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Thesis submitted to the
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T I T L E . .

The Smoking of Dagga (Indian Hemp) among
the Native Races of South Africa,
and the Resultant Evils.

B Y

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M.B.; Ch.B. (Edin).

M.D. 1913.



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P R E F A C E .

A few introductory remarks may be of use in explaining the scheme of this Thesis. I have divided my dissertation into two parts:-.

Part I. Deals with the Smoking of Dagga among the various Native races of South Africa. This has been gone into fully as the literature on the subject is scanty. Further the description is a general one and does not apply to any tribe in particular. Although somewhat of a digression the question of "Black Peril" cases has been included, because many people believe Dagga to be one of the causal factors.

Part II. Deals with the Insanity resulting from Dagga smoking. The subject has been treated in the manner usually adopted in text books. Any figures quoted are entirely original and are in all instances vouched for by statistics compiled from Case sheets.

Further I should like to take this opportunity of expressing my indebtedness to the Medical Superintendent of the Pretoria Lunatic Asylum for his kindness in allowing me to make free use of the Case books, and other records of his Institution.

CHAPTER 1.

Introduction - Choice of Subject - Difficulties of Investigation.

1. Introduction.

The Native races of South Africa offer a wide field for research and investigation. Travellers from Europe after a short hunting trip, or after a tour through a few large towns, have a peculiar habit of writing books; in which they presume to describe these semi-savage people in detail. They dilate at length on their manners, customs, beliefs, etc.; of which they have gathered at most a purely superficial, and usually a totally erroneous view. To know the natives one must live among them, work with them, see them in their natural surroundings, and study their behaviour both before and after close contact with civilisation. Missionaries, who in the main fulfil these conditions, undoubtedly write the best books, but their descriptions of the kaffir are apt to be prejudicial in his favour; his good points are emphasised, and his short comings glossed over. As a rule the missionary comes into

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contact with only one tribe, or a portion of a tribe, and yet makes the fatal mistake of attempting to describe all tribes from the knowledge thus gained.

Consequently literature on the South African native races is comparatively scanty, and the great bulk of it is absolutely worthless. So to the Archaeologist, the Ethnologist, the Politician, and to all others of a scientific turn of mind, these semi-savage tribes remain a vast unexplored region.

Into this region the Psychologist and the Alienist have made but slight attempts to penetrate - yet from their point of view it would prove a most fertile area, and amply repay any trouble taken to unravel its dark secrets. Numerous problems at once present themselves to the thoughtful Alienist, for example - The proportion of male to female lunatics is four to one, Dementia Praecox is the commonest form of insanity, Syphilis is rife and yet General Paralysis of the Insane is almost unknown.

2. Choice of Subject.

In passing over these and other problems, and in choosing "The Smoking of Dagga (Indian Hemp), and its results, among the Native Races of South Africa" as the subject of this thesis, the writer has been guided by several motives. From childhood he has lived in

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contact with natives and has always been familiar with their dagga smoking propensities; for a year he was in charge of the Native Asylum in Pretoria with its floating population of about 500 patients, and for the last six months has been Medical Officer to seven Native mining compounds at Witbank.

While the smoking of Indian Hemp among the Native races of India and Egypt has already been described, as far as I can gather, no one has ever written about its effects on the Native races of South Africa. It is only comparatively recently that Alienists in South Africa have realised that Dagga is not only a probable etiological factor in many varieties of Mental Disease, but causes a definite toxic Insanity with certain characteristic symptoms. The Native is essential to the economic welfare of South Africa; and that Insanity generally, - including Dagga Insanity - is increasing, calls for examination and consideration.

The drink problem has harassed South African politicians for scores of years and now the Dagga problem bids fair to follow suit. There are already certain governmental restrictions in force but they are "honoured more in the breach than in the observance" and in many places, such as some of the large mining compounds, Dagga smoking seems to be actually encouraged. Lately, the number of cases of

rape and attempted rape upon white women by kaffirs - the so called "black peril" - have increased to an alarming extent. Hitherto, alcohol has usually been held responsible but now Dagga is beginning to be blamed though in my opinion, without adequate foundation.

With these motives in view and in the hope that this paper may prove of some value, I commence, not without trepidation, to break new ground in describing the smoking of Dagga, and its resultant evils in the South African Natives. This necessary information has been gained:- mainly from personal experience and observation in the Pretoria Native Asylum, and in several large Mining Compounds - such as those at Witbank and the "Premier" Diamond Mine where 17,000 (seventeen thousand) natives are congregated; from actual experiments, personally conducted; from the views of several old Colonists and "Compound Managers" who are thoroughly conversant with the Native and his ways; from such scanty literature concerning the Natives as can be relied upon, and from various medical text-books and monographs.

3. Difficulties of Investigation.

On questioning a Native about himself, his customs or beliefs, it is instantly realised that he is very reticent. Any question, immediately puts him on his

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guard and he becomes suspicious of the inquisitive white man. It is only by assuming a knowledge that one does not possess, and by using this skilfully as "bluff" that one is able to get any reliable information. A Native is a past master in the gentle art of "finesse" and yet can himself be most hopelessly imposed upon. Persuade a Native into believing you know all about him and he talks freely; but once he imagines you are getting information, he closes like an oyster, and if by any chance he continues the conversation you may be perfectly certain that he is telling you a tissue of lies. Here is where the unwary traveller is caught, he takes all he is told as being true; and consequently, in the book he is certain to publish, appear some weird and wonderful statements.

The Native, in some ways, is a gentleman, - he is always anxious to oblige the white man, - hence, if he is asked a leading question, he gives as an answer what he thinks will please, that is, provided he answers at all. If the answer happens to be true - well and good - but truth or falsehood is one and the same to a Native. Politeness is far more important in his eyes than mere truthfulness. He does not mean to deceive and has no objection to truth "per se" but if a choice has to be made he prefers to

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be polite rather than truthful. A lie in his opinion is only wrong when found out, and then not so much wrong as silly. To tell a lie successfully in his eyes is a clever thing, and consequently a Native rarely differs from a White Man, and never commits himself if he can possibly help it.

Prove to a Native that he is lying to you and he merely shrugs his shoulders, prove that his statements are contradictory and again he shrugs his shoulders. Logic is of no avail. Kaffirs appear able to entertain antagonistic ideas at the same moment, without apparently passing through any region of conscious truth or mental incompatibility. They seem totally deficient in critical and analytical faculties, so even when willing to explain the "raison d'etre" of their customs they are unable to do so clearly. In speculative matters they are incapable of sustained thought.

From the foregoing it will be realized that the greatest care and a considerable amount of skill and patience is needed in investigating Kaffir customs and habits, and also in examining into the mental condition of all Kaffir lunatics. For the purposes of this paper I have talked to hundreds of sane and insane Kaffirs. By necessary deception I get some

information and note it down. Armed with this I trap the next boy into denying or corroborating it and into admitting more, and so on, - a laborious process -, but by carefully checking the various answers, it is possible to get at the actual truth.

Composition of Dagga There is another and more serious difficulty which has a very definite bearing on the latter part of this thesis. Some Colonists and others with a large experience of Natives say that every Dagga smoker is "pari passu" a heavy drinker. While not entirely agreeing with this sweeping generalization, one is bound to admit that a large proportion of Dagga smokers are heavy drinkers either of Kaffer Beer or Brandy, and that it is extremely difficult, and in many cases almost impossible to differentiate how much of the Insanity in a given case is due to alcohol, and how much to Dagga. This point will be dealt with more fully later on.

follows:-

"The amount of the active principle present varies with climate and locality in India and probably does so here."

"Examination of the material sent showed it to contain 10.45 per cent. of extract soluble in alcohol of which 8.31 per cent. is resin."

"The resin constitutes 30.2 per cent. of the
"alcoholic extract.

"The material contains a small quantity of
"volatile oil and by Willing's method 0.024 per
"cent. of a volatile CHAPTER 2.

Composition of Dagga - Mode of collection and prepara-
tion - Varieties of pipes used, with reason for use -
Dagga games - Dagga incantations.

"hold that the resin is 1. Composition of Dagga.

In South Africa there are three plants used by the
Natives for smoking purposes and all are known by the
one name - Dagga.

1. Cannabis Sativa, common dagga or hemp.
2. Leonotis leonurus, Red Dagga.
3. Leonotis ovata, Klip Dagga (a Cape specimen).

The Government Analyst to whom a
specimen of Cannabis **Sativa** was sent, reports as
follows:-

"The amount of the active principle present
"varies with climate and locality in India and
"probably does so here.

"Examination of the material sent showed it to
"contain 10.45 per cent. of extract soluble in
"alcohol of which 8.91 per cent. is resin.

"The resin constitutes 85.2 per cent. of the alcoholic extract.

"The material contains a small quantity of volatile oil and by Kissling's method 0.024 per cent. of a volatile alkaloid was separated in the form of radiating needle crystals.

"The active principle of Cannabis Sativa is a subject which is not definitely ascertained. Some hold that the resin is active whilst others attribute the activity of the drug to cannabinol (an easily decomposed substance associated with the resin).

"At the British Pharmaceutical Congress in 1911 Deane stated that in his examinations of Indian Cannabis Sativa he found from 17 to 26.5 per cent. soluble in alcohol and the resin constituted from 45 to 70 per cent. of the alcohol extract in the various samples. In examinations of Cannabis from Madagascar he found from 11.2 to 18.9 per cent. soluble in alcohol and the resin in these extracts was from 76 to 96 per cent.

"I am of opinion that the local Cannabis Sativa is similar to that grown in other parts of the world".

This report is vague and of little value as to the actual active principle. But on consulting various text books of Materia Medica the same vagueness and many contradictions are also to be noticed. It is certain the Dagga smoked in South Africa is practically the same as Hemp smoked in India and Egypt under the various names of Bhang Gunjah Haschish, etc. No doubt in different countries there are slight variations in the actual amount of the various active principles present.

Batty Tuke in his Dictionary of Psychological Medicine Vol II. page 1143 gives the constituents of Canabis Sativa as:-

- (1) A volatile alkaloid - Cannabinin, the qualities of which have not been thoroughly determined.
- (2) A base - Tetano - cannabin, strychnine like in its action.
- (3) An amorphous resinoid bitter substance - Cannabinon, which is the special active substance of the hemp.

2. Mode of Collection and Preparation.

Natives only use these plants in one way - by smoking and inhaling the fumes through water. Probably owing to their savage and primitive state they have not yet adopted the Arab habit of making pills and sweets from the hemp plant.

Dagga grows wild all over South Africa and in many places is carefully cultivated by the Natives. For smoking purposes they select plants just before they burst into bloom and pick off the small leaves with the flower buds. These parts are put in a damp place for about twelve hours, then they are rolled into a mass, tied round with grass and left for about a week. This causes "caking" and a slight degree of fermentation. Next the dagga is unrolled, thoroughly dried in the sun and after being rubbed fine between the hands is smoked. This is the ideal preparation of an epicure but when out of stock a Native will smoke any part of the plant even the main stem - though he admits it is not so nice and gives him "pain in his chest".

Any berries in the dagga are carefully removed lest the heat of the pipe causes them to swell up and burst. In this case the ashes would be

spluttered about and might easily injure the eyes of the smoker as he bends over his pipe. But when a Native is bent on an orgy of intoxication he crushes the berries to a powder and mixes this with the leaves. The resulting mixture is very powerful and the usual effects of an ordinary smoke are greatly increased.

(2) Sometimes ordinary tobacco is mixed with the dagga to reduce the strength and pungency of the fumes. A woman smoker tells me that all women invariably dilute their dagga in this way. Her statement however needs corroboration.

never been able to ascertain any valid reason

3. Varieties of pipes used

with Reasons for use.

Dagga is smoked in a variety of pipes, in the manufacture of which the natives show considerable ingenuity, and while it must be admitted that in most instances the kind of pipe is merely a matter of accident or habit yet often there is a very definite reason for its selection.

two cool

Whatever the pipe used water always plays a part in every smoke. It is needed for the purpose of cooling the fumes, thus reducing the irritation of the bronchial mucosa and lessening the violent coughing. Also without water the smoke

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reduces salivary secretion and a copious flow of saliva is needed for the Dagga games which are indulged in as a pleasurable adjunct to the smoke itself. Water is used in one of three ways:-

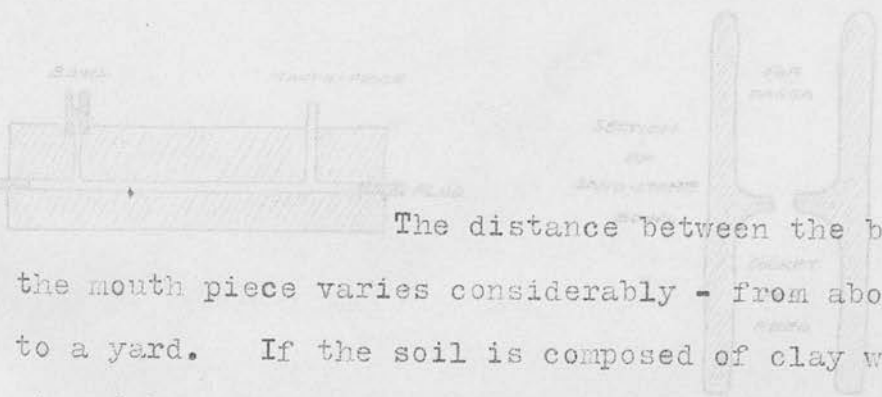
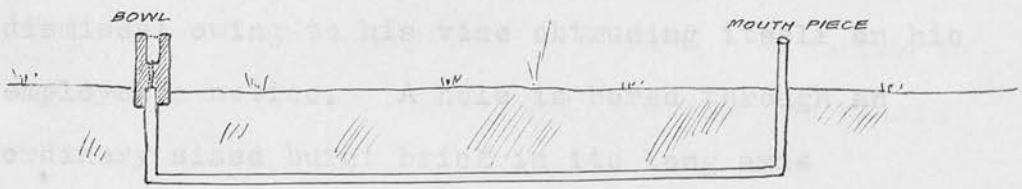
- (1) It is placed in the pipe itself and the smoke drawn through it with a bubbling sound.
- (2) The smoker takes a mouthful of water and converts his mouth into an improvised cooling chamber. After each inhalation he spits the water down a hollow reed (about 18" to 24" long) to a distance. I have never been able to ascertain any valid reason for the use of this reed. Repeated questions have always elicited one answer "It is our custom". Probably the natives enjoy blowing bubbles with the water. Certainly no native except a dagga smoker blows bubbles in this way - a fact worthy of note.
- (3) Occasionally smokers combine both the above methods, thus inhaling the fumes through two cooling chambers.

(a). Ground Pipe.

This is perhaps the commonest form of pipe used. It is certainly used by all beginners as being the least

conspicuous. The construction is simplicity itself - merely a narrow tunnel in the ground - to one end of which is fitted a bowl and to the other a piece of reed which projects about 2" above the ground level.

used when the native is in contact with Europeans and is afraid of his pipe being purposely broken, or of



The distance between the bowl and the mouth piece varies considerably - from about 6" to a yard. If the soil is composed of clay water is placed in the actual tunnel. After a time the tunnel and its surroundings become saturated and retain the water quite well. Failing this the water is taken into the mouth.

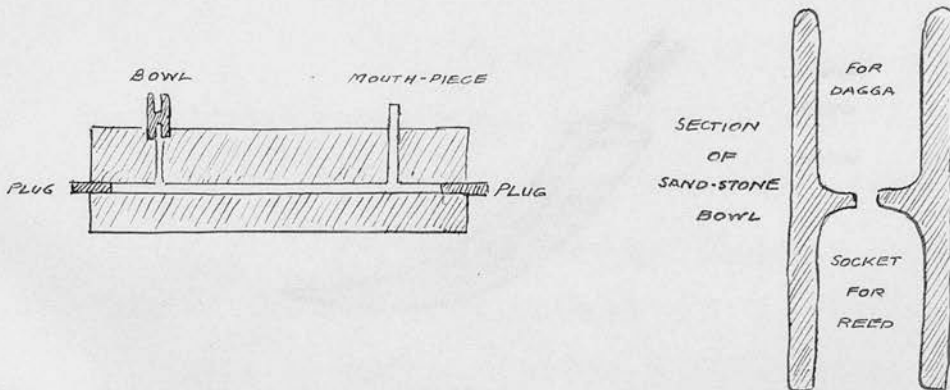
The bowls used in this and in other kinds of pipes are made in one of three ways.

- (1) Cut out of soft sandstone, and often elaborately carved and ornamented on the outside.

- (2) Moulded of clay. It is largely employed by
- (3) Moulded of soil taken from an ant heap.

