

The LANCET on ABSINTHE 1868 - 1930

A selection of significant articles published in the authoritative British medical journal THE LANCET on the subject of absinthe and absinthism.

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Pages 600-601

ABSINTHE.

WE think it time that an authoritative and exhaustive inquiry should be made as to the effects of excessive absinthe drinking, about which a great deal is being said just now, not merely by medical men, but by the public. It is quite clear that a great deal of what has been said is mere nonsense, and will not bear a moment's investigation. And when one reads carefully even the seemingly authoritative description of the symptoms given by M. Legrand, and quoted the other day by the Pall Mall Gazette, it is impossible to fix on any definite peculiarities which clearly distinguish poisoning with absinthe from poisoning with any other concentrated alcohol, taken in small doses repeated with extreme frequency. It may be remembered by some of our readers that some five years ago, when absinthe was beginning to make a noise in Paris, by reason of its having become the drink of fashionable idlers, instead of being the vulgar luxury of peasants and labourers, a clever young physician, F. Moreau, wrote a careful treatise, in which he formally denied that the absinthe (or wormwood) in the liquor had any specific poisonous effect whatever; in fact, if our memory serves us, he declared that there was very often no absinthe in the liquid sold under that name. At any rate, he totally denied that the symptoms were due to anything but the alcohol, and (to a very limited extent) to the adulteration with salts of copper which is sometimes practised. His opinion was opposed by M. Marce, who concluded, from certain experiments, that absinthe has a special tendency to produce intellectual dullness, with terrifying hallucinations, and a very rapid and complete degeneration of the mental powers. For our own part, we have never been convinced that there is anything in the symptoms of acute or chronic absinthism as they are described, essentially different from those of acute or chronic alcoholism which has been produced by the imbibition of innumerable drams of any spirit. We have repeatedly seen the whole train of symptoms, which are now so much talked of, produced by the constant drinking of brandy or rum. As for hallucinations, there is nothing more common. At any rate, it will take a good deal of very solid and precise evidence to convince us that the trifling amount of essence of wormwood contained in the liquor called absinthe, adds any considerable poisonous power to the natural influence of some 20 or 30 ounces per diem of a highly concentrated alcohol, which is what many of these Parisian buveurs actually dispose of in the course of innumerable visits to the cafes and other houses of refreshment.

The Lancet, March 6th 1869
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ABSINTHE AND ALCOHOL.

THE question whether absinthe exerts any special action other than that of alcohol in general, has been revived by some experiments by MM. Magnan and Bouchereau in France. These gentlemen placed a guinea-pig under a glass case) with a saucer full of essence of wormwood (which is one of the flavouring matters of absinthe) by his side. Another guinea-pig was similarly shut up with a saucer full of pure alcohol. A cat and a rabbit were respectively enclosed along with a saucer each full of wormwood. The three animals which inhaled the vapours of wormwood experienced, first, excitement, and then epileptiform convulsions. The guinea-pig which merely breathed the fumes of alcohol, first became lively, then simply drunk. Upon these facts it is sought to establish the conclusion that the effects of excessive absinthe drinking are seriously different from those of ordinary alcoholic intemperance.

It is not the first time that we have had to notice discussions on this subject, and to comment upon the inadequacy of the evidence produced in order to prove that absintheism, as met with in the Parisian world, is something different in its nature from chronic alcoholism. We have never denied the possibility of an ultimate discovery of such differences; but we do maintain that as yet no symptoms of absintheism have been described which are not to be met with in many of the victims of simple alcoholic excess. The sleeplessness, the tremor, the hallucinations, the paralysis, and even the epileptiform convulsions, are all of them well-known symptoms which are more or less frequently met with in the alcohol drinkers of England. And it is no sort of answer to these facts to prove, as the recent French observers have done, that the concentrated fumes of wormwood are capable of producing convulsive symptoms which are not produced by inhalation of the fumes of alcohol. Wormwood is, after all, only present in small proportions in absinthe. And the question really before us is, not as to the effects of concentrated inhalations of a simple substance like wormwood, but of the comparative influence of repeated small stomach doses (reaching a high daily total) of an alcohol pure and simple, and of an alcohol flavoured with small quantities of wormwood, and, indeed, of half a dozen other flavouring matters besides.

