the wine relish the better; . . . I shall forbear to tell you, how the juice or sap thereof, being poured and distilled within the ears, killeth every kind of vermin, that by any manner of putrefaction cometh to be bred and engendered there, and

destroyeth also any whatsoever other animal that shall have entered in thereat. If, likewise, you put a little of the said juice with a pail or bucket full of water, you shall see the water instantly turn and grow thick therewith, as if it were milk curds, whereof the virtue is so great, that the water thus curded is a present remedy for horses subject to the cholic, and such as strike at their own flanks. The root thereof well boiled mollifieth the joints, softeneth the hardness of shrunk-in sinews, is every way comfortable to the nerves, and good against all cramps and convulsions, as likewise all cold and knotty gouts.

\* \* \*

## THE USE OF HEMP IN THE MANUFACTURE OF ROPES AND FABRICS

seems to have been introduced rather late. Not a single passage is to be found in the writings and mural inscriptions of the ancient Egyptians and Hebrews which makes any allusion to such usage. Herodotus, on the other hand, reports that the inhabitants of Thrace made clothes from hemp fibers. It is related that Hiero (3rd century, B.C.), tyrant of Syracuse, had hemp brought from Rhodanus (the country of the Rhône?) in order to equip a ship. Pausanias (2nd century B.C.) mentions that hemp and other textile plants were cultivated in Elide; and Pliny the Elder (23-79 A.D.), relates that the sails and cordage of the Roman galleys were made of hemp. Until the end of the 19th century, hemp played an important rôle because of the industrial exploitation of its fibers. Today hemp is cultivated on a large scale, chiefly in Russia, Italy and Yugoslavia.

Formerly, besides the fibers, use was made of the seed, from which as much as 20% to 30% oil was extracted. This was utilized chiefly for illumination and the manufacture of soap. The residue, or bagasse, was used as fish-bait and as fertilizer.

W. R.



## CONCERNING CANNABIS INDICA

(Continued from page 386)

the menses. It has been pressed into the service of the diseases that mankind has named in honor of Venus. According to Osler, Cannabis is sometimes useful in locomotor ataxia. Christison reports a case in which Cannabis entirely cured the intense itching of eczema, while the patient was enjoying the delightful slumber which the hemp induced. It is sometimes employed as a hypnotic in those cases where opium, because of long-continued use, has lost its efficiency. As a specific in hydrophobia it was once claimed to be marvelous, for Dr. J. W. Palmer wrote that he himself had seen a sepooy, an hour before furiously hydrophobic, under the influence of cannabis drinking water freely and pleasantly washing his face and hands! Despite the value of personal observation, it is not hashish that has caused mankind to cease to fear Montaigne's terrible line: "The saliva of a wretched dog touching the hand of Socrates, might disturb and destroy his intellect." Frankly, if hashish depended solely on its therapeutic potency for its reputation, it would be resting in the pharmacologic graveyards of the past. *Cannabis indica* need not be included in the restricted list of "Useful Drugs."

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## EXPERIMENTS WITH HASHISH

(Continued from page 396)

pleasure, burning passion, youth inexhaustible and ever-fresh, the promise of bliss to come—she expressed all. . . . The modest stars had ceased to contemplate the scene; their golden eyes could not endure such a spectacle; the heaven itself was blotted out, and a dome of flaming vapor covered the hall."

But for me a thousand Cleopatras caroused—and did not present me a vase of poison to drain at a draught. Again I repeated to myself: "And all these charming miracles because of 20 minims of *Fluidextractum Cannabis Indicae*, U.S.P."

By the afternoon I had so far recovered as to be able to concentrate my mind on technical studies. I will not attempt to interpret my visions psychologically, but I wish to refer to one aspect. Spencer, in *Principles of Psychology*, mentions hashish as possessing the power of reviving ideas. I found this to be the case. I spoke about airships because there had been a discussion about them at supper; I quoted from Tennyson's "Maud" because I had been re-reading it; I saw mercury-globules in the heavens because that same day I had worked with mercury in preparing mercurial plaster; and I saw the peacock-tails because a couple of days previous I had been at the Museum of Natural History and had closely observed a magnificent specimen. I cannot account for the women in my visions.

All poets—with the possible exception of Margaret Sangster—have celebrated Alcohol, while Rudyard Kipling has gone so far as to solemnize delirium tremens; B. V. has glorified Nicotine; De Quincey has immortalized Opium; Murger is full of praise for Caffeine; Dumas in *Monte Cristo* has apotheosized Hasheesh, Gautier has vivified it in *Club des Hachichins*, Baudelaire has panegyricized it in *Paradis artificiels*, but as few American pens have done so, I have taken it upon myself to write a sonnet to the most interesting plant that blooms:

Near Punjab and Pab, in Sutlej and Sind,  
Where the cobras-di-capello abound,  
Where the poppy, palm and the tamarind,  
With cummin and ginger festoon the  
ground—

And the capsicum fields are all abloom,  
From the hills above to the vales below,  
Entrancing the air with a rich perfume,  
There, too, does the greenish Cannabis  
grow:

Inflaming the blood with the living fire,  
Till the burning joys like the eagles rise,  
And the pulses throb with a strange desire,  
While passion awakes with a wild surprise:  
O to eat that drug, and to dream all day,  
Of the maids that live by the Bengal Bay!