(b) Portable Ground Pipe.

This is merely a variation of the preceding and is used when the native is in contact with Europeans and is afraid of his pipe being purposely broken, or of dismissal owing to his vice obtruding itself on his employer's notice. A hole is bored through an ordinary sized burnt brick in its long axis

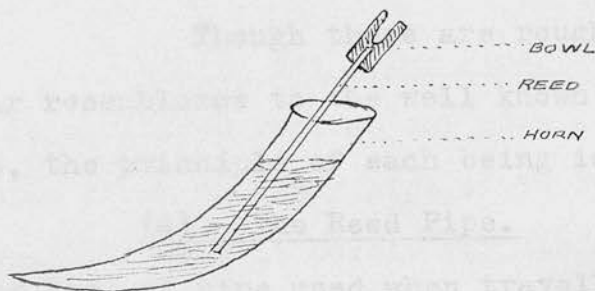


and two shorter holes are bored vertically downwards to meet it at right angles near its extremities. The actual extremities are then plugged, and to the vertical holes are fitted a mouth piece and a bowl. Water is used as in the ground pipe.

(c) Horn and Reed Pipe.

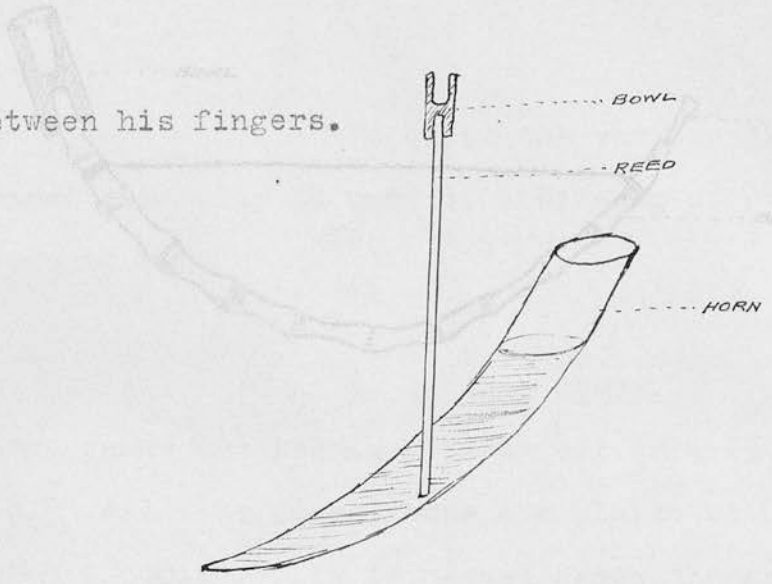
When a smoker becomes callous to outside opinion and when he no longer strives to hide his new vice he may

adopt this form of pipe. It is largely employed by old men to obviate stooping. An ox horn is half filled with water and into this is placed a hollow reed bearing at its other end a bowl containing the dagga. The open end of the horn is closed by the smokers hands and he inhales through a chink between the thumb and fore finger of one hand. A vacuum is thus created and the smoke drawn through the water.



When a native finds he cannot with comfort close the upper end of the horn owing to the protruding reed he alters the pipe slightly. A hole is made in the side of the horn and the reed inserted through it to under the water level. He now finds it easier to close the open end of the horn with his hands and inhales as before through a space

between his fingers.



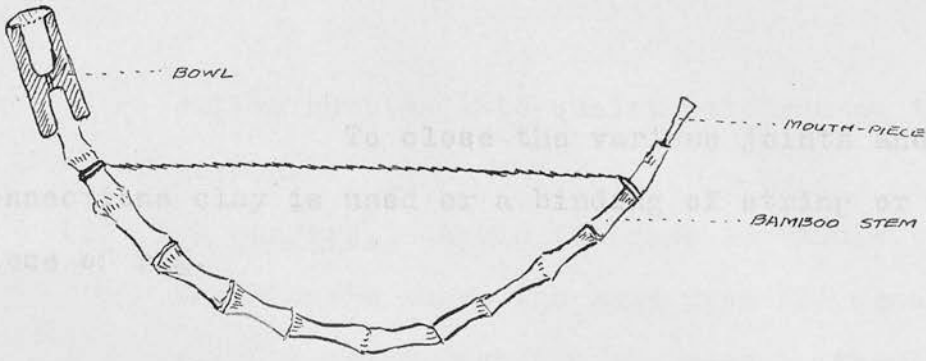
The curve is filled with water and the smoke inhaled through it.

Though these are rough and primitive pipes their resemblance to the well known Hooka is remarkable, the principle of each being identical.

(d) The Reed Pipe.

This is the form of pipe used when travelling. A piece of bamboo is bent into a bow shape and retained thus by string. The Traveller takes care to cut one end of his reed about 2" above a node, and while through the other nodes he makes large holes, through this one he makes only a small hole and so has a ready made bowl. Or he may fix to the end of his reed a bowl which he either carries with him or manufactures on the spot.

piece of reed.



Dagga Games.

These games are indulged in by all smokers young and old. All true dagga games are played with saliva, of which a copious flow is needed hence the cooling. The curve is filled with water and the smoke inhaled through it.

(e) The Briar Pipe.

Sometimes in civilized regions one sees a native smoking dagga in an ordinary pipe of European manufacture. He uses it purely for the sake of convenience and is least likely to attract unwelcome attention. Water in this case is always taken into the mouth.

While these five varieties may be taken as standard pipes it must be borne in mind that a native with wonderful ingenuity will make a pipe for himself out of almost any materials. The writer has in his possession a pipe made out of a kettle spout; and another made with an empty "Brasso" tin and a piece of reed.

To close the various joints and connections clay is used or a binding of string or a piece of rag.

4. Dagga Games.

These games are indulged in by all smokers young and old. All true dagga games are played with saliva, of which a copious flow is needed hence the cooling chambers of water which figure in every pipe.

The spitting of water from the mouth down a hollow reed is not a true game but no doubt affords a great deal of pleasure to the smoker.

The only addition to the smokers outfit needed for the games is a hollow reed of fairly narrow calibre and about 12" in length.

The saliva as it is bubbled out of this reed is a thickish opalescent fluid of a fair tenacity which enables the bubbles to remain for some time before bursting. It is not a fine white saliva but has a greyish tinge.

Of the dagga games proper there are several according to the number of players.

- (1) One player. Even a single smoker indulges in a sort of solitaire. He blows his

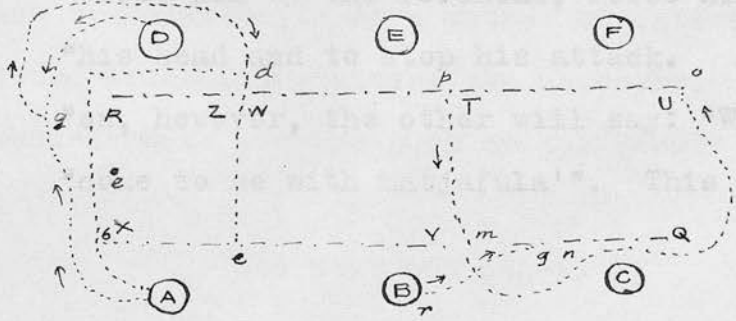
saliva bubbles into quaint patterns on the ground.

(2) Two players. Again the game is simple.

The players share the same pipe but usually each is armed with his own reed. They may simply blow rows of bubbles on the ground each one trying to blow the longest row or the one composed of most bubbles. Again one player blows a line of bubbles and his opponent tries to outflank him by making his row encircle the first line. They keep this on during the whole of a smoke each trying to win. This game has been compared to chess played in a dirty fashion (Kidd. "The Essential Kaffir").

- (3) Four or more players. Now the game becomes more complex and is played by opposing sides of two or more players. I have never seen one of these games but the following extract from "The Life of a South African Tribe" by H.A. Junod will suffice as an example. The Author calls it a Saliva fight.
- "There are two opposing sides each with its own pipe. Three men, A.B.C. oppose three

"others, D.E.F. First of all each side
 "protects itself by making a saliva fence,
 "line X. Q. for the first side, R.U. for the
 "second one. Unhappily for D.E.F. the
 "saliva dries up on the point Z.W., and, so
 "their fence is broken. "A, takes his
 "advantages. He begins to squirt out his
 "saliva on the line a.b.c.d...passes through
 "the opening Z.W., and, having come back
 "victoriously to e, he has destroyed all the
 "fortifications R.A. Suppose D. wants to
 "protect himself. He tries to close the
 "access to his position by drawing the line
 " f.g.. But, arrived in g. he comes to the
 "end of his saliva, and A. who started in
 "h" having arrived in i, turns round the
 "point g. where his enemy has miserably
 "stopped, and, going on, j.k. reaches the
 "opening d. and triumphantly ends his
 "campaign in "e".



"to quarrels, even to blows. The hemp pipe

"But "E" of the opposite camp has
 "noticed a gate in the barrier X.Q. The
 "saliva has dried there. He quickly carries
 "his blow pipe across the battle field,
 "squirting all the time, passes through the
 "opening "Y". He draws the line l.m.n.o.,
 " and so destroys the part Q.Y. of the
 "fortification X.Q. Should "B" be quick
 "enough, he might prevent him accomplishing
 "his plan by drawing the line p.q. And so
 "on'. Young men, even men of ripe age, take
 " an immense delight in these saliva battles.
 "But the saliva must be blackish. It must
 "be "ntjutju" saliva, viz., saliva produced
 "by hemp, and not the ordinary white saliva,
 "called "matjafula".

"Should one of the players try to
 "supplement the blackish by the white, he
 "would be disqualified. His enemy would
 "seize him by the forehead, force him to lift
 "his head and to stop his attack. If he goes
 "on, however, the other will say: "What? You
 "come to me with matjafula!". This may lead

See next two pages.

We smoke it and it reminds us of different things. W "to quarrels, even to blows. The hemp pipe we use W "falls down and everything concludes in W "cordial laughter".

5. Dagga Incantations.

During the course of a dagga smoke as the intoxicating effects are beginning to be felt the smokers often burst forth into song. In solo or in chorus they sing chants with great rapidity to the accompaniment of clapping hands. These incantations vary in different tribes, but have this in common, they are never in praise of Dagga itself; but are eulogies of some great warrior - chief or of an ancestral spirit.

The speed of the singing, the clapping of hands, and the associated posturing and dancing, all render it impossible for any whiteman to gather more than a few isolated words and phrases here and there, An educated Basuto supplied the writer with one of these incantations, together with an English translation. As a matter of interest both are appended without any alteration whatever; the annotations in both are the work of the Basuto himself.

See next two pages.

We smoke it and it reminds us of different things.
 We remember the miracles of the world,
 We remember those far and near.
 We remember

Mosheshoe's son of wondrous valour
 Imphen renowned for good brave deeds
 Wrought guarding the principal gate
 The Gatekeeper Makhabane's brother
 Guard thou the gate be firm as a rock
 Be thou the door to stop the foe
 Thou the Buffalo revengeful beast
 Which likes to kill on the mountain side
 that the skulls promiscuous must not be
 In battle fights with his right hand
 Between the towns he won the booty
 Betwixt Winberg and Bloemfontein
 Our enemies of his name do fear
 They quarrel with their young ones still
 They always speak to the ignorant folk
 "You remind us of that terrible 'Schief'"
 "Who killed the bravest of the land"

x these lines are referred to the Free state Boers during the war of 1868 when Wepener the then General of the Free state was killed at an attempt to climb Thaba Bosiu Moshoes's stronghold or fortress

Ha re a se ja ra hopola mehloto ea
lefatsi. Ra hopola batho, Ra hopola
ba koana le ba koano.

Ra hopola eana

Mora moqheshwe qhabe ea tona tona 1
 mphem o chachile ka ho halefa 1
 ka ho halefa ka ho thiba khoroeng
 sethibathibane Mora mamakhabane 2
 Thiba khoro e iphetole lefika 1
 le iphetole moqoallo qoboko
 Mora mamokhu have ea qvetse 2
 nare ea hore ha e tla bolaea 1
 e rate e ka bolaea letsoapong
 Hala le tla le tswane le mafika le majoe 2
 se besetswa nama marumo oa ipesetse
 seoli sa likhomo pakeng tsa mehe 2
 Pakeng tsa makedikella le mangalung 3
 seoli se seke se hopoloe ka mahopolo
 Ha se hopoloe koana meseteling 3
 hlata ngoana a mohlatho ka leswai
 a re o re hopoloe kholo re mo lebetse
 a tsoa ja seoka ntho ea tona

B. Mark the Rhyme at the end of each line

- e.g 1,1 = "a"
- 2,2 = "e"
- 3,3 = "g"

CHAPTER 3.

Women Smokers - General Remarks regarding men smokers and regarding different tribes - First Phase, Commencement.- Second Phase, Youth.- Third Phase, Adult Life.- Fourth Phase, Old Age.

1. Women Smokers.

The generally accepted opinion is that comparatively few women smoke, probably not more than 3%, and usually they do not adopt the habit till adult life is reached. Regarding these women two views are held, differing only in degree.

(1) All women smokers are prostitutes or "loose women". This would give a prostitute rate among native females of 30 per 1,000, rather a high figure, and one certainly needing confirmation.

(2) Smoking among women is looked on as "bad form" and even immoral. A man would hardly marry a woman who smoked dagga; and if he did so it would probably only be because her purchase price in the marriage market had greatly depreciated owing to her vice. Such a marriage would clearly indicate the bridegroom's poverty both in

in worldly wealth and in morality. Personally I favour the first view because native women marry very young and they certainly do not become confirmed and heavy smokers before an age at which they are considered passe. But there is no doubt that the vice is spreading among the women and the number of female devotees is rapidly increasing. In Swaziland even young girls of the age of 10 and thereabouts are acquiring the habit. The men are strongly opposed to this state of affairs and on marriage they insist on its cessation. For they say a dagga smoking wife neglects her home, children and lands, is disobedient to her marital lord and master, becomes lazy and slovenly, and will steal dagga and other things whenever she has a chance. In short if a heavy smoker she becomes what is known as a "loose woman", she will leave her husband without rhyme or reason and cohabit with the first available man for any length of time that suits her fancy.

2. General Remarks regarding Men Smokers and regarding different tribes.

For all practical purposes of this paper, it may be taken that dagga smoking is almost entirely confined

to the male sex, in whom it has become a deep seated vice.

Males of all ages smoke. They begin young and rarely leave off. Once a "confirmed smoker always a smoker". Missionaries say that a native who embraces Christianity gives up this vice - along with many others. This may sometimes happen, but is very rare and is merely a case of the "wish being father to the thought".

Though the dagga vice is extremely prevalent all smokers are a little ashamed of themselves and try to hide their shortcomings - at any rate in the earlier stages. Consequently non-smokers rather look down on and despise their erring brethren. They say they are not men to be trusted. Parents have a simple but useless cure to check the vice in their sons. The pipe is broken, some soot scraped out from the inside, and mixed with the culprit's food - of course without his knowledge. When he has partaken of this three times he is said to be cured "Similia similibus curantur".

No statistics have as yet been compiled with a view to demonstrating the frequency of the Dagga habit in the various tribes, and owing to the

reticence of the native and his dread of officialdom any such compilation could hardly be trustworthy. There is no doubt that the majority of male natives smoke dagga to a greater or lesser extent, and if any one tribe contains a larger percentage of smokers it is the Swazi tribe - practically every Swazi is a devotee. Next would come the Hottentots and then the Zulu's and closely following the latter the Moshoeshoe Basuto's for in their country there are many Zulu's and naturally their bad example is followed. Probably the Transvaal Basutos would be fifth on the list, but beyond this it is impossible to go.

For descriptive purposes the life history of a dagga smoker may be divided into four phases or stages. These blend and overlap so are merely to be regarded as convenient artificial subdivisions. Naturally no native ever recognises them as separate and distinct stages of his vice.

3. First Phase - Commencement.

Exactly as the European boy starts cigarette smoking so does the native boy begin the dagga habit. The average age of starting is 8 - 10 years, boys of this age are sent with older boys and young men to herd

cattle on the veldt. Here, away from parental observation a start is made, partly from curiosity and partly owing to the persuasion of the older boys. The feeling of bravado may be another incentive, for the boys have been warned by the old men of the tribe against the evils of dagga and have been forbidden ever to touch it. The knowledge that he is doing wrong is quite sufficient encouragement for the average boy.

It often happens that one or two attempts prove so unpleasant as to deter a beginner from further indulgence. Many ^{non}/smokers say they tried it as children but did not like it and have never smoked since.