The Lancet, January 4, 1873

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OUR neighbours, the French, whenever they take up with a new social vice, are pretty sure to invest it with some special features, and to pursue it with an energy that is all their own. Formerly, there can be no question that the French nation was far more free from the vice of alcoholic intemperance than the English; but at present, in Paris and the large cities, at any rate, this scandal is almost as great as in the worst of our towns. Moreover, the favourite liquor which the French choose to tipple has become more and more deadly in its composition, and, consequently, in its effects. Originally the only important ingredient in its composition, besides alcohol, was the essential oil of absinthium, or wormwood; and though, doubtless, this added something to the mischievous effects of the liquor, it would be impossible to trace to it, or to the other comparatively trivial ingredients, the more serious of the special results which are now observed to occur in the victims of absinthe. An analysis recently made at the Conservatoire des Arts shows that the absinthe now contains a large proportion of antimony, a poison which cannot fail to add largely to the irritant effects necessarily produced on the alimentary canal and the liver by constant doses of a concentrated alcoholic liquid. As at present constituted, therefore, and especially when drunk in the disastrous excess now common in Paris, and taken frequently upon an empty stomach, absinthe forms a chronic poison of almost unequalled virulence, both as an irritant to the stomach and bowels, and also as a destroyer of the nervous system. It is probable, we think, that the addition of the antimony was intended to produce the doubtful benefit of rendering the absinthe less intoxicating, for it is notorious that tartar emetic is often slyly given to drunkards by their friends to quiet their fury. But it would be impossible to adulterate the liqueur with sufficiently large doses without risking the production of nausea or actual sickness, and the quantity of antimony actually introduced only serves to do all the mischief possible, without any corresponding good.

The Lancet, September 19, 1874
Pages 410 - 412

ON THE COMPARATIVE ACTION OF ALCOHOL AND ABSINTHE.

By Dr. Magnan
Physician to the Ste. Anne Asylum, Paris.

PATIENTS affected with acute alcoholism may offer the following peculiarities:

1. Some of them present convulsive phenomena, which nothing in the previous symptoms allowed us to foresee. The patient, in fact, all at once loses consciousness, and suddenly falls; the face becomes pale, the limbs stiffen, and the muscles of the trunk and neck contract, so as to turn the head to one side. To this stage of tonic spasm soon succeed clonic spasms, twitchings in the arms and legs, with grimaces of the face, and convulsive movements of the eyes; frothy saliva, occasionally tinged with red, covers the mouth, and the tongue is bitten; then the lips grow blue, the face livid, and the breathing stertorous, whilst the urine and faeces escape involuntarily; a more or less prolonged state of stupor following the fit.

We have here, it is evident, an attack of epilepsy. Such a fit may occur equally at the periods of onset, of full establishment, or of the decline of the attack of delirium tremens - that is to say, in stages of the attack when the trembling is very violent, or, on the other hand, very slight. After the attack the trembling follows its usual course: it diminishes if the attack of delirium tremens is on the decline ; it increases, on the contrary, if the fit has come on at the earlier part of the attack.

The fit, then, is not the highest expression of the motor disturbance, nor is it the most advanced degree of that general tremulousness which accompanies delirium tremens; it is an accident of a different order, superadded to the other disturbances of motility, and due to a distinct cause, which from the antecedent history is usually absinthe, more rarely bitters, vermouth, or *vin blanc*, the adulterated white wine which is sold retail in Paris by most of the wine merchants, and is very different from that drunk in the neighbourhood of Vignobles.

An acquaintance with this fact is not unimportant either from a diagnostic or therapeutic point of view; and perhaps bleeding would have been used more moderately for patients affected with epilepsy wrongly called "alcoholic," if practitioners had been thoroughly impressed with the idea that the attack was due to the direct action of a poison which possesses the special property of stimulating the excito-motor functions of the medulla and spinal cord, without the necessary intervention on the part of the brain of that determination of blood to which certain writers have ascribed the principal role in the production of convulsive seizures.

To sum up, the epileptic attack is an exceptional phenomenon due to a special cause, and independent of the degree of trembling.

2. In certain rarer cases, in patients suffering from acute alcoholism, we observe the occurrence of an attack of delirium which presents all the general characters of alcoholism-that is to say, hallucinations of very changeable character, of painful, disagreeable, and aggressive nature, recalling, it may be, either the profession of the individual or the dominant preoccupations of the time of attack. But with this characteristic delirium the trembling in this class of patients is next to nothing; it may even be entirely wanting, so that the attack of acute alcoholism may be found reduced simply to intellectual disturbances. Cases of this kind have been on record for some years past. M. Motet relates some observations of the kind in his thesis of 1859 "On Alcoholism, and the Poisonous Effects produced in Man by the Liqueur Absinthe." In his cases the patients were especially drinkers of absinthe.