The sensations of a first smoke are worthy of note and the following is a natives description of his one and only attempt at dagga. "I was "12½ years and began in the fields with some other "children. We had to smoke on the sly because our ""old men" had told us not to. We were made to smoke "by the older boys. I had three "draws" felt giddy, "felt as if it went to my head, I had dreams of terrible "things - that men with spears came to kill me, and "I had to be held down so that I could not hurt myself

"or run away. Then I remember no more and have no idea
 "what happened. They tell me I lay asleep (i.e. for
 "unconscious) for six hours. I woke with a bad
 "headache and they had to hold me as I walked like a
 "drunk man. I did not get sick (i.e. vomit) but could
 "not go to school for 3 days as my head was very sore".

This is the only really reliable
 personal description of a first smoke I have ever
 been able to obtain, and it is correct as regards the
 stages of excitement and coma and the after effects.
 But that his hallucinations were of an unpleasant nature
 is somewhat exceptional.

We now reach the stage corresponding to the European
 who drinks alcohol. 4. Second Phase - Youth.

For purposes of analogy this stage may be most aptly
 compared to the European youth who drinks with his
 friends in bars and clubs mostly for the sake of good
 fellowship. The young natives now smoke because
 their comrades do so, and in order to play the dagga
 games. They smoke in parties as a rule sharing the
 same pipe and their pleasure is derived more from the
 games and companionship than from the actual smoking.
 Consequently they do not smoke very heavily or to any
 great extent.

3

This phase is best observed in the native kraals before the young men leave to work for the whites. I have been able to glean but little information concerning the effects of the dagga but can definitely state that these neophytes cough a great deal and often have headaches after a smoke.

If a native with any pretensions to being a regular smoker gives up his vice, he usually does so at this stage while it is more of a social pleasure than an actual craving.

But when the dagga work is done they exceed their own

5. Third Phase - Adult Life.

We now reach the stage corresponding to the European who drinks alcohol for the sake of alcohol. A craving has by now developed and the native smokes dagga for the effects it produces, smokes heavily, smokes often and inhales deeply.

This is the stage to be seen in the Mining Compounds where dagga smoking is permitted. The Natives smoke in parties or cliques round a ground pipe, each man using the pipe in turn. A worker finds at least three smokes a day are necessary; one before going down the mine, the second in the mine when the invigorating effects of the first are passing off, and

the third when he returns to the surface; in this way he completes his eight hours labour.

For about three to four hours after a smoke the natives work hard and show very little fatigue. They work at high pressure and with tremendous energy. As one native expressed it "We forget all our troubles, we forget we are working "and so work very much". Experiences smokers soon learn to gauge the exact maximum they can safely take without becoming intoxicated - the maximum at which they work best. But when the days' work is done they exceed their own limit solely for the pleasurable sensations of becoming oblivious to their surroundings and forgetful of the days labour.

It is in this Third Phase that a dagga smoker can be recognised by his appearance. He looks tired and worn out as if he had been working hard, his eyelids are a little swollen and his eyes are sleepy looking, bloodshot and lacking in lustre. Naturally as soon as he has a smoke he brightens up in every way at once. Colonists with a large native experience recognise a smoker at sight, and yet find it impossible to put into words the exact distinguishing characteristics. There is an indescribable something which

instantly designates the habitué to an initiated eye. .
"Because it makes . . . Regular smokers do not suffer from
headaches and during a smoke they cough less than a
beginner. If their supply of dagga be suddenly
stopped they experience a craving but do not become
physically ill as do alcoholics or morphinomaniacs
under like circumstances. All that is noticeable is
that a "boy" becomes restless, bad tempered and is very
lax regarding his work. . . can play and enjoy myself".

(5) "So as to . . . The reasons given by natives for
their indulgence would be interesting but they cannot
distinguish between cause and effect, and as reasons
for smoking they mention one or two of the pleasurable
sensations derived from the resultant intoxication.
True enough these are motives but they are secondary
not primary. Regarding purely primary incitements
the following may be noted:-

- (1) "Because the others do so".
- (2) "For the same reason as a white man takes
pleasures in a tot of whiskey".
- (3) "So as to play games".
- (4) "Just like a white man smokes a cigarette".
- (5) "I am fond of it, its nice stuff".

Turning to the secondary reasons we
find a greater variety given. An almost universal

reply to the question, why do you smoke dagga?, is -
"Because it makes me strong and happy and I can work
"well". Other answers are:-

- (1) "It makes me feel nice".
- (2) "It is good for me and makes me feel like a
chief".
- (3) "It makes me drunk and when drunk I am not
afraid".
- (4) "I feel as if I can play and enjoy myself".
- (5) "So as to forget I am working".
- (6) "To make work a pleasure and you do not feel
the day pass".
- (7) "Its the best medicine in the world".

6. Fourth Phase - Old Age.

From the prime of life to advanced old age a native
smokes partly from sheer force of habit, but chiefly
because he feels he can no longer do without it. He
smokes because he must and because the same emotional
pleasures are still to be derived. It is more than
probable that if at this stage a native desired to give
up his vice he would be unable to do so owing to the
deterioration of his will forces.

As is to be expected in old age
the effects of the drug are diminished and a definite

tolerance is established. An old smoker shows signs of pleasure and satisfaction but rarely exhibits any intoxication.

An old man does little or no work and does not need the invigorating effects, consequently he does not smoke very heavily but remains an ardent lover of the dagga games. If a companion is not available he smokes alone.

An ex-heavy smoker is usually thin, sickly and ailing, he does not make "old bones". His voice becomes husky from the incessant cough and from the same cause he may suffer from Emphysema, and its accompaniments. He realizes the harmful effects of his indulgence, and though he continues a participant, he carefully warns all the young boys against it. As has already been mentioned he uses the horn and reed pipe for comfort, and to obviate stooping.

- (a). Physical Effects. The eyes are irritated and shining with blood and conjunctivae. The pupils become slightly dilated and react to light and accommodation as usual. They may continue to do so all through the night, but at the first-awakening

advances a native becomes too excited to allow of the necessary testing.

If the smoke is cooled through water there is a remarkable CHAPTER 4. of saliva, but if not

so cooled there Intoxication of Dagga. It becomes dry. Irritation Individual Idiosyncrasy. causes

paroxysms of harsh hacking coughing, sometimes

accompanied by 1. The Intoxication of Dagga.

As in the case of Indian Hemp smoking in other countries, Dagga can produce its effects in two ways:- through the respiratory tract by inhalation, or through the digestive tract by eating certain portions of the plant. It is occasionally followed by profuse perspiration.

The pulse becomes In the intoxication caused by dagga two apparently contradictory states appear; a stage of excitement and exaltation, followed by one of depression. This is in no way remarkable, as it is seen in the case of alcohol, morphia, and many other toxic substances.

(2). Mental Effects (1) Stage of Excitement.

(a). Physical Effects. The eyes are bright and shining with blood shot conjunctivae. The pupils become slightly dilated and react to light and accommodation at first. They may continue to do so all through this stage, but as the intoxication

advances a native becomes too excited to allow of the necessary testing.

If the smoke is cooled through water there is a remarkable increase of saliva; but if not so cooled there is a reduction and the mouth becomes dry. Irritation of the bronchial mucosa causes paroxysms of harsh hacking coughing, sometimes accompanied by the spitting of blood stained mucus; this being more marked in the beginner than in the habitué. Their breathing is shallow and rapid between the deep inhalations of the actual fumes.

There is a marked fall of blood pressure, occasionally followed by profuse perspiration. The pulse becomes rapid and soft, with the typical characters of a reduced blood pressure.

The appetite is increased, and after a smoke, before passing into the second stage of depression, a smoker usually makes a hearty meal.

(b). Mental Effects. Dagga appears to act mainly on the Cerebrum, causing stimulation of the sensory, psychic and motor functions.

At first a general sense of well being prevades the whole organism, with a slight trembling or thrilling sensation, and an almost

irresistible desire to be "up and doing". This is soon evidenced by the smokers' singing, dancing, and shouting. They sing long incantations in a rapid excited manner, to the accompaniment of clapping hands. They dance with the utmost abandon and vigour, interspersing their gyrations with shouts and yells. Often the movements are so forced and so unnatural, that they appear to partake of the nature of Motorious Hallucinations - rather than a mere exhibition of pleasing excitement - . It is during this phase that the idea of great strength possesses the subject. Natives say they feel strong enough and powerful enough to do anything - to do any work without feeling tired -. This almost amounts to a delusion of grandeur; so emphatic are they about their strength. It is however quite obvious, to even a casual observer, that in their dancing and singing they are for the time being devoid of all fatigue.

Turning to the purely psychic functions; we find that dreams or visions, of an agreeable nature leap into the mind so rapidly that all idea of time becomes lost and memory gets confused. Actual hallucinations, both auditory and visual, are experienced. Subtle conceptions and brilliant ideas

in few seconds,

follow one another with such speed and disorder, that association of them is difficult, to connect them logically impossible, and in consequence thought becomes disjointed. The senses become sharpened. Colours, buildings and external objects generally impress themselves on the vision as being unusually clear and well defined; the hearing is acute; the merest trifle causes intense amusement with uproarious, and uncontrollable laughter.

While most of the hallucinations and visions are of a pleasing nature such as; "the sky "looking like a big rainbow", "the grass being a blaze "of colours and covered with girls dancing", yet some are alarming and hideous. Dreadful misshapen human beings with thick arms, staring eyes, and long legs, with evil intent in their faces, appear to some smokers, others see their arch enemies, or some wild beast, advancing with murderous design.

The dominant note of this stage is exaltation and increased "bien-etre"; displaying itself in noise and merriment, with an oblivion to the outside world. The smoker is absorbed in his hallucinations and it is only with the greatest difficulty that his attention can be gained, even for a few seconds.

2. Stage of Depression.

When a smoker has become thoroughly intoxicated by exceeding his maximum this second stage succeeds the first almost at once; but after a moderate degree of inebriaty, there is a lapse of three or four hours before the stimulant effects of the drug give place to the depressant.

Not invariably an intermediate phase is experienced, with anomalies of sensation and a certain amount of numbness, and some degree of muscular incoordination. Also there is fairly complete anaesthesia for both tactile and painful impressions. The gait becomes a little staggering.

In the Stage of Depression proper, the eyes are bleary, bloodshot, and dimmed, as if their owners had not slept for many nights. Pulse and respiration slowly return to normal. There is a copious perspiration most probably the result of the vigorous dancing. Usually a smoker suffers from intense thirst, which copious drinks of water fail to relieve, and resource is had to snuff. The less the precautions taken for cooling the smoke the greater the thirst. Often a headache, some thoracic pain and a sense of general malaise is experienced.

An extreme fatigue pervades the whole being. There is marked depression, with a prevalent apprehension of impending syncope, and the weary smoker falls into a deep sleep.

2. Individual Idiosyncrasy.

While the above portrays an accurate picture of Daggā intoxication, it must be borne in mind that Daggā affects natives in many indifferent ways, in this respect being closely analagous to alcoholic intoxication among Europeans. This latter need hardly be dealt with in this paper, even for purposes of comparison; but the individual idiosyncrasies displayed by daggā smokers is of great importance, and naturally falls to be discussed at this stage.

After watching a party of natives smoking, a spectator is at once struck with two facts; firstly, the mental and physical results are not dependent on the amount of fumes inhaled, but on the individual himself, his nervous organisation, his disposition, his character, and his temperament; secondly, that the effects of the drug vary greatly, both in kind, and in degree among different smokers.

As observers of facts and emotions

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kaffirs are hopelessly incompetent, and as already mentioned they seem very deficient in critical and analytical faculties. Hence they give a very poor description of their sensations, etc, while under the influence of dagga, but every description gives a key to the idiosyncrasy of the smoker. For each native only mentions one or two of the most prominent results, and never alludes to any lesser ones or to any steps leading up to his principal sensations. A "de Quincey" among dagga smokers would be an inestimable boon. It is only by the most careful piercing together of information gathered from many natives that one is able to compile a connected description of dagga intoxication.

But the individual narratives are too short and scrappy to show wherein lies the source of the idiosyncrasy. Is it innate or acquired? Is it of mental or physical origin? Is it dependent purely on somatic conditions?, or does auto-suggestion play a part?. To these conundrums no solutions can be found at present.

For purely descriptive purposes it is convenient to discuss Individual Idiosyncrasy and self-centred kaffir smoker alone, and discuss his

under three heads:-

- (a). Amount smoked.
- (b). Manner in which smoked.
- (c). Effects and degrees of intoxication.

(a). Amount Smoked. As already mentioned every experienced smoker can exactly gauge his "maximum optimum"; that is the amount requisite to produce the most agreeable sensations, with the least degree of unpleasant after effects, and the point at which he can work best. No rules can be laid down as to the quantity of toxin needed to secure this desideratum. An amount which amply satiates the sensual desires of one native, will hopelessly intoxicate a second, and have no perceptible effect on a third. Some natives often exceed their own limit, perhaps because they cant stop there, perhaps unconsciously, possibly because they want to; others always stop when prudence warns them they have had enough.

(b). Manner of Smoking. This subject is fully discussed in the four phases of a Dagga Smoker (Vide Supra) and need only be touched on here. The more sociably disposed natives smoke in company for the sake of good fellowship or for the games; the reserved and self-centred kaffir smokes alone, and shares his

pleasures with no one.

(c). Effects and Degrees of Intoxication. These

vary enormously and are best described by giving in the natives own words his sensations, and following this with an account of what he appeared like while under the influence of the drug.

Case 1. "It makes me feel nice and happy, makes my heart and body strong. I feel I can do anything. I cannot eat any food unless I smoke, and it does me no harm". This boy tends to be hilarious and noisy. He dances and boasts of his strength.

Case 2. "I can see people in front of me whom I know are dead. I feel as if my body is not here (.i.e. does not exist). Sometimes I think I am very rich". This native sits smoking in quiet, with a dreamy far away look on his face. He is absorbed in his hallucinations, and his motor functions do not appear to be stimulated at all.

Case 3. "Makes me drunk and when drunk I am not afraid of anything". Here we have a native who becomes noisy and excited, at the same time being arrogant and rather impertinent. When

intoxicated he wants to fight.

Case 4. "I can hear voices of people talking to me,
"but do not see them or know who they are".

Another example similar to Case 2, only here the
Hallucinations are auditory instead of visual.

Case 5. "I feel my eyes getting big and sticking out,
"my head becomes noisy and sore. I cant help
"shouting out just like a person who is drunk.
"It makes me work better, but when I smoke I feel
"the other boys want to hit me, and I am
"frightened". A most interesting case mainly
because fear enters into his emotions. The boy
in question while under the influence of Dagga is
very noise, he dances and shouts, talks at a great
pace and occasionally bursts forth into song.
His headache and perverted optic sensations also
call for passing note.

Case 6. "It makes me work better. It sharpens all
"my senses, I can see better and hear more clearly.
"If I smoke a lot my head gets heavy. I am not
"hungry after smoking". Another case of
considerable value. Here the sensory faculties
are mainly stimulated, and at the same time there
is typical feeling of increased strength, and

consequently improved working capacity. Two other features worth noticing are the headache, and the absence of hunger.

Case 7. "It makes me work better for a time but afterwards I feel sleepy and my legs and arms become dead (numb). I have to sit down and cant work any more ". The importance of this case lies in the paraesthesia and the early onset of the second stage - sleep. The stimulant effect of the drug was very short and comparatively slight.

Case 8. This native would or could not describe his sensations beyond saying they were "nice". But while inebriated he was the quintessence of motor excitement. The vigour and abandon of his dancing beggars description. He was also noisy, abusive and threatening. At intervals he chanted incantations with marvellous rapidity. Through it all there were no signs of fatigue, though the perspiration poured off him.

These examples might be multiplied indefinitely but have been selected from a great number as demonstrating:-

1. A fair average with a tendency to laughter.
2. Visual hallucinations with no motor excitement.
3. Motor excitement with fearlessness.
4. Auditory Hallucinations.
5. Fear, headache and optical sensations.
6. Sensory stimulation and absence of hunger.
7. Early onset of second stage with transient paraesthesia, and slight stimulant effect.
8. Intense motor stimulation.

In concluding this section the cases of three insane natives might be quoted as affording instances of other individual peculiarities.

(1). E.B. (No.2407). Epileptic Insanity. Well behaved, quiet and a good worker while in the yard. Has on many occasions been tried at work outside, with one inevitable result; he always becomes violent and attacks somebody. He constantly begs for a further chance. Recently it has been ascertained that while working outside he manages to procure Dagga, and after smoking for a few days becomes violent. Given dagga while in the yard, as a test, he speedily showed signs of violence, saying "Now I am feeling nice". He continues bright and cheerful for a time, then relapses into his stuporous condition.