How are we to explain this rapid evolution of delirium in the absence of motor disturbances? It is that absinthe acts in the same way as belladonna, henbane, datura, and haschisch (cannabis Indica), and does not require, like alcohol, to prepare its way, for, as is shown by physiological experiment, it can rapidly give rise to hallucinations and delirium before the alcohol contained in the liqueur of absinthe has had time to produce trembling in man. We have here, then, a second fact – viz, the premature appearance of hallucinatory disturbance without trembling - a fact which, from clinical observation alone, we might attribute to the absinthe, and of which physiological experiment gives us the confirmation.

3. In the greater number of cases of patients affected with acute alcoholism, the trembling and intellectual disturbances progress simultaneously, or present only slight differences in their successive evolution. These patients, according to what we can ascertain about them, have usually wine or brandy only to excess.

The present communication has for its object to furnish experimental proof of the facts taught us by clinical observation.

Before showing the action of essence of absinthe on the nervous centres, it is needful to recall in a few words the mode of action of alcohol. Let us observe, for example, what takes place in a dog submitted to the poisonous action of this agent. Some minutes after the administration of the alcohol the animal leaps, yelps, and runs in every direction, then staggers and becomes stupefied; the paws, especially the hinder ones, cross each other and give way under him. The paralysis at first of the hind quarters soon reaches the fore part of the body; the animal falls into a state of complete relaxation and comatose sleep; when raised he sinks like a lifeless mass, all energy and elasticity being lost, The temperature is lowered, sensibility is abolished and cannot be aroused, in cases of complete intoxication, by the most active excitants. These symptoms are reproduced in the same animal every time it is submitted to the action of alcohol, and during tenor twelve days we do not see any new symptoms supervene; there are no alterations in the general behaviour, no illusions or hallucinations, and no epileptic or epileptiform attacks. But if one continues to administer a daily dose of alcohol, sufficient to bring on intoxication, one remarks in the dog from about the fifteenth day a nervous excitability of quite peculiar character. The animal is melancholy and uneasy; he listens, the least noise makes him start; when the door is opened, seized with fright, he runs and crouches in the darkest corner of the room; he no longer responds when patted, he runs away and tries to bite when one attempts to take hold of him, and utters sharp cries at the mere threat of blows. This irritable and timid condition increases each day, and from the end of the first month, illusions and hallucinations becoming added to it, it is transformed into a veritable delirium. In the middle of the night he utters plaintive moans, or even whilst all is quiet he begins to bark, the cries becoming louder and more frequent, as if an enemy were approaching; speaking or calling does not reassure him - one must interfere with a light. At last, during the day he growls without cause; then thinking that he is pursued, he cries out, runs scared hither and thither, with his head turned back, and snapping in the air.

In some cases the hallucinations and delirium are the causes of fatal accidents, the animal in its flight may fall out of a window or down stairs exactly like a drunken man. With these intellectual troubles one sees, from the second month, a trembling appear, which is at first limited to the paws, but gradually becomes general, and reaches the muscles of the trunk and head. This trembling sometimes persists for twelve hours in the day, and follows each fresh dose of alcohol; it presents a rhythmic type, with short and somewhat rapid oscillations, is of variable intensity, stopping for a few moments, and is complicated, moreover, from time to time by tremors in small isolated groups of muscles. But never, in the experiments with alcohol, is an epileptic attack produced, whilst this, as we are about to make evident, is the principal manifestation of poisoning by absinthe.

In a weak dose, essence of absinthe induces a more or less marked muscular tremor, little abrupt jerking shocks, like electric discharges, repeated one or several times, in the muscles of the neck, and giving rise to rapid and very limited movements of the head, which is carried upwards and backwards; the contractions reach in succession the muscles of the shoulders and the back, and then provoke stronger abrupt contractions, which raise, by jerks, the anterior part of the body. This action of absinthe, more especially directed to the head and neck—that is to say, its influence upon the bulbo-cervical region of the cord, is the more remarkable because alcohol acts in the reverse order. The latter, in fact, as we have seen, produces at the onset paraplegia, before paralysing the anterior parts of the body; absinthe, on the contrary, provokes spasmodic contractions in the fore-quarters before producing generalised convulsions. And this is not all: sometimes one sees a very interesting phenomenon come on in the dog; the animal stops all of a sudden, stays motionless as if stupefied, with the head low, a dull look, and the tail hanging down. It keeps this attitude for thirty seconds to two minutes, and then spontaneously regains its habitual appearance. This is a vertiginous condition, which is not without analogy to the *petit mal* or "absence" of the epileptic.

The action of the essence of absinthe in a large dose is different, or, rather, it is a higher degree of intensity of the phenomena.

After prodromata analogous to the occurrences of which we have just spoken, or even abruptly and more or less rapidly, according to the mode of introduction of the poison, epileptic attacks come on: the animal loses consciousness, falls, and stiffens in the tonic convulsions which form the first stage of the fit. Most frequently the extensor muscles of the neck and back contract energetically so as to produce opisthotonos; but with this one almost always remarks a slight pleurosthotonos either to the right or to the left. Sometimes, in place of an extension of the head, it is flexion which is in excess, and which may by a forcible emprosthotonos make the animal turn over itself. To the tonic convulsions succeed, after the lapse of a few seconds, clonic convulsions, with snapping of the jaws, foam (sometimes bloody) on the lips, and biting of the tongue; and one sees the evacuation of urine and faecal matters, and even of semen, occur in some cases. The attack over, the animal continues in a state of slight stupefaction for a brief interval. The attacks of epilepsy show themselves sometimes with this ensemble of symptoms, and leave intervals between them of ten or twenty minutes, or even longer.

The action of essence of absinthe, however, does not reveal itself only by a stimulation of the excitomotor power of the nerve-centres; it shows itself also by intellectual disturbances; and, acting in an inverse mode to that of alcohol, which requires a certain time to produce delirium, this substance gives rise to hallucinations at the first onset, without previous preparation, in an animal which up to that time was free from every ailment. In fact, what we see in the dog, in some cases, after intravenous, subcutaneous, or stomachal injections of essence of absinthe, is as follows: In the interval between two epileptic attacks, and sometimes before the convulsive symptoms, or even without convulsions, the animal is seized with an attack of delirium. All of a sudden he erects himself on his paws, the hair bristles, the look becomes wild, the eyes, injected and brilliant, staring at some particular spot where there is nothing apparent to draw his attention; he barks furiously; advances and retires as before an enemy; with open mouth, he throws his head suddenly forwards, and immediately shuts his jaws and shakes them from side to side as if he wished to tear his prey in pieces. This attack of delirium may recur several times; then the effects pass off, and the animal becomes quite calm.

It is not necessary to insist here upon the parts which belong to the spinal cord and to the brain respectively in the production of this group of symptoms. It will be sufficient to call to mind that, after section of the cord below the medulla oblongata, we obtain separately and at different times an attack of bulbar epilepsy (head, eyes, mouth, and face), and an attack of spinal epilepsy (limbs, trunk, and neck). On the other hand, after the removal of the cerebral hemispheres, the convulsions are produced in the same manner. Lastly, we have seen that the delirium may show itself without convulsive seizures. All these are so many proofs demonstrating that the cerebro-spinal axis in its entirety concurs in the production of epilepsy; but that each one of the parts may be influenced separately, and may give rise to a determinate group of symptoms. We will add, moreover, that the essence of absinthe is a valuable agent for the study of the mechanism of epilepsy, and for the observation of the changes in the cerebral or retinal circulation which accompany the different periods of the attack.

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ABSINTHE AND ABSINTHE DRINKING IN ENGLAND.

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MANY readers of this journal may regard an article on absinthe and its dangers as superfluous, being unaware that this liqueur, of which the manufacture and sale have been prohibited in France, Belgium, Switzerland, Italy, Germany, and Bulgaria, is still manufactured and exported to England. I have been informed by a member of an exclusive London club that when a cocktail is ordered it is customary to inquire whether a "spot" shall be added - that "spot" being absinthe. Another London clubman states that "the cocktail 'with a kick in it' is often ordered by the more hardened cocktail drinker" and that the "kick" is obtained by the addition of an extra quantity of the basic spirit (gin, whisky, brandy, or rum) of the cocktail or of a variable amount of absinthe. A third patient states that "when in my club a cocktail is ordered, the waiter inquires 'with or without': with or without absinthe." The names of several brands of absinthe, vermouth, and chartreuse (both the latter liquors containing essential oil of wormwood) appear in the current price lists of many of the large London stores and wine-merchants.

Consumption of Spirits.

While the question of total abstinence versus moderate drinking of alcohol remains undecided, the majority of responsible men and women will agree that the consumption of wines and beers of low alcoholic strength is preferable to that of spirits and liqueurs. Many writers have regretted the gradual conversion of the United Kingdom from being a beer, cider, and wine-drinking nation to one in which the annual production of British distilled spirits rose from 10,372,000 proof gallons in 1810 (the first year in which complete returns were available) to 59,246,000 proof gallons in 1900. The population in 1810 being (approximately) 16 millions and in 1900 (approximately) 40 millions. In this ratio, the production in 1900 should have been 25,930,000 gallons, or 33,316,000 gallons less than the total production in that year.