(2). D.M. (No.375). Delusional (Non Systematised)

Insanity. Periodic outbursts of excitement. In them he tends to become violent towards, and is prone to attack other patients, and male native nurses. He is very abusive to the white officials, dismisses them individually after an obscene review of their characters, morals and pedigrees. Complains bitterly of his treatment, and demands to see various high Government Officials. Three hours after a single smoke of dagga he is quiet and all traces of his excitement are banished and he chats pleasantly and rationally.

(3). P. (No.3561). A case of Dagga insanity.

Sits alone all day, quiet, unsociable, taking no interest and his expression is misery personified. He never speaks, is wet and dirty in habits, and has to be dressed and undressed, etc. The mere sight of a dagga pipe brings about a wonderful change. He squats down and puffs vigorously. His face becomes wreathed in smiles, he chats brightly and laughs with great heartiness. Shakes himself with great gusto and hands the pipe back saying "Now I am feeling nice". He continues bright and cheerful for a time, then relapses into his stuporose condition.

August" dated from CHAPTER 5. of the Minister for
Existing Laws regarding Dagga, Necessity for new ones and
suggestions for same. - Medico Legal Considerations
of Dagga Smoking - Effect of Dagga on the Sexual
Appetite - Kaffir Morality and the
relation of Dagga to "Black

Peril" cases. of 1901 in regard to the
selling of dagga by Chemists and others".
1. Existing Laws regarding dagga - necessity
for New Ones and suggestions for same.

The existing laws on the subject of dagga are very
simple and quite inadequate to cope with the existing
evil. They can be expressed in a sentence, when freed
from legal phraseology - "In the Cape Colony the sale
of dagga is forbidden". There are no laws at all in
the Transvaal, the Orange Free State and Natal. These
three Colonies with Cape Colony form the "Union of
South Africa"; and it is understood that the Cape law
will be made applicable to the whole Union; or that
new legislature will be introduced into the Union
Parliament.

As yet no steps have been taken
in the matter, though official and semi-official
publications frequently call attention to the situation.
For example the "Supplement to Monthly Circular for

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August" dated from the "Office of the Minister for
"Justice", Pretoria, 2nd September, 1912, says inter
alia "In view of the growing use of dagga by native and
"coloured farm labourers and the deleterious effects
"resulting therefrom; Magistrates in the Cape Province
"are required to take steps for the strict enforcement
"of the provisions of Act 34 of 1891 in regard to the
"selling of dagga by Chemists and others". Again at
the Annual Congress of the Cape Province Agricultural
Union held in East London in August, 1912, it was
moved and passed. "That the Cultivation, storage,
"sale and use of dagga should be absolutely prohibited;
"and that wild dagga should be treated as a noxious
"weed." (Agricultural Journal of the Union of South
Africa, Vol 1V. No.4. October, 1912, page 627).

Two facts are clearly obvious, a
law regarding dagga is needed for the whole Union, and
public opinion is strongly in favour of such law being
passed.

If the question were asked "are
"any laws regarding dagga smoking necessary"?, every
thoughtful colonist would unhesitatingly answer, "yes",
and would be prepared to put forward several reasons
for his reply. In the opinion of the writer the

5. Crimes. This is discussed separately in the following are among the more important of such reasons:-

1. Nature of Work. While under the influence of dagga a native works with frantic, feverish, unthinking energy; then as the intoxication passes into its second stage he becomes lazy and sleepy. If roused to work he exhibits bad temper and works badly.

2. Moral Deterioration. A dagga smoker appears to degenerate in his moral sensibilities. He is not to be trusted, he lies more readily and more often than the average kaffir and will steal for the sake of getting more dagga. When supposed to be working the Overseer will find him smoking or sleeping. A good-for-nothing scoundrel is quite a mild description of a smoker.

3. Physical Deterioration. This has already been dealt with in Chapter 3.

4. Insanity. During five years, of the total number of male native admitted to the Pretoria Asylum, 17.86 % owed their insanity wholly or partly to Dagga smoking. For contrast it may be mentioned that 6.38% is the corresponding figure for alcohol.

5. Crimes. This is discussed separately in the next section.

6. Women. The Vice is spreading among the female population.

7. Cost to State of Dagga Lunatics. Statistics for the Pretoria Asylum for 1908-1912 show that 114 cases of Dagga insanity spent 30,444 days under treatment. The official estimation of the cost per diem for a native patient is one shilling and two pence. At this figure our 114 cases cost £1,775:18:0. To this must be added the expense of transportation of each native to and from the Asylum; the fees for medical certification; the charges incurred by keeping many suspected cases of lunacy in prison, for observation. Bearing in mind that Pretoria is one of five Asylums; that some thousands of mad natives are at liberty, doing wilful damage to property; and that all these insane natives are exempt from taxation; it will be clear that the annual loss to the State is no mean one - though the exact figure cannot be gauged.

The foregoing demonstrate that fresh legislature regarding dagga smoking is needed

for the whole Union of South Africa, and furthermore public opinion is beginning to be roused in favour of such laws being speedily passed by Parliament. Two courses are open to the Government:-

(1). To enact stringent measures at one fell swoop, by prohibiting the cultivation, storage, sale and use of dagga and by declaiming it a "noxious" weed. (In South Africa a "noxious" weed is one which must be destroyed at sight by everyone).

(2). To bring about the same end by gradual means. Firstly extend the Cape Law to the whole Union, that is prohibit the sale of dagga. Later proclaim dagga a "noxious" weed, and forbid its cultivation and use.

In the opinion of the writer the latter alternative is to be desired, as it is less likely to cause unrest among the natives and will gradually accustom them to the deprivation of an indulgence.

	1910	1911	1912	1913	1914	1915
Dagga	100	100	100	100	100	100
Alcohol	100	100	100	100	100	100

2. Medico Legal Considerations
of Dagga Smoking .

There are no statistics available - it is even doubtful if any records are made - to show how many kaffir criminals are dagga smokers, or how many crimes are committed while the criminal is under the influence of the drug. If such information could be obtained and if it showed a fair proportion of criminals were dagga smokers it would be an additional reason for fresh and more stringent legislature against the smoking habit.

The only available facts are to be gleaned from the histories of Dagga lunatics prior to their admission to the Asylum's. From this source has been drawn up the following, and for purposes of comparison the figures for alcoholic insanities are added. Those insanities in which both dagga and alcohol are involved have been omitted.

(a). Considered or actually Dangerous to Persons, and
Destructive to Property.

	: Considered Dangerous to : : Persons. :		: Property. :			
	: No. of : : cases : : in which : : facts : : are : : stated :	: Danger- : : ous. : : : : : : : : :	: Not : : Danger- : : ous. : : : : : : : : :	: No. of : : cases : : in which : : facts : : are : : stated :	: Destruc- : : tive. : : : : : : : : :	: Not : : Destruc- : : tive. : : : : : : : : :
Dagga.	87.	31.	56.	90.	12.	78.
Alcohol.	39.	22.	17.	38.	9.	29.

From this table it will be noted that while a large number of Dagga Lunatics are dangerous and destructive they are proportionately less so than Alcoholic lunatics. Just under 37% of Dagga cases are Dangerous to persons as compared to just over 56% of alcoholic cases. As regards destructiveness to property the approximate figures are Dagga 13 and one third per cent to alcohol 23 3/4%.

(b). Suicidal Tendencies. Out of 88 Dagga cases in which the facts are stated 5 attempted suicide - a percentage roughly of 5 and two-thirds per cent. Turning to Alcoholic cases 4 out of 35 (11 and three sevenths per cent) endeavoured to end their own lives.

(c). Striking White Men. It is most remarkable that however mad a kaffir may be his inherent respect for a whiteman remains, and it is extremely rare for a native lunatic to attempt violence to his European superiors. The figures are 3 out of 103 Dagga cases as compared to 1 out of 43 Alcoholics.

(d). Crimes for which actually arrested.

(1). Out of 103 dagga cases 9 were arrested and tried for crime. The crimes and result of trials are as follows:-

- Murder.
- Murder.

The Attempted Theft (8 previous convictions) ...
 Detained as Criminal Lunatic. ... as Criminal,
 Theft of a horse.....Not stated.
 (e). Theft of 25 head of Cattle....Charge dropped.
 Theft of an axe..... do. ... and that
 Suspicion of Sheep stealing... do. ... are the
 Crime not stated..... do.
 Creating a disturbance..... do.
 Assault with Intent to murder. Detained as a
 Governor's Pleasure Lunatic.
 Murder.....K. Detained as a Governor's Pleasure
 Threats Lunatic.

With the exception of the first and the last two the
 crimes were so obviously the work of a lunatic that
 little stress need be laid on them.

(2). Turning to the 43 cases of alcoholic insanity
 we find 7 were arrested and tried for the
 following crimes:-

Creating a disturbance.

Drunk and Disorderly.

Attempted Illicit Liquor Selling.

Robbery and Theft.

Malicious Damage to Property.

Murder.

Murder.

The latter five crimes were of a serious nature, and the offenders were ordered to be detained as Criminal, or Governor's Pleasure Lunatics.

(e). Acts which would have led to arrest.

In the following list it must be borne in mind that in many cases several of the acts enumerated are the work of one lunatic.

<u>To Persons.</u>	: 103.	: 43.	:
	<u>Dagger.</u>	<u>Alcohol.</u>	:
Indecently exposing the person.....	3.	1.	:
Threatening to Kill...	3.	2.	:
Threatening to Violence..	5.	2.	:
Self Multilation.....	1.	1.	:
Sodomy.....	1.	-	:
Using obscene language...	1.	-	:
Actual violence.....	12.	17.	:
Throwing Stones.....	3.	-	:
Annoying people.....	1.	-	:
	<hr/>	<hr/>	
	30.	23.	:

Attempted Suicide and Striking Europeans have been dealt with under separate heads. crimes committed by sane drunk walkers if it proved above that insane walkers of a considerable amount of damage to property, and are a source of danger to persons.

To Property.

	3.	Effect of	4.	5.
Setting grass on fire.....	2.		-	
Setting fire to Huts.....	3.		4.	
Killing Animals.....	2.		3.	
Mutilating Animals.....	-		1.	
Breaking Furniture.....	11.		5.	
Breaking Buildings.....	2.		1.	
Destructive to Clothing..	2.		6.	
Aimless Theft & Stealing.	2.		-	
Wandering in houses.....	1.		-	
Creating Disturbance.....	3.		1.	
	28.		21.	

From the foregoing details it is clearly obvious that alcoholic Insanity is proportionately more potent than Dagga Insanity in the causation of acts contrary to the law. While this may be an argument in favour of further restrictions regarding the sale of alcohol to kaffirs; it is not an argument against fresh legislature pertaining to the use of Dagga. For whatever facts may be elicited regarding crimes committed by sane dagga smokers it is proved above that insane smokers do a considerable amount of damage to property, and are a source of danger to persons.

3. Effect of Dagga on the Sexual Appetite.

It is commonly believed in this country that Dagga smoking does stimulate the sexual passions, and is therefore a factor in causation of rape on white women by natives. If this be true, it is of paramount importance that the most stringent legislature be instantly introduced to prevent the use of dagga; for these frequent assaults on white women are rendering South Africa a very unsafe country for them. Consequently settlers are leaving, and fresh settlers hesitate to immigrate. The importance of this in a large and only partially developed country cannot be over estimated.

The writer has taken great pains and spent a good deal of time in investigating this question as fully as possible, by tapping all sources of information. And has arrived at the conclusion that Dagga in no way stimulates the sexual desires of its smokers. But while it must be admitted that the evidence is mainly circumstantial, and even at that somewhat meagre; yet there is not the slightest foundation of proof in support of the common hearsay that Dagga does increase the sexual appetite.

As already hinted at the average Colonist is of the opinion that Dagga smoking augments the sexual longings of a native and plays a part in the "Black Peril" cases. I have interviewed a great many people on this point - mostly those with a larger experience of natives - but have never elucidated a shred of proof or reason in support of their belief. And while investigating this subject I have come across many people who hold the opposite view, namely, that Dagga has no effect on the sexual passions.

A reference to the crimes and acts of Dagga lunatics prior to admission show the following committed by 103 patients.

- Indecently exposing the Person.....3.
- Sodomy.....1.
- Rape and Indecent Assault..... 0.

A very small number for a drug which is credited with stimulating the carnal desires. Any 103 patients, taken haphazard, in any Asylum suffering from any forms of insanity, will show as high a percentage, if not a higher one.

Presuming that dagga does act as a sexual stimulant, it is fair to argue, that sane natives must exercise their faculties of self control,

and will power to restrain their rising desires; otherwise rape cases - black on black or black on white - would be more common, and the intoxicated condition of the assailant would be disclosed in evidence. In no Courttrial has an accused native been proved to have been under the influence of Dagga when he committed, or attempted to commit rape. Experiments in this direction on insane natives, in whom all inhibitory faculties were lost, proved absolutely negative.

All natives, sane and insane, emphatically deny that the smoking of dagga in any way stimulates the sexual craving. Put the question in whatever form you please the invariable answer is "No". A fair number however say that after a smoke they are incapable of coitus, and the idea does not appeal to them. A party of smokers explained it thus :-
 "After a smoke we feel nervous and shy, and cannot speak, even when the girls laugh and talk, we can only look at them and laugh".

The writer has tested many natives while fully and semi intoxicated, with the introduction of an erotic subject by conversation. The smoker will carry on his share of talk without enthusiasm, and

with scarcely any interest, quickly relapsing into silence; or changing to another topic. However this means but little for a native is more than usually reticent when discussing sexual matters with a white man.

Taking the evidence of Text Books of Materia Medica and Therapeutics on the subject of Cannabis Indica it is found that nowhere is the drug stated to be a stimulant to the sexual organs, or sexual passions. It is usually described as a sedative to the nervous system. And by some authors its use is recommended as a sedative in the treatment of chordee in gonorrhoea. Surely if the drug increased the sexual longing it would augment the condition of chordee, instead of acting as a palliative.

None of the above arguments, taken separately, can be considered as strong, but collectively they form a substantial claim of evidence, proving that Dagga does not increase the sexual appetite, and if any further fact is needed to strengthen this chain it is to be found in the weak arguments of those who hold the contrary opinion.

between them and share their marital rights, turn and turn about.

4. Kaffir Morality and relation of Dagga to "Black Peril" Cases.

To get a comprehensive idea of this subject it will be necessary to make a digression into the morality of kaffirs in general. Judged by the European standard natives are absolutely immoral, in fact they might be described as non moral.

From puberty onwards unbridled licence is allowed to both sexes. Boys and girls cohabit freely, and actually special huts are provided for the purpose. The ceremonious rites of circumcision, which is performed at puberty, and those connected with the first appearance of the menses, are so vile and revolting that a description of them is hardly possible.

Masturbation and Sodomy are freely practised now-a-days, though before contact with civilization they were almost unknown.

Polygamy is of course permitted and likewise every polygamous wife has a lover or two, often with her husbands consent. Husbands exchange wives for varying periods, or sell a wife to another man for a stated time. Two poor men may buy a wife

between them and share their marital rights, turn and turn about.

Kidd "The Essential Kaffir" Page 210 discussing young women sayd "Nothing is left undone "which could be expected to destroy any lingering "remains of self-respect in the girls' mind. The last "traces of chastity are consumed in the burning fire of "unbridled lust. Henceforth the girl is but a ""thing".

These few remarks barely touch on the fringe of the subject but go far enough to prove that a kaffir in sexual matters is a lustful animal, and he regards a woman merely as the vehicle of sensual gratification.

So much for Kaffir morality. Now let us turn to the causes of rape on white women and see what part, if any, dagga plays in them. In the writers' opinion the principal causes are :-

- (1). The absence of morality among kaffirs, and their absolute want of respect for women. They have a respect almost amounting to veneration for the whiteman, but they have not nearly so high an opinion of the European woman.

- (2). The rapidly increasing number of whitemen who cohabit with black women. In many parts of the country a native girl can be bought from her father for a few pounds, she belongs to her purchaser body and soul, and serves the double duty of servant and prostitute. These whitemen apparently glory in their shame, and don't realise the harm they are doing. They do harm; for the native follows the example of a combination between black and white.
- (3). The frequency with which whitemen forcibly rape native women.
- (4). The prolonged absences of the men from their kraals and wives, while working on the mines or as house boys in towns; and the scarcity of native women in certain areas. Regarding this latter some interesting figures are obtainable from the last Census, the returns of which have recently been published. In Johannesburg area there are 4 native women to every 100 men, in Boksburg 8, in Germiston 4, in Krugersdorp 5. These are large centres of European

population and in them many "black peril" cases occur. Over the whole Union of South Africa there are 99 native women to 100 men.