For many centuries, before the introduction of tea, coffee, and cocoa, home-brewed or "small" beer, of low alcoholic strength was the national beverage of England. There was no native production of distilled spirits corresponding to the "usquebaugh" or whisky of Scotland and Ireland, although brandy was introduced into England in the reign of Henry VIII., and whisky was distilled by Irish settlers in Pembrokehire in the latter part, of the sixteenth century. With the growth of the West Indian slave-trade, rum was introduced into the larger English seaports, especially Bristol and Liverpool. It was adopted as the regulation liquor in the Royal Navy in the reign of Charles II., and it became a popular drink as well as a favourite family medicine.

An increased consumption of spirits followed the Napoleonic Wars. The Army learned to drink brandy in France, and it became a fashionable beverage among men of the Regency period. The popularity of brandy continued until it was superseded, firstly by Irish and then by Scotch whisky during the last quarter of the nineteenth century. Consequently, the consumption of spirits increased rapidly, but it was almost entirely confined to the male sex. The numerous references to brandy and water in the works of Dickens and Thackeray indicate the popularity of this spirit. Women took it medicinally, but social and convivial spirit-drinking among women and girls was unknown. The habit of drinking spirits of high alcoholic content grew quickly, until many persons drank brandy, whisky, rum, or gin without dilution. Liqueurs were introduced from the Continent, and were drunk usually undiluted, although the alcoholic content of the weakest liqueur anisette-is 27 per cent by volume. At the same time port and sherry were "fortified" for the British market by the addition of rectified spirits in order to satisfy the increasing national desire for higher alcoholic content.

In the compilation of Inland Revenue statistics it has been usual to group according to the mode of manufacture - ie., by fermentation or distillation - various alcoholic liquors, regardless of the percentage of contained alcohol; but many Governments have come to recognise the importance of the alcoholic content and consequently prohibit the manufacture and sale of liquors of high alcoholic strength.

On Nov. 15th, 1915, the Belgian Government "prohibited the manufacture and sale or keeping for sale of distilled alcohol (spirits) or wines with more than 15 per cent, alcoholic strength and beers or beverages with more than 8 per cent. of alcohol; except alcohol for medicinal, scientific, and industrial uses." "Other Acts (August 29th, 1919) followed by Ministerial decree (Sept. 10th, 1919), increased the tax on alcoholic liquors in order (a) to secure increased revenue, and (b) to combat alcoholism by prohibiting absolutely the consumption of spirits in all places accessible to the public."

The introduction into Great Britain of Continental liqueurs was followed later by that of "cocktails" from America, and, since the war, the latter have become increasingly popular among young men and women of the upper and middle classes. Prof. W. E. Dixon's article "Cocktails and their Effects" received warm commendation in the press, but his warnings seem to have had little effect. "Cocktail parties" have become very popular among society women of all ages, and I have been told by several patients that many young men and women ask for a "spot" of absinthe in a cocktail, doubtless often in ignorance of its composition.

Nature of Absinthe.

"Absinthe," says the Encyclopedia Britannica, "is a highly toxic liqueur or aromatised spirit, the characteristic flavouring matter of which is derived from various species of wormwood (*Artemisia absinthium*). Among the other substances generally employed in its manufacture are angelica root, sweet flag, dittany leaves, star-anise fruit, fennel, and hyssop. The Swiss variety has a higher alcoholic strength than the French. The best absinthe contains 70 per cent. to 80 per cent. of alcohol. It quickly intoxicates, and its deleterious effects are more serious than those of other forms of alcohol. The wormwood acts powerfully upon the nerve centres and causes delirium and hallucinations, followed in some cases by idiocy."

Oil of absinthe is also an ingredient of French and Italian vermouth, of chartreuse, and of a popular "bitter" aperitif. Although the manufacture and sale of absinthe were prohibited in Switzerland on July 5th, 1908, in Italy in 1913; and in France, on March 16th 1915; the sale of absinthe and of vermouth is unrestricted in England. The laws of Switzerland, Italy, and France, are being infringed in order to manufacture these liqueurs for export to Great Britain. These laws were passed in all three countries in the face of strenuous and prolonged opposition on the part of manufacturers of the liqueurs in question. Each firm claimed that their special brand of absinthe was not only harmless but, even had medicinal value. In Switzerland and in France these claims were supported by certain Ministers and senators. In Switzerland the opposition to the legal prohibition of absinthe was so strong (especially in the Cantons of Geneva and Neuchatel) that in 1906 the Federal Department of Justice and Police appointed a commission of three professors - Dr. J. Gaule, Dr. A. Jaquet, and Dr. R. Weber. In their report this commission described minutely the manufacture of absinthe, as well as its physiological effects on animals and man. They found that the health of any community deteriorated rapidly when absinthe drinking prevailed. They quoted the following statement made by Colas and Gautier, two French supporters of the absinthe trade: "If, therefore, absinthe may be considered as more dangerous than other spirituous beverages, it is not, because it is more toxic in itself, but because its particular flavour offers greater attraction to the drinker and leads him more easily to abuse." Gaule, Jaquet, and Weber stated: "Our personal experience leads us to the conclusion that, there is, in effect, an analogy between the absinthe drinker and the morphinomaniac. There is no deception which either will not employ to satisfy their passion." The commissioners agreed with Leonidoff: "absinthe has become the most popular aperitif and, among certain drinkers, it is the only beverage."

Ledoux draws attention to another danger; Senator Borne, in defending the Pontarlier product, stated: "At Pontarlier, only the purest alcohol enters into the manufactures of absinthe - ethylic alcohol, 'spirits of wine,' rectified alcohol. But on the other hand, there are absinthes made with impure alcohol." Rocques observes "(Analyses of Alcohols and of eaux-de-vie)" "It is probable and even certain that inferior alcohols are sometimes utilised for the manufacture of common products, principally of absinthes and of other liqueurs of which the very strong aroma can mask the taste of inferior alcohols." This writer quotes several other authorities who state that methylated spirit and "denatured alcohol" are also employed in the manufacture of liqueurs.

Physiological Action of Absinthe.

Many eminent French and Swiss physicians - among others, Lancereaux, Legrain, Mairet, Combemale, Legendre, Sollier, and Fere - have studied the physiological effects of absinthe.

Lancereaux found 1229 alcoholics (901. of whom drank liqueurs) among 2192 patients suffering from tuberculosis ; while Jaquet found 180 alcoholics among 252 tuberculous patients - ie., 71.42 per cent. Dr. Mirman, Directeur de l'Assistance Publique, reported (June 27th, 1907) to the President of the Council that among 71,547 mental patients "interned" in 1907, 9932 became insane entirely or in part owing to alcoholism. Of these, 4882 (49.15 per cent.) drank absinthe or other "aperitifs."

Ledoux states that absinthe drinking in 1860 was confined to officers and men of l'Armee de l'Afrique ; delusional insanity was common in that service, and was colloquially known as "le cafard." "These men on returning to France continued to drink their favourite beverage. Fashion and folly were the great disseminators of absinthism." While in France, in 1884, the consumption of absinthe amounted to 40,994 hectolitres, the figure rose in 1900 to 208,931 hectolitres - that is to say, that in 16 years the quantity of absinthe consumed increased more than five times. Ledoux shows that the incidence of insanity, idiocy, epilepsy, and tuberculosis in different regions of Eastern France corresponds closely with the percentage of the population addicted to absinthe. This statement is confirmed by reference to the statistics of rejection of Army recruits on account of tuberculosis or "feebleness of constitution." In one of his concluding sentences, Ledoux quotes the statement of 112 senators who presented a Bill for the prohibition of absinthe on June 22nd, 1908: "Absinthe causes insanity and crime, it predisposes to epilepsy and tuberculosis. Each year it kills thousands of Frenchmen; it makes man a beast, woman a martyr, the child a degenerate."

Lancereaux, who studied the problems of alcoholism for many years, was convinced that the essential oils of absinthe and of the other ingredients of the liqueur were far more toxic than the alcohol in which they were dissolved. He published an official table of the Direction of Contributions for the years 1885-92 inclusive (the figures represent the volume of pure alcohol). These figures are for Paris and its suburbs only. They show that while the total increase in consumption of alcohol in Paris and its vicinity during that period was 4.96 per cent. only, the increase in the consumption of absinthe during the same period amounted to 124.6 per cent. Lancereaux believes that absinthe is far more insidious than ordinary alcohol. "Even the daily consumption of this liqueur is not fraught with danger if these persona could be satisfied with only one "*petit verre*," but this is far from being the case; the attraction possessed by this beverage drives the consumer generally to double and treble little by little the dose until the time comes when he cannot abandon it; thus is created a craving analogous to that for morphine, a desire almost as imperious as those of hunger and thirst." Lancereaux thought formerly "that limitation of the number of cabarets and an increase of the duty on liqueurs would suffice to arrest the progress of the evil, but since I learned better the attraction that this liqueur exercises on women even more than on men, on account of the essential oils which it contains, my conviction is that the only means of avoiding the danger is prohibition of the sale of this drink."