(5). A large number of the lower class white prostitutes will accept a kaffir as readily as a whiteman. This horrible statement unfortunately admits of no denial and has a tremendous influence on the native mind. A kaffir who has been so gratified invariably boasts of it to his fellows, and boasts openly.

(6). Many white women, especially newcomers from Europe treat kaffir servants with far too much familiarity. As an example, it is quite a common thing for the kaffir boy to bring coffee, etc, into his Mistress' bedroom before she gets up; to hand her a forgotten towel or soap while she is having a bath, etc.

(7). Cases such as the following, culled from the Transvaal Leader, Johannesburg, 4th December, 1912. "Details of an unsavoury

its father. "nature where disclosed during the hearing was report "of a charge against a native named Johannes, committed "of contravening Section 19(2) of Ordinance the girl? "no.46 of 1903. The alleged offence took "place on a farm at Elandsfontein, and the reasons are "person concerned, a young Dutch girl, Black Peril "according to the evidence of the accused, we find the "had made propositions to the native, who white woman "resisted for a time. The girl herself had example "said there had been no force used by the colour pro "native. In bringing in a verdict of infidelity "guilty", the jury without retiring, Two came to "recommended the accused to the mercy of not within "the Court. Mr. Justice Gregorowski said part played "the girl appeared to have been devoid of opinion pro "shame, - in the circumstances accused of these "would be sentenced to four months imprison- three some "ment with hard labour".

Some further facts not mentioned in the newspaper should be added. It appears the girl and her black paramour cohabited freely and openly, with the knowledge and consent of her parents, the four of them sharing a hut. Also the girl appeared in Court with a bastard child and acknowledged the native in question to be

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its father. One may be certain that the above case was reported in all the native papers and freely commented on. Why was the native punished and not the girl? And why a sentence of four months?

To most people the above seven reasons are all sufficient as an explanation of the Black Peril. But they are not. In examining these we find that in five out of the seven reasons either white women or men are largely to blame for setting a bad example. Consequently in this country, where colour prejudice rules high, these causes are deemed insufficient and absurd and others are sought for. Two come to hand at once - Alcohol and Dagga. It is not within the scope of this paper to discuss the part played by alcohol - if any -. Dagga in my opinion plays no part whatsoever, as a causal factor of these rape cases, and in support of this theory three sound reasons may be given.

- (1). There is no case on record where the accused man has been found to have been under the influence of Dagga at the time he committed the act.
- (2). Most Black Peril cases occur in or near the larger towns, but most dagga is smoked

where the native population is thickest,
that is in the country districts.

- (3). There is no evidence to show that the
smoking of dagga has any effect on the
sexual appetite.

For the purpose of part 2 of the Dagga Inquiry
the writer has taken the cases reported into the
Provincial Asylums for the last 5 years, that is 1906 to
1912 inclusive. These figures the case records are
very scanty and the diagnoses are more or less
in 1908 and 1909 the cases were not available in the
notes, but the diagnoses were filled up. At the
end of 1908 a new system of case recording was adopted,
and from that time onwards the case records are
satisfactory. The cases of 1908 and 1909 are
collected from the records of the Provincial Asylums.

(1) Cases of insanity in the

(2) Cases of insanity due to Alcohol

(3) Cases of insanity due to Dagga and Alcohol

(3) For purposes of comparison, the cases of insanity due to Alcohol alone - Alcohol.

P A R T II.

The Insanity of Dagga.

CHAPTER I.

Etiology.

For the purposes of investigation into Dagga Insanity the writer has taken the cases admitted into the Pretoria Asylum for the last 5 years, that is 1908 to 1912 inclusive. Prior to 1908 the case records are very scanty and the diagnoses are none too accurate. In 1908 and 1909 the same want of details is to be noted, but the diagnoses can be relied upon. At the end of 1909 a new system of case taking was adopted, and from that time everything has become highly satisfactory from the statistician's point of view.

Three groups of cases have been collected:-

- (1) Cases in which the insanity is due to Dagga alone - Dagga.
- (2) Cases in which both Dagga and Alcohol play a part - Dagga and Alcohol.

(3) For purposes of comparison, the cases of insanity due to Alcohol alone - Alcohol. The figures under these heads are as follows:-

YEAR	MALES					FEMALES				
	TOTAL CASES	DAGGA	DAGGA + ALCOHOL	COMBINED (1&2)	ALCOHOL	TOTAL CASES	DAGGA	DAGGA + ALCOHOL	COMBINED (1&2)	ALCOHOL
1908	101	9	3	12	4	31	-	-	-	1
1909	123	20	2	22	10	19	-	-	-	-
1910	115	29	3	32	9	26	-	-	-	2
1911	131	20	2	22	6	33	2	-	2	-
1912	157	23	1	24	11	39	-	-	-	-
	627	101	11	112	40	148	2	-	2	3
%		16.1	1.75	17.86	6.38		1.35		1.35	2

From these figures attention is at once drawn to the importance of Dagga Insanity. Roughly 18% of all Males Admitted are suffering from this type of lunacy, in one of its several forms; a percentage which easily exceeds any other individual cause, and any other form of Insanity, except Dementia Praecox.

The low figure for alcoholic psychoses is remarkable, but admits of a ready explanation. In South Africa no liquor, in any shape or form, may be sold, or given, to a native. To do so is a grave violation of the stringent liquor laws. Consequently natives are restricted to Kaffir Beer, and to illicitly obtained wines and spirits. Though without doubt they secure and consume a large amount of alcohol, still it is a limited quantity, and is mainly imbibed in secret, and in small amounts at one given time. Dagga on the other hand is freely and openly used to an unbridled extent; and for all practical purposes there are no laws against this vice.

1. Heredity.

To get the history of any heredity weakness from a native is infinitely more difficult than in the case of a European. The former regards it as unwarrantable curiosity, and gives an emphatic denial of any ancestral taint, or declines to answer the question at all. Occasionally reliable information can be obtained from the relatives.

Among the dagga cases only one

gives a certain history of heredity - the patients' mother was insane, as a girl, and is still considered "queer". Of a far smaller number of alcoholic cases heredity is found in four - two patients have an Aunt insane; one his Mother; and one shows collateral insanity, both his brother and sister being of unsound mind.

2. Physical Stigmata

and Palatal Abnormalities.

Out of 70 Dagga cases in which the fact has been gone into six show physical stigmata or deformities.

No.1942. Eyes widely set, forehead and head narrow and receding. Base of head wider in front across eyes than behind.

Head is asymmetrical.

No.2668. Head small narrow and asymmetrical.

Ears and face asymmetrical.

No.3329. A peculiar depression of sternum, which cannot be accounted for except as a deformity.

No.2889. Teeth widely spaced.

No.2927. Bifid thumb on right hand.

No.3493. Talipes Valgus (left).

The question of palatal deformities or abnormalities is one bristling with difficulties. No "normal palate" has been described for the native races of South Africa. If such a description were attempted, it would probably be necessary to fix a standard for each individual tribe.

In the case sheets palates have been classified roughly, by a succession of Medical Officers, under the heads of "normal", "high and narrow," "low and broad," regardless of tribe, and without any definite measurements. The statistics collected are as follows, and show the great bulk under the heading of normal.

	CASES EXAMINED	NORMAL OR MEDIUM	HIGH & NARROW	LOW & BROAD
(1) DAGGA	71	52	15	4
(2) DAGGA & ALCOHOL	5	4	1	.
(3) 1 & 2 COMBINED	76	56	16	4
(4) ALCOHOL	26	18	5	3

3. Sex.

The facts revealed anent the sexes give, in my opinion, a most important clue to the whole subject of Etiology of insanity among the kaffir races.

	MALES	FEMALES
TOTAL CASES ADMITTED:- 1908 to 1912	627	148
(1) TOTAL DAGGA INSANITIES	101	2
(2) TOTAL DAGGA & ALCOHOL INSANITIES	11	
(3) TOTAL OF (1)&(2) COMBINED	112	2
(4) TOTAL ALCOHOL INSANITIES	40	3

These Statistics show that:-

- (1) For all types of Insanity the proportion of Males to Females is approximately 4.25 to 1.
- (2) For types of Dagga Insanity there are 56 men to one woman.
- (3) For Alcoholic Insanities the proportion is roughly 13 to 1.

(1). Males 4.25 Females 1. This dis-proportion between the two sexes is more apparent than real, and before discussion of the real causes it is advisable to eliminate the fictitious ones.

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- (a). Females largely remain in the kraals, in the Kaffir districts; and their insanity is not reported to, or observed by, white officials.
 - (b). Unless dangerous, or destructive, no notice is taken of an insane woman.
 - (c). Women are of no value apart from their reproductive functions. Once a wife has had several children her husband considers that he has had fair value for his "lobola" (purchase money) - he then discards her, and buys another girl. To spend a few shillings in securing treatment for an insane wife, who has borne children, is a ridiculous waste. If she has no offspring, the husband "cuts his losses" and makes a fresh investment.

When a girl becomes mad before marriage, her father conceals the fact in order to get her sold, otherwise she is a dead loss to him. If the insanity cannot be concealed, the father naturally says to himself, "why send good money after bad", and leaves her to get on as best she can.

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(d). Old women, many of them possibly senile demented, are of no earthly value. They are practically turned out into the veld to starve and die, thus avoiding the defilement and subsequent destruction of a hut. No one takes the slightest notice of or interest in them.

These four reasons, based on the commercial value of women, do eliminate some of the marked disproportion of insanity in the two sexes, but not all. There are actually more insane kaffir men than women, but as to the exact difference, figures are of course unobtainable. The reason is not far to seek. Women lead a quiet plethoric vegetative existence in their kraals, away from the stress and strain of modern civilization. Their labours consist of house work, tilling the ground, and bearing children. Their vices and pleasures are strictly limited by the men. They are not allowed in contact with civilization, or education. In short women are not human beings in the ordinary sense of the term but only the goods and chattels of their lords and masters.

(2). Dagga Insanities. Males 56: Women 1. Here the disparity between the two sexes is more marked, but admits of a ready explanation.

(a). Everyone of the above reasons regarding all types of insanity are operative.

(b). Far more men smoke dagga than women.

(c). Women smoke less, both in amount, and in frequency.

(3). Alcoholic Insanities. Males 13: Women 1.

These figures are only given for purposes of comparison; and do not call for further discussion.

(4). Age.

No native can state his age in years, but does so by a reference to his state or occupation at the time of some outstanding event. As examples:-

(1). "I had started to herd cattle when the big "war began" (Anglo-Boer war of 1899-1902).

A native boy begins to herd cattle at the age of 8.

(2). "I was at the breast when the Rinderpest "came" (1896).

(3). "I was about so high (pointing to say four "feet) when there was snow in Johannesburg" (1909).

(4). "I can remember when Dinizulu was captured".

By knowing the date of these occurrences, it is easy to form an approximately accurate estimate of a kaffir's actual age. When it is necessary to guess, one must always remember that a native looks younger than a European of the same age. Statistics regarding age incidence are as follows:-

	CASES IN WHICH AGE IS STATED	UNDER	20	25	30	35	40	50	TOTAL AGES IN YEARS	AVERAGE AGE
		20 YEARS	TO 24 YEARS	TO 29 YEARS	TO 34 YEARS	TO 39 YEARS	TO 49 YEARS	YEARS & OVER		
DAGGA	93	7	24	29	17	13	2	1	2519	27
DAGGA & ALCOHOL	10	-	5	4	1	-	-	-	245	24½
ALCOHOL	39	3	5	14	5	4	5	3	1204	31

It is seen that the average age at which Dagga insanity appears is 27; and that the majority of cases start between 20 and 30 years. This age period is the one at which most men are working on the mines, or in large towns. Before this they are herding cattle; afterwards with the money they have

earned, they retire, buy a wife or two, and settle down to a life of luxury and ease.

In the case of alcohol, the age of commencement is four years later; most probably because a native by the time he has reached adult life, has smoked far more dagga, than he has drunk powerful intoxicating liquors, such as brandy and whiskey. Children drink only kaffir beer. Another explanation would be that Dagga is more potent, than alcohol, as a cause of lunacy. But these suggestions are merely tentative and need investigation before being accepted.

It is interesting to note that in those cases, where both Dagga and Alcohol play a casual part the age of incidence is $24\frac{1}{2}$ years; that is several years younger than in cases due to these toxins acting separately. Unfortunately the number of cases is too small for much stress to be laid on this point.

	Alcohol	Dagga	Both	Total
Number of cases	10	10	10	30
Age at onset (years)	28	24.5	24.5	27.5

These figures largely give the... in each tribe, according

5. Race or Tribe. In the following table Males only are counted, the Females are so few in number as to be negligible.

TRIBE	TOTAL NO OF CASES ADMITTED	DAGGA		DAGGA & ALCOHOL		DAGGA & DAGGA AND ALCOHOL COMBINED		ALCOHOL	
		NO OF CASES	ROUGH PER CENTAGE	NO OF CASES	ROUGH PER CENTAGE	NO OF CASES	ROUGH PER CENTAGE	NO OF CASES	ROUGH PER CENTAGE
BASTARD.	33	9	27	1	3	10	30	-	-
BECHUANA.	34	2	6	-	-	2	6	2	6
HOTTENTOT.	10	2	20	-	-	2	20	-	-
M'SUTO	241	38	16	2	1	40	17	25	10
N'DEBELE	34	3	9	-	-	3	9	2	6
NYAMBAAN.	13	4	21	-	-	4	21	1	5
SHANGAAN.	70	11	16	3	4	14	20	3	4
SWAZI.	45	12	27	-	-	12	27	1	2
'KOSA.	37	4	11	-	-	4	11	1	3
ZULU.	51	11	22	3	6	14	28	4	8
SUNDRY SMALL TRIBES	53	5	-	2	-	7	-	1	-
	627	101		11		112		40	

These figures merely give the percentage of Dagga Lunatics in each tribe, according

to admissions. Bastards, Zulus, and Swazi's, are easily first; but it must be remembered that Swazi's and Zulus are among the heaviest smokers, and Bastards are degenerate cross breeds. In the absence of any records as to the frequency of the dagga habit in the various tribes, the above table is of little statistical value; it being impossible to estimate the percentage of insanity among dagga smokers.

6. Occupation. In considering the occupation of natives, more stress is to be laid on the site of the labour, than on the actual work itself. Whether the boy works in a large town, or in the country is of far more importance than whether he is a house servant, or a railway porter. In the former case it means close contact with civilization. Here the struggle for existence is keen, money is an object to be striven for, the vices of white men are an example to be followed, ambitions are fostered, work is hard and hours are long, and there are the police to be avoided. In country districts a native pursues "the even tenor of his way" without feeling much of the stress and strain of life.

For all Dagga cases the proportion of Town workers to those in the Country is roughly

3 to 1; which bears out the contention, that where a man works, is of more importance, than what he does.

Regarding actual occupations it will be noticed that Mine labourers supply the greatest number of cases; and it must be borne in mind that most of those classified under "Town, not stated", are in all probability mine boys. At the various mines work is very arduous, and dagga is freely smoked.

the age of puberty. Then comes a distinct falling off. The energy of growth becomes absorbed in more bodily

	TOWN								COUNTRY				
	NOT STATED	MINE	HOUSE	STABLE	RAILWAY	BRICK-FIELDS	VAGRANT	TOTAL FOR TOWNS	NOT STATED	FARM	HOUSE	PEASANT	TOTAL FOR COUNTRY
(1) DAGGA	22	30	17	2	6	1	2	80	5	12	4	2	23
(2) DAGGA + ALCOHOL	3	3	-	-	-	-	-	6	3	2	-	-	5
(3) (1) & (2) COMBINED	25	33	17	2	6	1	2	86	8	14	4	2	28
(4) ALCOHOL	8	12	7	3	-	-	2	32	3	5	2	1	11
								118					39

7. Religion and Education. These two go hand in hand.

A native is either a Christian and semi-educated, or a pagan and uneducated. Out of 80 cases in which these facts are ascertainable 43 are Christians

and 37 pagans. Roughly one half are Christians and more, or less educated; but of the total native population, probably not more than one fifth, or one tenth, have embraced religion.

Christianity involves unnatural surroundings, fresh interests and forced education. Kaffirs are quick at absorbing new ideas, and adapting themselves to new conditions of life, until they reach the age of puberty. Then comes a distinct falling off. The energy of growth becomes absorbed in mere bodily functions - nutritive and sexual -; and brain development stops. As a final product there is a man of sinews, lustful with animal passions; but with a stunted mental growth. It is easy to teach a boy, but is a slow and tedious process to instill new ideas, and new facts, into the brain of a grown man. Missionaries do not realize this, and force Christianity and education, too rapidly, and too extensively, on an enfeebled intellect.