Many other passages from the works of eminent French authors might be quoted, but enough has been said to indicate that absinthe addiction begins insidiously and that, at first, the dose is very small. It is well known that some persons have so insatiable a craving for alcohol that they cannot be satisfied with ordinary beverages but have recourse to perfumes such as lavender water, eau-de-cologne, "extrait de violettes de Parme," etc; probably not only for the effect of their concentrated alcohol, but also largely for the highly toxic essential oils contained in the perfumes. Many of these perfume drinkers are women and some of them become addicted to morphine, heroin, and cocaine.

Cocktails.

Lest it should be thought that Continental authorities 'have exaggerated the evidence against absinthe, the following passage from Prof. W. E. Dixon's article on "Cocktails and their Effect" should be convincing: "A large percentage of cocktail drinkers are young men and young women, and they drink to lose their shyness, so that they may become bright and interesting, and it may be also partly in a spirit of bravado. These young people are usually not content with one drink; they often indulge in two or more, though the second has a much less pronounced action than the first at least so far as the initial effect is concerned. Most drugs of addiction assuage the pangs of hunger and thirst. The person who habitually takes alcohol in excess has a poor appetite and rarely eats breakfast, though he may be fat and bloated in appearance. "The cocktail, on the other hand, improves appetite - at least, in certain abnormal conditions ; this it does not by increasing hunger contractions, but by relieving temporarily the conditions which are producing inhibition of these contractions."

"All will agree that cocktails are utterly bad for the young. Their use injures the stomach and lays the foundation for a habit. Youth is the, time when the drinking habit is acquired. Youth desires new sensations, strong emotions, and varied interests. Cocktails supply something of these for a very limited period; they do more than this, they cultivate the habit of drinking in a way and to a degree which, in my opinion, can be induced by no other type of beverage."

In a previous passage this writer shows that absinthe or vermouth are present in many popular cocktails, such as Martini, Bronx, and Manhattan. Absinthe (or vermouth) is added frequently to other cocktails.

Prohibition of Absinthe Abroad.

We have the evidence of distinguished French physicians that absinthe is as insidious as morphine and that the dose is increased rapidly in many cases, as in morphine and heroin addiction. Several French writers give details of crimes of violence committed by absinthe drinkers while suffering from delusions and hallucinations induced by absinthe. Murder and suicide were often attributable directly to this addiction.

It is certain that the Governments of France, Italy, Belgium, Switzerland, Bulgaria, and Germany had good reason for prohibiting the manufacture and sale of absinthe. In less than half a century, in the words of Lancereaux "it shows that the use of absinthes, confined formerly to Paris and its environs, has finished by invading the provinces and by spreading throughout France, where it produces the most serious results. . . Let us be logical, therefore. if we seek, rightly, to protect ourselves from epidemic diseases, at home and abroad, do not let us permit to develop, under our careless eyes, a scourge more terrible than the most deadly epidemics... The measures you propose, some will say, are far too radical; you demand the suppression of important industries, which enrich the community and make it prosper. Fatal error! These trades, far from contributing to national prosperity, degrade and ruin it, because they are always causes of depopulation, of unemployment, and of demoralisation."

Although Lancereaux's appeal was published on Dec. 1st, 1906, and as we have seen, Switzerland prohibited the manufacture and sale of absinthe 19 months later (July 1908), France did not prohibit it until March, 1915, when the Great War had been waged for more than seven months, and the French national leaders realised that to save their country everything that made for inefficiency must be swept away. English writers have been astonished by the amazing rapidity with which France and Belgium have reconstructed their devastated regions. Can it be doubted that that progress would have been less rapid and satisfactory if there had been no prohibition of absinthe and of similar liquors ?

The Importation of Absinthe.

If, as we have seen, six of the most progressive and patriotic of European nations have prohibited the manufacture and sale of absinthe and absinthe-containing beverages, the following questions arise: (1) Why is England indifferent to the dangers of absinthe? (2) How is it possible that absinthe should be shipped from the Continent to England?

1. England appears to be indifferent, largely through ignorance on this subject on the part of the general public and from the apathy of successive English Governments. Every year witnesses an increase in "that false spirit of laissez-faire which is not charity." The rising generation says, with Talleyrand "*Avant tout, point de zèle.*" It tolerates if it does not approve the existence of every kind of evil. Enthusiasm for any subject is considered to be bad form.