8. Seasonal Incidence. For all insanities, Natives and Europeans, there is evidence of a seasonal incidence. A great influx of new admissions occurs in March and October, that is at the beginning and end of Summer.

But for Dagga lunacy this does not hold good. Over a period of five years the highest admissions per month have been in January, May, August, October and December.

Discussion on Etiology.

Each causal factor has now been considered separately, and we are in a position to eliminate several as having little or no value, namely:- "Heredity", "Physical Stigmata", "Race or Tribe", and "Seasonal Incidence". The inevitable question is, "If so many natives smoke Dagga, why do "so comparatively few become insane?", and the answer is found under the headings of "Sex", "Age", "Occupation", "Religion and Education". The whole problem evolves itself into a consideration of the interaction between the vice and the environment, in a suitable nidus. Leave a raw savage in his primitive state, leading his own life, let him smoke dagga, when and how he pleases, and it will be found that little or no harm will result. But take a young adult native, with his stunted mental powers, place him in abnormal surroundings, educate him beyond his intellectual capacity, give him hard and unnatural work to perform, let him become ambitious to copy the white man, and outshine his

fellows. He then realizes the keen competition of life and enters with great zest into the struggle for existence. Now introduce the vices, Alcohol, Dagga, unnatural sexual practices, etc. What is the result? The interaction of environment and vice, proves too much for many; and the feeblar brains drop out of the fight - shattered and broken.

Dagga as an Etiological Factor in other

Total Natives and Forms of Insanity. - 138.

An investigation has been made into all forms of insanity, with a view to finding out how many patients were dagga smokers; and what part, if any, dagga played in the causation of their insanity. This investigation would be of great value but for one thing, the facts are not always entered upon the case sheets. If a patient is a suspected Dagga lunatic the question of his vice is thoroughly gone into, and results noted. Otherwise the facts may, or may not, be stated. Consequently the following figures are probably too low. They only refer to the years 1911 and 1912.

	Dagga.	Dagga and Alcohol.	Alcohol.
Schizophrenia.....	22.	2.	12.
Dementias, Secondary.	3.		
" Organic & Senile.	2.		2.
Epilepsy.	6.	1.	5.
Manic Depressive.	6.	1.	2.
Delusional.			3.
	39.	4.	24.

Total Males admitted 1911 and 1912 = 288.
 Total Dagga Insanities 1911 and 1912 - 46.
 Total Cases of other Insanities
 in which Dagga smoking was
 noted..... - 43.

A glance at these statistics will show the importance of dagga as an etiological factor. One does not mean to insinuate that Dagga alone **causes** say Senile Dementia; or Manic Depressive Insanity; but merely plays a part in the causal trinity, environment, nidus, and vice. A potential Schizophrenic might remain sane for ever but indulgence in the luxury of Dagga sways the balance towards insanity.

Dagga does not appear to colour the insanity at all, except in the case of epileptics. All cases of epilepsy who are dagga smokers invariably show violent impulses.

CHAPTER 3.

Physical State on Admission.

Information prior to Admission.

Practically every European patient is brought to the Asylum, by a relative or friend, from whom full information can be obtained as to the sufferer's antecedents, family and personal history, vices, manner of life, etc. But Natives are always brought by a Kaffir policeman, who probably has only been in charge of the patient for a few hours, and knows nothing of his history.

Hence for any information about a native patient, prior to admission, one has to fall back on a short form filled in by the Magistrate of the district, and on any facts which may be gleaned from an occasional visitor. These legal forms are hurriedly and briefly completed and are restricted to facts concerning tribe, district, religion, possessions,

crimes committed, parents' names and addresses, previous attacks, and so on. No information is ever given about the patient's history or his family history, and even the facts stated cannot be relied upon, owing to the inherent talent a native possesses for "terminological inexactitudes".

CHAPTER 2.

Physical State on Admission.

Delay in Admission.

Information prior to Admission.

Practically every European patient is brought to the Asylum, by a relative or friend, from whom full information can be obtained as to the sufferer's antecedents, family and personal history, vices, manner of life, etc. But Natives are always brought by a Kaffir policeman, who probably has only been in charge of the patient for a few hours, and knows nothing of his history.

Hence for any information about a native patient, prior to admission, one has to fall back on a short form filled in by the Magistrate of the district; and on any facts which may be gleaned from an occasional visitor. These legal forms are hurriedly and briefly completed and are restricted to facts concerning tribe, district, religion, possessions,

to describe with any degree of certainty, the bodily crimes committed, parents names and addresses, previous attacks, and so on. No information is ever given about the patients history or his family history, and even the facts stated cannot be relied upon, owing to the inherent talent a native possesses for "terminological inexactitudes".

Delay in Admission.

In almost every case there is a considerable delay in admitting a native patient to the Asylum - such delay is however unavoidable. Natives who are suspected of unsoundness of mind are often removed to prison for observation, by the District Surgeon, this is according to Law, and wastes a great deal of time. In country districts it is not uncommon for doctors to be two hundred miles apart, and consequently certification is a difficult, and tedious process. Again the journey to the Asylum, from outlying districts, is often a matter of several days.

Hence it follows that when a native patient is admitted, the acute physical state of his mental malady is passing off, and lacking scientific records, from the outside medical men, it is impossible

that native patients have been seized systematically

to describe, with any degree of certainty, the bodily condition at the onset of noticeable insanity. All that can be done is to fall back on the case sheets and describe the physical state on admission, always remembering that when a patient is examined he has been insane for from one to fourteen days.

1. General Nutrition. There is very little change in the general nutrition of patients as will be seen by the following table:-

	N° OF CASES IN WHICH THE FACTS ARE STATED	NUTRITION		
		GOOD	FAIR	POOR & EMACIATED
(1) DAGGA	98	63	29	6
(2) DAGGA & ALCOHOL	7	5	1	1
(3) = 1 & 2 COMBINED	105	68	30	7
(4) ALCOHOL	38	21	12	5

Seven out of a total of one hundred and five dagga cases show a marked deterioration, which compares very favourable with the alcoholic cases - five out of thirty eight.

2. Weight. It is only within the last two years that native patients have been weighed systematically

month by month. Consequently statistics are limited to a very few cases; for a weight on discharge is of no value without the weight on admission for comparison.

From any form of bodily disease. The details are:-
 Dagga (103 cases). 8 cases with 3 deaths.

	NO OF CASES TAKEN	GAIN			NO CHANGE	LOSS		
		NUMBER SHEWING GAIN	TOTAL WEIGHT GAINED IN LBS	AVERAGE GAIN IN LBS	NO OF CASES	NUMBER SHEWING LOSS	TOTAL WEIGHT LOST IN LBS	AVERAGE LOSS IN LBS
(1) DAGGA	32	19	119	$6\frac{4}{19}$	7	6	17	$2\frac{5}{6}$
(2) DAGGA & ALCOHOL	2	1	4	4	1	-	-	-
(3) - 1 & 2 COMBINED	34	20	123	$6\frac{3}{20}$	8	6	17	$2\frac{5}{6}$
(4) ALCOHOL	13	7	52	$7\frac{3}{7}$	6			

Dagga and Alcohol (11 cases). 30 cases.
 Alcohol (43 cases). 2 cases with 1 death.

The 34 cases of dagga show a nett gain of 106 lbs, being an average of $3\frac{2}{17}$ lbs; the greatest increase of weight in any one case was 23 lbs. and the maximum loss was 6 lbs. Turning to the 13 alcoholic cases they show an average gain of 4 lbs each, the greatest individual gain was 23 lbs, and it is noticeable that no single case lost weight.

These figures corroborate the remarks under "General Nutrition" - the dagga cases show less impairment of nutrition, and consequently

a smaller gain in weight.

	NO OF CASES	UNDER 98°	NORMAL 98°-99°	99° TO 100°	OVER 100°
(1) MALARIA	73	21	50		
(2) DAGGA					
(3) ALCOHOL	27		17		

3. Presence of other Bodily Diseases. Comparatively

few dagga and alcoholic cases were admitted suffering from any form of bodily disease. The details are:-

Dagga (103 cases). 8 cases with 5 deaths.

- Otitis Media.....1.
- Tuberculosis.....4.
- Nephritis.....1.
- Mitral Regurgitation.....1.
- Scurvy.....1.

Dagga and Alcohol (11 cases). No cases.

Alcohol (43 cases). 2 cases with 1 death.

- Tuberculosis.....2.

4. Temperature. The vast majority show a normal

temperature; and of the minority, most are sub-normal.

It is to be noted that a "normal temperature" is taken to be one between 98 x 99° F, this is to allow for errors in the thermometers, which tend to register high, probably owing to the tropical heat and the altitude.

But the comparison with "Alcohol" calls for notice, in proportion to the number of cases roughly 3 times

	NO OF CASES	UNDER 98°	NORMAL 98° - 99°	99° TO 100°	OVER 100°
(1) DAGGA	73	21	50	1	1
(2) DAGGA & ALCOHOL	6	1	4	-	1
(3) (1&2) COMBINED	79	22	54	1	2
(4) ALCOHOL	27	9	17	1	.

and occasionally by foul breath. Reducible Ventral Hernias are fairly common, but call for no special comment. An enlarged spleen is occasionally found in patients from Malarial districts.

5. Pulse. Here again information tends to be of a negative nature for most patients show a pulse normal in rate, rhythm and tension.

	NO OF CASES	RATE					RHYTHM		TENSION		
		UNDER 70	70 TO 80	80 TO 90	90 TO 100	OVER 100	REG:	IRREG:	HIGH	MEDIUM OR NORMAL	LOW
(1) DAGGA	70	13	37	14	4	2	68	2	4	62	4
(2) DAGGA & ALCOHOL	5	-	2	2	1	-	5	-	-	5	-
(3) (1&2) COMBINED	75	13	39	16	5	2	73	2	4	67	4
(4) ALCOHOL	24	4	11	2	4	3	22	2	4	20	

Here again the normal range is most predominant, and divergences from it tend mainly in the direction of an increase. The cases classed under "mixed", see these

But the comparison with "Alcohol" calls for notice. In proportion to the number of cases roughly 3 times

as many of the latter show a pulse rate of over 90; and also 3 times as many cases are irregular in rhythm.

6. Alimentary System. In 63 out of 83 dagga cases the tongue was furred, often accompanied by constipation, and occasionally by foul breath. Reducible Ventral Herniae are fairly common, but call for no special comment. An enlarged spleen is occasionally found in patients from Malarial districts.

7. Reflexes - Superficial and Deep.

	NO OF CASES	REFLEXES NOT OBTAINABLE	NORMAL	BRISK OR INCREASED	SLUGGISH OR REDUCED	MIXED
(1) DAGGA	83	4	50	16	7	6
(2) DAGGA & ALCOHOL	5	1	3	-	1	-
(3) & (2) COMBINED	88	5	53	16	8	6
(4) ALCOHOL	31	2	21	6	2	-

Here again the normal shows a great preponderance, and divergence from it tends mainly in the direction of an increase. The cases classed under "mixed", are those in which differences exist between the superficial and Deep reflexes on either side.

8. Gait and Station. One Dagma case showed an unsteady gait, with increased knee jerks. None of the cases definitely tested showed any Rombergism.

9. Tremors. There is very little to be noted under this head. Two dagma cases exhibited tremors; one fine of hands and tongue, the other coarse of face and hands. As compared to this three alcoholic cases showed tremors; two fine of tongue, one fine of hands and tongue.

10. Eyes and Pupil Reflexes. Neither Strabismus, Exophthalmos, Nystagmus nor Ptosis were observed in any of the cases. Nor were any irregularities found in the size, shape, or outline, of the pupils. In all cases the Conjunctival Reflex was normal. As regards Light accommodation and Consensual reactions 31 out of 84 Dagma and 26 out of 29 Alcoholic cases were normal. Of the three exceptions two were absent or impaired, and the third was unobtainable.

11. Urine. Figures regarding Urine are only available for a short period. In a few cases traces of albumen and blood due to Bilharzia Haematobium were found; otherwise no deviations from the normal were noted.

Conclusions. From the foregoing it is clear that, except in a few isolated cases, a dagga patient on admission is practically in a normal state of bodily health. Even bearing in mind the delay prior to admission it would appear that in dagga insanity the toxin acts almost wholly on the mental functions, without any impairment of the bodily organism.

Judging by analogy one would expect to find signs of a febrile reaction. If this occurs it must be of a brief duration for on admission the only traces are a furred tongue and constipation.

... considerable amount of repetition will be avoided.

It is useless to examine an insane native without some knowledge of the psychology of a sane man. Natives differ in "toto caelo" from the white race and cannot be judged from a European standpoint. In this section, although somewhat foreign to the subject in hand - a few elementary psychological facts will be touched upon, mainly to indicate points of difference and to show where care is necessary in conducting an examination.

No rules can be laid down as to the amount of smoking necessary to produce insanity.

Some patients admit 3 or 4 pipes a day, others as much as 10. Some acknowledge having adopted the habit as children, while others state that they have only smoked a few years. It is not so much a question of the vice, as of the individual himself and his environment.

CHAPTER 3.

Dagga Insanity as a Whole.

Before the cases of Dagga Lunacy are classified into different types and fully described, certain broad facts concerning Dagga Insanity as a whole can be discussed; and in this manner a considerable amount of repetition will be avoided.

It is useless to examine an insane native without some knowledge of the psychology of a sane man. Natives differ in "toto coelo" from the white races and cannot be judged from a European standpoint. In this section - although somewhat foreign to the subject in hand - a few elementary psychological facts will be touched upon, mainly to indicate points of difference and to show where care is necessary in conducting an examination.

No rules can be laid down as to the amount of smoking necessary to produce insanity.

Some patients admit 3 or 4 pipes in a day, others as much as 10. Some acknowledge having adopted the habit as children, while others state that they have only smoked a few years. It is not so much a question of the vice, as of the individual himself and his environment. It is quite easy to identify a smoker with absolute certainty.

Recognition of a Dagga Smoker.

Naturally no reliance can be placed on a patient's word as to whether he smokes dagga or not. Regardless of denial or admission of the fact he is always tested. He is given a pipe, water, reed and dagga itself and then his actions are carefully watched. If he is a smoker his actions will betray him. One patient will visibly brighten at the mere sight of the paraphernalia, another will grasp the pipe in the approved fashion, a third will roll the dagga in his hands and commence to fill the bowl. If any doubt exists this test is repeated several times and the man is frequently questioned. In many instances a mere glance at the patient by an expert is sufficient to show that he is a smoker, his eyes and countenance generally, divulge his secret.

Again many patients at the mention of the word Dagga begin a long rignarole of how good it is, how strong it makes them feel, etc, and often ask outright for some to smoke.

Taking everything into consideration it is usually quite easy to identify a smoker with absolute certainty.

Always, before discharge a native is finally examined on the point, and thoroughly cautioned to abandon his vice.

Power of Attention and Answers.

In examining a patient it must always be remembered that natives are very reticent in answering questions and will tell lies readily. Because a native takes a long time to answer he is not necessarily retarded. He may be considering whether he is going to reply, then he thinks of an answer which will please; and these two mental processes take time. Allowing for this six % of dagga cases were retarded in answering and a further 3% declined to speak at all.

It is very common to find a patients answers entered as "contradictory" and "amenable to tell a friend everything that occurred during his

suggestion". Now whether a native is sane or insane his answers will often be contradictory and are always amenable to suggestion. The same question put in two different ways will result in two dissimilar replies. "You do smoke Dagga, don't you?" and "You don't smoke Dagga, do you?" will elicit an affirmative and a negative response from the same man. His answer is that which he thinks will give pleasure to the questioner. And moreover it must be remembered that a kaffir is a past master at speaking a multitude of words without conveying any definite information. A direct question will be answered by a long rignarole of plausible phrases skirting round the subject without in any way elucidating it.

In the majority of Dagga cases the answers are irrational, irrelevant or incoherent. Often they are silly and childish and frequently they are mainly composed of fabrications invented on the spur of the moment.

Because a patient takes no notice of questions it is not correct to suppose that his attention is wandering. He may ignore all questions and commands while being examined; then go outside and tell a friend everything that occurred during his

interrogation. His attention is active but he takes no visible notice for some reason best known to himself.

Orientation.

A certain amount of care is necessary in examining patients for Orientation of Time and Place. Most natives do not know the days of the week or months by name, nor have they any knowledge of the number of days in a week or month, or of the number of months in a year. They calculate time by the events of the different seasons, "ploughing" "sowing", "reaping", "nealies are up", "leaves are coming, or are falling", and so on. Strangely enough many reckon the years by Christmases - "I worked for the baas for three Xmases", means three years. Further in stating a short period of time in days a native will always make the number of days inclusive. This Monday to Thursday is four days not three as we calculate it.

Natives generally have an excellent idea of direction and locality but cannot name places simply because they do not know the English names. An Asylum is a thing beyond their ken and is usually

described as a hospital, a compound or a prison.

Orientation of Time.

	NO OF CASES	SAVE ON ADMISSION	DECLINED TO SPEAK	NO OF CASES TESTED	CORRECT	IMPAIRED	LOST
DAGGA.	103	15	3	85	20	15	50
DAGGA & ALCOHOL	11	2	1	8	2	-	6
ALCOHOL.	43	10	1	32	13	5	14

Orientation of Place.

	NO OF CASES TESTED	CORRECT	IMPAIRED	LOST-
DAGGA	85	40	9	36
DAGGA & ALCOHOL	8	3	-	5
ALCOHOL	32	17	3	12

From the above tables it will be noticed that loss or impairment of Orientation for time is quite a feature of Dagga Insanities, only $23\frac{1}{2}\%$ of patients are correct in this particular, as compared with 44% in the case of Alcohol. For place orientation roughly 50% in each case are correct.

As regards "self" it is rather rare to find a native disoriented in this respect. Statistics show over 95% to be correct in both Dagga and Alcoholic Insanities. Consequently statistics regarding insanity are not reliable.

Memory.

Kaffirs have a wonderful memory for any little fact which interests them. Trivial details are remembered for years, while many big and important events are passed by unnoticed; and cannot be called to remembrance even after a few days. They seem to have no idea of relative values. As an example a native transported to London for a short visit, would in all probability carry away as his chief recollection that fact that a lot of men wear top hats. On the other hand their memory for cattle and horses is little short of marvellous. It is no exaggeration to say, that after a kaffir has had a horse or cow in his care he never forgets it, and can at any time mention its distinguishing marks. Like the proverbial Curates egg a natives' memory is good in parts. But in examining an insane kaffir how is one to light upon the good parts? and see

whether they are still sound. Many a patient is credited with gross impairment of memory simply because his questioner has failed to touch on facts which are likely to have impressed him. Consequently statistics regarding Memory are not reliable.

	CASES AVAILABLE	RECENT		REMOTE	
		GOOD	IMPAIRED TO BLANK	GOOD	IMPAIRED TO BLANK
DAGGA	85	15	70	21	64
DAGGA + ALCOHOL	8	-	8	-	8
ALCOHOL	32	11	21	16	16

But for purposes of comparison these figures are of value for they demonstrate that Dagga causes more impairment of memory than does Alcohol. As a rule both recent and remote memories are imperfect, but of the two the recent memory is usually the worse.

In the great majority of Dagga cases the patient gives a very poor account of himself and of his family and personal history. Even a sane native appears unable to give a brief resumé of his life.

Emotional State.

A single kaffir is stolid. He does not display any emotions but hides them under a mask of philosophic stoicism. But get a party of Kaffirs together and under certain conditions they become very emotional, once the barriers of reserve are broken down a whole flood of excitement bursts forth. A solitary man is a coward but a party of natives will perform wondrous deeds of valour.

Dagga and alcohol both loosen the barriers of reserve. A party of smokers or drinkers become highly emotional. They flash from tears to laughter at the slightest provocation. Consequently in these insanities we usually find the emotional tone is unstable.

Association of Ideas.

Natives have this faculty badly developed. They cannot distinguish between cause and coincidence, nor between "post hoc" and "propter hoc". In coming to a conclusion they do so with but little thought and without any logical reasoning. The fact that at one time of the year it is hot, it rains and the crops

ripen is more or less a happy coincidence, and the relative bearings of heat, rain and harvest, one upon the other, escape notice. Their deeply rooted belief in magic, and their ready acceptance of the

most absurd and contradictory statements of a witch doctor are probably the main cause why natives have never learnt to associate facts and draw their own conclusions.

	71	8	13
... HALLUCINATIONS	71	8	13
... VISUAL HALLUCINATIONS	57	5	13
... HALLUCINATIONS		2	4

Hallucinations.

After what has been said under Association of Ideas it it to be expected that Halluninations and Delusions of will be common occurrence among insane Kaffirs. If a sane native dreams that snakes are crawling out of his abdomen, he will on waking firmly believe that this actually occurred and at once consult a witch doctor. He never stops to associate the snakes and his dreams as a mental phantasmagoria with no existence except as a nightmare.

In all varieties of Insanity, Hallucinations and Delusions are common but especially so in those types now being considered. In the compilation of these statistics all facts mentioned in

the Medical Certificates are included, and as a result those cases who were sane on admission are included.

	DAGGA	DAGGA & ALCOHOL	ALCOHOL
NUMBER OF CASES	108	11	43
CASES WITH NO HALLUCINATIONS	28	1	17
CASES WITH AUDITORY HALLUCINATIONS	71	8	23
CASES WITH VISUAL HALLUCINATIONS	58	5	18
CASES WITH HALLUCINATIONS OF GENERAL ORGANIC SENSE	1	1	4
CASES WITH COMBINED HALLUCINATIONS (INCLUDED ABOVE)			
AUDITORY & VISUAL	53	4	13
AUDITORY + VISUAL + GENERAL ORGANIC SENSE	1		3

The high percentage - 73 - of patients exhibiting Hallucinations makes this another feature of Dagga Insanity.

The classification of Auditory and Visual Hallucinations according to their subject discloses two interesting facts.

- (1). The large proportion of Hallucinations which centre round God, the devil and angels.

Many patients see one or other members of

the Holy Trinity in various guises, chat with them freely and receive sundry messages for their fellow mortals. The devil usually takes up a threatening attitude and is far from friendly in his designs. These "religious" hallucinations demonstrate the great effects of Christianity on the savage mind.

(2). In the case of Visual Hallucinations only a small percentage of Dagga Cases see quickly moving animals as contrasted to alcoholic patients.

Details are as follows:-

	AUDITORY			VISUAL		
	DAGGA	DAGGA + ALCOHOL	ALCOHOL	DAGGA	DAGGA + ALCOHOL	ALCOHOL
HALLUCINATIONS OF LIVING PEOPLE }	24	5	12	10	1	4
DO INANIMATE OBJECTS	4		1	8	1	3
DO GOD	17	1	3	9	-	2
DO THE DEVIL	5		1	7		
DO THE ANGELS	2			2		
DO GHOSTS & ANCESTRAL SPIRITS }	1		3	5	1	1
DO ANIMALS	6			7	1	6
SUBJECT NOT STATED	12	2	3	10	1	2
	71	8	23	58	5	18

Delusions of two types, viz. Grandeur and Religious; and the remaining 52 are Illusions, etc. three types.

Illusions in Dagma In anity are rare, only five being found in 103 cases. These are classified as follows:-

	GRANDUR	RELIGIOUS	ALCOHOLIC
Visual.....	2.		
Auditory.....	1.		
Hypochondriacal.....	2.		
An "Idea of Negation" was found in one instance; and four patients made "Errors of Identity".			
The 43 Alcoholic cases show one "Illusion of Sight" and five "Errors of Identity".			
<u>Delusions.</u>			

Delusions are not as common as Hallucinations in the different varieties of Dagma Insanity, that is if Delusions of Bewitchment are excluded.

These in the writers' opinion are not delusions in the proper sense, their rationale will be considered later.

(1). Of the 52 patients with delusions 32 were possessed of only a single type, 14 had

(2). ...of the ...practices of an evil

delusions of two types, such as Grandeur and Religiose; and the remaining 6 patients had each three types. This combination of different types possesses no further interest and is therefore omitted.

	DAGGA	DAGGA & ALCOHOL	ALCOHOL
CASES WITH NO DELUSIONS	51	3	26
CASES WITH DELUSIONS AS UNDER	52	8	17
GRANDEUR	22	5	8
PERSECUTION	21	3	7
RELIGIOSE	17	2	3
ALTERATION OF IDENTITY	1	.	1
SEXUAL.	1	.	.
HYPOCHONDRIACAL	8	2	3
SUICIDAL	1	.	.
FANTASTIC	2	.	1
MISINTERPRETATION	1	1	1
INVISIBILITY.	1	.	.

Delusions of Bewitchment. When a native is taken ill his sickness is attributed to one of three causes.:

- (1). Caused by ancestral spirits or fabulous monsters.
- (2). Caused by some magical practices of an evil

there is considerable delay in communicating with the patients friends and arranging for his discharge. On the other hand cases admitted towards the end of 1912 have not been under treatment a sufficient length of time to ensure recovery. But on the whole the figures representing the average stay in the Asylum are higher than the actual duration of Insanity.

	NUMBER OF CASES WHOSE STAY IN ASYLUM WAS													TOTAL NO OF CASES	TOTAL DAYS SPENT IN ASYLUM	AVERAGE STAY IN ASYLUM
	1-50 DAYS	50-100 DAYS	101-150 DAYS	151-200 DAYS	201-250 DAYS	251-300 DAYS	301-400 DAYS	401-500 DAYS	501-600 DAYS	601-700 DAYS	701-800 DAYS	801-900 DAYS	OVER 900 DAYS			
DAGGER	18	9	14	11	12	8	11	6	2	6	2	3	1	103	26287	255 1/5
DAGGER + ALCOHOL	1	1	2	2	2	-	-	1	-	-	-	-	2	11	4157	378
ALCOHOL	13	4	5	3	3	2	6	2	1	-	1	-	3	43	10713	249 1/7

It will be noticed that the majority of cases recover under the average of 255 and 1/5th days. The secondary dementias and Criminal Lunatics are mainly responsible for the high average duration of stay. Sixty-four cases were discharged under 250 days, 31 cases were above 300 days and the remaining eight were in the Asylum between 251 and 300 days.

Relapses.

Relapses are far more frequent than would be expected from a consideration of the figures. Owing to the unavoidable delay in getting patients brought to the Asylum, many of them are to all intents and purposes sane on admission, at any rate they cannot be certified, and are discharged in a few days. Now as many of these "sane on admission" patients have a relapse before their detention order expires and are then certified; it is fair to assume that of those discharged a good many relapse outside the Asylum. This assumption is borne out by a case such as the following:-

William J. No.3493. Admitted 8:9:12. Sane on admission and discharged uncertified after 7 days. Readmitted 21:10:12 discharged uncertified after 7 days. Readmitted 8:11:12, sane on admission and uncertifiable. Special detention order obtained to keep him under observation for three months. He kept sane for two months then had a relapse, and is still an inmate.

Relapses are quite a feature of Dementia Incurabilis. They are sudden and complete.

	Nº OF CASES	CASES WITH NO RELAPSE	CASES WITH ONE RELAPSE	CASES WITH TWO RELAPSES	CASES WITH THREE RELAPSES	CASES WITH STEADY INCREASE OF SYMPTOMS
DAGGA - SANE ON ADMISSION	15	11	3	1	-	-
INSANE ON ADMISSION	88	51	25	6	1	5
TOTAL	103	62	28	7	1	5
PER CENTAGE		60½	27½	7	1	5
DAGGA & ALCOHOL - SANE ON ADMISSION	2	1	1	-	-	-
INSANE ON ADMISSION	9	7	2	-	-	-
TOTAL	11	8	3	-	-	-
PER CENTAGE		73	27	-	-	-
ALCOHOL - SANE ON ADMISSION	10	9	1	-	-	-
INSANE ON ADMISSION	33	25	7	-	-	1
TOTAL	43	34	8	-	-	1
PER CENTAGE		80	18½	-	-	2½

Of the Dagga cases 35% in all have one or more relapses, Dagga and Alcohol cases show a relapse rate of 27% and Alcoholic cases are as low as 18½%.

Relapses are quite a feature of Dagga Insanities. They are sudden and complete.

Within 24 hours a patient, almost ready for discharge, is back to exactly the same mental condition as on admission. But he shows no signs of any febrile reaction. These relapses last for varying periods often clearing up in a few weeks, but sometimes persisting much longer.

It is difficult to account for these relapses. They may possibly be explained by either of the following reasons:-

(1). The patient in some way or another secures more dagga and recommences to smoke. This undoubtedly does occur, in spite of close observation. Experiments have proved that a revival of smoking produces a recurrence of the symptoms. In this case the relapse would be most correctly regarded as a further fresh attack.

(2). That sudden and complete abstinence from the drug produces exacerbations of the malady; thus making dagga analogous to alcohol and morphia. It will be noticed that 5% of the cases showed a steady increase of symptoms after admission, becoming worse

worse and worse. This undoubtedly favours the contention; but on the other hand if relapses are due to abstinence why are they so often not developed till months after admission.

Previous Attacks.

Remarks under this head will tend to prove what has already been said under the title of Relapses. It is impossible to really differentiate between a second attack and a relapse, one occurs at home, the other in an Asylum; and the interval in the former is longer than in the latter.

	NO OF CASES IN WHICH REQUIRED FACTS ARE STATED	CASES WITH NO PREVIOUS ATTACKS	CASES WITH ONE PREVIOUS ATTACK	CASES WITH TWO PREVIOUS ATTACKS	CASES WITH THREE OR MORE PREVIOUS ATTACKS
DAGGA	90	65	18	6	1
DAGGA & ALCOHOL	10	7	2	1	-
ALCOHOL	37	24	11	2	-

Twenty-five out of ninety cases had one or more previous attacks, a percentage of 27.7/9ths. These figures corroborate experiments performed, namely that to restart smoking is liable to cause fresh insanity.

Treatment.

No special treatment is necessary, except that care must be taken to prevent a patient obtaining Dagga. The routine housing and feeding adopted in all cases, and a description of it will sound somewhat strange to one having no experience of natives.

Housing and Sleeping Accommodation, etc. The Native Asylum is built in the form of a large quadrangle. The dormitories forming the boundaries of a central airing court. Each dormitory accommodates about 60 patients, is well ventilated and the floor is of granolithic cement. Every patient is provided with a sufficiency of blankets and sleeps on the floor - no beds are used. Single rooms on the same principle are provided for cases needing them.

Patients who are physically ill are treated in the hospital where to their annoyance beds and pillows are supplied. A sick native dreads a bed because he thinks it indicates the approach of death.

An optional bath may be taken daily and a compulsory one must be taken on Sundays.

Work. For the first few days after admission the patient does no work but is kept under observation.

When fit, he is started on what may be termed "indoor duties". These consist of cleaning the dormitories and airing court. Later the patients go out in gangs under supervision for hard manual labour on the estate - ploughing, tree planting, road making, septic tank, etc.

Diet. In arranging native diet care must be taken of three things:-

- (1). To give food to which the natives are accustomed.
- (2). That such food should have a sufficient calorific value.
- (3). Economy must be studied.

The following dietary provided at the Pretoria Asylum fulfills these conditions.

	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY		SUNDAY	
	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT	OZS	CALORIES OF HEAT
MEALIE MEAL	18	1830	10	1020	18	1830	10	1020	18	1830	10	1020	13	1326
DRIPPING	$\frac{1}{2}$	120	$\frac{1}{2}$	120	$\frac{1}{2}$	120	$\frac{1}{2}$	120	$\frac{1}{2}$	120	$\frac{1}{2}$	120	$\frac{1}{2}$	120
BREAD			8	560			8	560			8	560	8	560
FRESH MEAT } OR PORK }			11	300			11	300			11	300		
FRESH VEGETABLES	8	150	8	150	8	150	8	150	8	150	8	150	8	150
RICE	2	200			2	200			2	200			2	200
GROUND NUTS			5	875			5	875			5	875		
BEANS	7	700			7	700			7	700			7	700
		3000		3025		3000		3025		3000		3025		3056

Working Extras (for workers only). Daily.

- Tobacco 1/2 oz.
- Coffee 1/2 oz.
- Yellow sugar 4 ozs.

Medical Extras. As ordered.

- Eggs.
- Milk.
- Soup, etc.

Medicinal Treatment. Occasionally on admission it is found necessary to have recourse to Hypodermic administration of hypnotics and sedatives.

Aperients are administered as a routine to all new patients.

Recreation. Football, cricket, cards and kaffir games are played all the year round. Musical instruments are allowed under supervision to anyone capable of playing them.

Result of Treatment.

There can be no doubt after a perusal of the following table that the Recovery rate for Dagga insanities is a very high one. Excluding the few cases which develop

into Secondary Dementia practically every case is recoverable. Those patients discharged unrecovered were all improving, and were merely sent out as a matter of convenience to their relatives who had walked hundreds of miles to fetch them.

CHAPTER 3.
 Classification of Mental Inebriation
 and a description of each type.