In view of the French and Swiss evidence no responsible person could justify the continued importation of absinthe, even in small quantities. If, as Lancereaux has shown (vide supra) the increase in the consumption of absinthe in Paris and its vicinity in seven years (1885-92) amounted to 124.6 per cent. while the increase in the consumption of all alcoholic beverages during the same period was 4.96 per cent. only, there is no reason to suppose that a similar increase would not occur in England if fashion and folly should so ordain it.

It is quite clear, from the foregoing evidence, that absinthe has no possible claim to therapeutic value, but that on the other hand, it is extremely toxic and should be classified as a dangerous drug. The argument that the quantity is so small, that it is negligible, cannot be sustained. No vice claims a large number of victims in its initial stage. It begins insidiously, as absinthe-drinking commenced in France. If but once it obtains a foothold. "vested interests" will make the task of prohibition of absinthe as difficult as it was in France and Switzerland, where, as has been seen, the opponents of prohibition were numerous and powerful. In Switzerland these persons numbered 89,195 in an electorate of 368,1615, or over a quarter of the electorate. They had an actual majority in the cantons of Geneva and Neuchatel. Legislation will not stamp out any trade which has the support of a strong and determined minority, the trade will be "driven underground" and carried on surreptitiously. There can be no doubt that a contraband trade exists, and may, at any time become formidable.

2. How is it possible that absinthe should be imported from the Continent to England : On Feb. 18th, 1930, the Secretary to the Treasury replied to a question by Mr. Leif Jones, M.P., concerning the amount and value of absinthe imported during the last nine years (1921-29). The reply is incomplete, inasmuch as "no separate particulars are available with regard to vermouth or absinthe-containing cocktails which are classified as "wine" or "liqueur cordial mixtures" and "other preparations containing spirits" respectively."

The figures for imports of absinthe alone for the years 1921-29 are interesting for several reasons. The countries whence absinthe is consigned to England are (a) the Netherlands, (b) France, (c) Spain. According to the latest available information, Holland is not an absinthe manufacturing country, and in regard to prohibition, Dr. R. Hercod, of Lausanne, states that "absinthe is probably prohibited in Holland." It appears, therefore, that absinthe is exported from its country of origin to Holland for shipment to England. France still manufactures absinthe in spite of the prohibition of March 15th, 1915. The figures quoted by the Secretary to the Treasury show that whereas in 1921 only 24 "proof" gallons were imported from Holland, no less than 1112 "proof" gallons and 102 "liquid" gallons ("not to be tested for strength and therefore liable to a higher rate of duty") were imported from France. The third country from which England imports absinthe is Spain, a remarkable fact, for Spain has never manufactured absinthe, but it appears that it is not prohibited in that country. While the quantities imported into England from the Netherlands, France, and Spain vary considerably from year to year, rising from 1 382 gallons in 1921 to 2 550 gallons in 1923, it will be found that, speaking generally, when a large quantity is imported in one year from France, there is a reduction in the quantity consigned to England from Holland and Spain, and vice versa,. The total quantity imported during this period of nine years from the Netherlands was 1 582 gallons, while from France and Spain the figures are 6 556 gallons and 6290 gallons respectively - ie., the imports from the Netherlands are approximately only a quarter of those from France and from Spain. The total quantity imported from all three countries during the above period is 14,428 gallons.

A Public Menace.

As the majority of cocktail or absinthe drinkers take only a few drops of the liqueur in each glass (although Ledoux found that the quantity is increased rapidly in a considerable number of cases), it is obvious that this total quantity of 14,428 gallons indicates that a large number of persons drink this highly toxic beverage, and, at any time, if it became fashionable, the annual consumption of absinthe (instead of remaining practically stationary since 1927), would increase rapidly.

To argue that, because a comparatively small quantity of this deadly liqueur is consumed at the present time, the importation of absinthe may be ignored, is as dangerous as to suggest a similar course in regard to heroin or cocaine, and with less reason, because these alkaloids have their legitimate uses, whereas in the considered opinion of many eminent physicians in France and Switzerland, absinthe is not only valueless, but it is also a menace to the public health and the prosperity of the country.

The question of the prohibition of the importation and sale of absinthe in England should be considered on its merits, apart from any question of general prohibition of alcohol. Although the alcoholic content of absinthe is higher than that of any other beverage, it is evident that alcohol is not the toxic agent but the vehicle of the highly toxic vegetable oils which are responsible for the deleterious effects of absinthe.