	TOTAL CASES	DISCHARGED RECOVERED AND UNCERTIFIED	DISCHARGED UNRECOVERED	DIED	PATIENTS STILL IN ASYLUM	
					BELOW AVERAGE DURATION OF STAY	ABOVE AVERAGE DURATION OF STAY
DAGGA	103	74	3	5	10	11
DAGGA AND ALCOHOL	11	8	1	-	1	1
ALCOHOL	43	36	1	1	1	4

Jan, 1903) classified both Hashesh and Alcohol under the same six headings.

- (1). Ordinary Intoxication.
- (2). Delirium Tremens and Hashesh Delirium.
- (3). Mania.
- (4). Chronic Mania.
- (5). Demencia.
- (6). Dipsomania and Cannabinomania.

In the broad outlines these classes appeared suitable, but it was found impossible

to fit every case of Dagga Insanity under one of these sub-divisions. Warnock has 12 types corresponding to Stuper and Hallucinosis, but the writer has found no cases close to Delirium Tremens.

CHAPTER 4.

Classification of Dagga Insanities
and a description of each Type.

Classification of Dagga Insanities.

However cases of Insanity from Nasheesh smoking in India and Egypt may be classified, the cases of Dagga Insanity among the South African Native Races need a classification of their own. Warnock in his paper "Insanity from Hasheesh", (Journal of Mental Science, Jan, 1903) classifies both Hasheesh and Alcohol under the same six headings.

- (1). Ordinary Intoxication.
- (2). Delirium Tremens and Hasheesh Delirium.
- (3). Mania.
- (4). Chronic Mania.
- (5). Dementia.
- (6). Dipsomania and Cannabinomania.

In the broad outlines these classes appeared suitable, but it was found impossible

to fit every case of Dagga Insanity under one of these sub-divisions. Warnock has no types corresponding to Stupor and Hallucinoses, and the writer has found no cases closely analogous to Delirium Tremens. No doubt Cannabinomaniacs may exist, but they do not find their way into the Asylum.

The outstanding feature of Dagga Insanity is the occurrence of Auditory and Visual Hallucinations in cases which present several different clinical types. To classify every case as "Dagga Hallucinoses" would be too arbitrary, and would lead to much confusion in description, without serving any useful purpose. In the classification adopted "Hallucinoses" is limited to those cases in which there is not marked disturbance of Emotion and Ideation. There are distinctly recognisable types of "Mania" and "Stupor" in which the hallucinations play a minor part in the clinical picture. These three types are not sharply demarcated one from the other; and many borderland cases are almost impossible to classify, with any degree of certainty. In such cases the most prominent symptom has been taken as the distinguishing guide.

In two cases however it is

necessary in several Cases of any of the above types, which clear up within 48 hours and are known to follow immediately a bout of smoking, are separated under the heading of "Pathological Intoxication".

In addition to the above there are a few cases with more or less advanced "Dementia", found in habitual dagga smokers. This type is exactly similar to Alcoholic Dementia.

This classification is in many points closely analagous to the normal intoxication produced by Dagga. "Pathological Intoxication" resembles the complete result of a smoke, exaggerated in intensity and duration. According to the individual idiosyncrasy a smoker may be absorbed in his dreams - "Hallucinoses" - or may exhibit stimulation of his motor functions - "Mania". - "Stupor" may be regarded as being analagous to the second stage of Depression.

For purposes of comparison Alcoholic Insanities have been similarly classified, only with the addition of two extra types namely: "Delusional" and "Delirium Tremens".

Cases in which both Dagga and Alcohol play a part, readily follow the classification for Dagga Insanities. In two cases however it is

necessary to describe the Insanity as Delusional .
Probably in these the alcohol was the more potent
factor.

Comparisons have hitherto always
been drawn between Dagga and Alcohol. But in order
not to obscure the picture of each type of Dagga
insanity with laboured references all such comparisons
are left out. Sufficient has already been said to
indicate points of resemblance and difference.

<u>1. Dagga Insanities.</u>	Number of cases.
A. Pathological Intoxication.	13.
(1). Stupor.	
(2). Mania.	
(3). Hallucinosiis.	
B. Mania.	34.
(1). Mild or Hypomania.	
(2). Acute Mania.	
(3). Delirious Mania.	
C. Stupor.	13.
D. Hallucinosiis.	34.
E. Dementia.	9.
	<hr/> 103. <hr/>

<u>2. Alcoholic Insanities.</u>		Number of cases.
A.	Pathological Drunkenness.	6.
B.	Mania.	14.
C.	Stupor.	2.
D.	Hallucinosiis.	14.
E.	Demencia.	2.
F.	Delusional.	2.
G.	Delirium Tremens.	<u>3.</u>
		<u>43.</u>

3. Dagma and Alcohol Insanities.

A.	Pathological Intoxication.	1.
B.	Mania.	3.
C.	Stupor.	2.
D.	Hallucinosiis.	3.
E.	Delusional.	<u>2.</u>
		<u>11.</u>

A. Pathological Intoxication.

Definition. An acute attack of Insanity passing off in 24 to 48 hours. It is the direct result of Dagma smoking, in this being closely analagous to Pathological Drunkenness. The most characteristic feature is the

The Recent memory is hopelessly confused.

rapid subsidence of all symptoms, with complete return of insight.

Frequency. Undoubtedly this is a very common type, but the majority of cases never reach the Asylum.

While being detained in prison for observation, or while medical men are being summoned from a distance for certification, all symptoms clear up and the patient is allowed at liberty.

Many of those who are sent to the Asylum are sane on admission, and are discharged as Uncertifiable on lapse of Urgency Order.

Sub-Divisions. The thirteen cases which have been collected can readily be sub-divided into three forms:-

- | | | |
|-------|---------------------|----------|
| viz:- | (1). Stupor. | 2 cases. |
| | (2). Mania. | 6 cases. |
| | (3). Hallucinosiis. | 5 cases. |

The actual form taken in each case is in my opinion solely dependent on the individual idiosyncrasy of the smoker.

Symptoms. In Pathological Intoxication the symptoms are largely those of an ordinary intoxication, only more marked, and lasting for a longer period.

Consequently we find that all idea of time and place becomes lost. The Recent memory is hopelessly confused.

Attention is difficult to gain and in those cases where it can be gained, it readily wanders. The emotional state is usually unstable. Association of ideas is impaired, being in some cases sluggish; in others flights of ideas, and incoherence are found. The psychomotor activity is increased or diminished according to the form of insanity. Consciousness always displays a variable degree of clouding. Hallucinations and Delusions are frequent, often variable, and usually disconnected.

Generally the patient is restless and noisy especially at night. Then he falls into a deep sleep and on waking is sane.

Relapses. No relapses were noted.

Length of Stay in Asylum. None of the patients were certified and all left on the lapse of their detention order.

Result of Treatment. Every case recovered within 24 to 48 hours.

... was able to give a good account of himself. He stated that he had worked days on the day of his admission, and has only a vague and misty recollection of the subsequent happenings, except that he fell to the ground as if drunk and was arrested by a Policeman.

Specimen Cases.

Case 2011. Stupor. On Admission. His expression is dull and sleepy. He takes no interest in his surroundings, and is unsociable. It is difficult to gain his attention. He shows complete disorientation for time and place, but gives his name correctly. His memory is very confused, and he can give practically no account of himself. His almost invariable answer is "Nix Baas" (Nothing, Sir). He is unable to name correctly common objects, such as a pencil, scissors, a dog, etc.

Progress. He remained in this condition for about 12 hours after admission. During the early part of the night he was sleepless, and restless, constantly getting up and searching for his clothes in a dull, and confused, manner. The Night Nurse reports that he went to sleep about midnight.

The following morning he appeared perfectly rational and was able to give a good account of himself. He stated that he had smoked dagga on the day of his admission, and has only a vague and misty recollection of the subsequent happenings; except that he fell to the ground as if drunk and was arrested by a Policeman.

Case 2473. He was discharged uncertified on lapse of Urgency Order.

Case 2892. Mania. On Admission. His expression is wild and excited. Very untidy in appearance. His clothes are torn and soiled. He is restless and talkative. His attention is easily gained, but very distractible. He is completely disorientated for time and place. His answers are long-winded, and he constantly wanders off into irrelevant side issues. His psychomotor activity is markedly increased. His emotional state is exalted, but unstable. He exhibits at times flights of ideas almost amounting to incoherence. No hallucinations or delusions were elicited.

Progress. He rapidly improved and 48 hours after admission was practically recovered, recognised that he had been ill, but ascribed his illness to his having vomited bile. He gave a history of excessive Dagga smoking.

Discharged uncertified on lapse of Urgency Order.

Case 2473. Hallucinosiis. On Admission. His expression is a little excited. He is quiet, well behaved and conducts himself in a rational manner. Is correctly orientated for Time and Place, also for self. He gives a good account of himself. He gives a history of Visual Hallucinations. A few days previous to admission while returning from work he saw a strange apparition dressed in white, with eyes like balls of fire. Ghost, animal, God, or man, he knows not what. This was so close to him that he could have touched it. Was so terrified that he lost all control of his sphincters. Saw this apparition on two subsequent occasions and he thinks it has bewitched him.

From the above it will be seen that he was practically sane on admission. His only defect being a want of insight. He gave a history of dagga smoking.

Was discharged on lapse of Urgency Order having gained complete insight. He expressed the opinion that his illness was due to an orgy of Dagga smoking.

(1). Psychomotor Excitement and Motor Unrest. Patients

are always restless. B. Mania.

Definition. A form of Dagga Insanity closely resembling the manic phase of Manic Depressing Insanity, but differing from it in the frequent occurrence of Hallucinations.

Frequency. Thirty-four out of the 103 collected Dagga cases fall into this type, this making it as common as "Hallucinosis".

Sub-Divisions. Like other manias, cases may be sub-divided into three forms differing from one another only in degree.

- (1). Mild or Hypomania.
- (2). Acute Mania.
- (3). Delirious Mania.

(3). Excitation. No real benefit can accrue from rigidly placing every case under one or other of these forms. It would be too arbitrary a classification, as the differences are bridged across by many gradations.

Symptoms. The four cardinal symptoms are:-

- (1). Psychomotor Excitement and motor unrest.
- (2). Excitation of the Emotional state.
- (3). Divertibility.
- (4). Incoördination of Ideation.

(1). Psychomotor Excitement and Motor Unrest. Patients

are always restless, laughing, dancing, singing, shouting, running around and aimlessly interfering with other patients, throwing things about, trying to open doors, etc. In the more acute cases they are destructive to property, tearing their clothes and bedding, deliberately breaking furniture, and are often violent to others. The psychic portion

(4) of the excitement is "a disorder in the process of thinking rather than in the content of thought".

Ideas, needing expression in movement, crowd rapidly into the brain, one following another haphazard. Each idea and movement taken separately is not abnormal or unusual, but the rapid succession forms and unnatural ensemble.

(2). Excitation of the Emotional State. The Emotional

tone, whether stable or unstable, is always one of exaltation. As a rule it is unstable. Merry moods rapidly change to unreasonable anger and as rapidly change back to euphoria. It is only in the milder cases that any stability is noticed.

(3). Divertibility. Is evidenced by the ready manner in which the attention is distracted by outward or inward stimuli. It is either difficult

or easy to obtain a patients' attention, but it is quite impossible to retain it for more than a moment in the severer cases. In the midst of answering a question he wanders off into a side issue; or before answering, a fresh thought strikes his mind, and his reply refers to this and not to the question. Naturally we have many answers which are irrational and irrelevant.

(4). In coördination of Ideation. The association of ideas is impaired even in the mildest case. As we advance from mere disturbance of thought in Hypomania towards Delirious mania we find increasing degrees of Flights or ideas, amounting in some cases to apparently complete incoherence.

The intensity of these four cardinal symptoms vary in their relation to one another; one or more may be out of all proportion to the others. A marked degree of Psychomotor unrest may be accompanied by only slight exaltation of the emotional state.

Other symptoms calling for special mention are :-

(5). Clouding of Consciousness. There is always a certain amount of clouding of consciousness, varying in degree from a mild inability to properly appreciate

(5) surroundings, to great confusion and dissociation.

(6). Orientation. Following what has been said under the head of consciousness, it is only to be expected that Orientation is usually impaired. In some cases there is only a slight haziness, but in others there is a complete loss of all idea of time and place. Orientation for time is more often lost than for place; and frequently when time sense is totally lost there is only a slight impairment of orientation for place.

(7). Memory. Is almost always affected. The Recent Memory is confused, and frequently is a blank. The press of current ideas seems to prohibit recollection of past events. Remote memory is not so badly affected, but nevertheless very few patients can give a good account of their own doings.

(8). Answers. these as has already been noted are often irrelevant and irrational,. When the association of ideas is very faulty they become quite incoherent. Often they are unnaturally voluble and long-winded. In no case was any retardation noticed.

(9). Impulses. Thirteen patients showed impulses of a violent or destructive nature, and one was homicidal and one suicidal in their intentions.

(10). Hallucinations, Delusions, etc. Hallucinations are common especially auditory. 22 patients exhibiting them as under:-

Auditory alone.....	10.
Visual alone.....	1.
General Sense alone.....	1.
Auditory & Visual combined....	10.

Delusions are rarer only being found in 15 cases. Grandeur is by far the most common with Persecution next in order of frequency. Ideas of Negation, Errors of Identity and Illusions were each present in one instance.

Relapses. Nine cases had one relapse each, and four cases each relapsed twice.

Length of Stay in Asylum. 250 days is the average stay for all cases.

<u>Result of Treatment.</u>	Discharged Recovered.	27.
	Died.....	3.
	Patient - stay above average.....	2.
	Patient - stay below average.....	2.
		<u>34.</u>

The average stay in the Asylum of Patients discharged recovered is 244 days. Both the patients whose stay is above average duration are detained as Governor's Pleasure Lunatics. Excluding these and deaths, the recovery rate is practically cent per cent.

Specimen Cases.

Case 2700. Hypomania. Admitted 24:12:10 with history of having been ill for 2 days.

On Admission. His expression is excited. He is restless and talkative, constantly on the move, fidgeting and boisterous and playfully interfering with the other patients. He enters the Medical Officers room with great confidence and greets the Medical Officer affably. He cooperates readily. His attention is good - easily gained and retained. His orientation is good - he knows the day, the date, and recognises the nature of his surroundings. His memory is good: he gives a good, if long winded account of himself. His conversation is extremely voluble and he shows a penchant for side issues. Emotionally he is distinctly exalted and he expresses delusions of grandeur and persecution also hallucinations of hearing. "He is a Prophet, cleverer than any white man". He says that

some few days back the people of Johannesburg all died and he brought them to life again. He is much troubled at nights by people talking to him, calling him a dog and other equally opprobrious names. He states that some time back two boys poisoned him with the result that he died, but came to life again. He admits to excessive dagga-smoking: says it makes him feel just like a Chief.

Progress. Remained practically as above for 2½ months, retaining his delusions and hallucinations. After this he began to improve; became less talkative and restless, lost his ideas of grandeur, etc, and began to regain insight. His improvement continued unchecked and he was discharged recovered on the 1st May, 1911.

Case 3582. Acute Mania. Admitted 24:6:12, with history of having been ill for 3 days.

On Admission. His appearance is excited. He is very talkative (requiring to be asked few questions) using Kaffir and Dutch indiscriminately. His attention is fairly easily gained but quickly wanders. He exhibits marked inner and outer divertibility. His conversation is voluble, and very religious accompanied by many emphatic gestures. His orientation for place and time is imperfect: he knows he is in Pretoria but says the

patients are not insane - "merely suffering from God's Spirit": he does not know the day or date but states correctly that it is near the beginning of Summer. His recent memory is considerably confused: he cannot recount the events of his two first days here, thinks he has slept here four nights (really two). His emotional tone is much exalted: he regards himself as a Prophet specially commissioned to tell the people of the near approach of the end of the world. His consciousness is somewhat clouded: he is not in perfect touch with his surroundings, thus shown pictures of animals he imagined they were alive and would bite him and he attempted to kill several of them with a stick. His psychomotor activity is much increased: he exhibits marked "press of occupation". At times there are flights of ideas.

The following is an example of his conversation:-.

"You must all go out and pray for the time is short before the world will come to an end. Under the ground are people but we are above the ground; the world will turn round and they will come up and we will go down. It is no use to fight you must all be content so that God may make the count correctly.

"The people that are dead must be burnt in the fire and
"the ashes of their bones will be used for making other
"people. Then another set of people will be made, the
"Sun will rise in the West and set in the East. Then
"shall the black people become white and the white
"black. God will put the people in his Prison which
"is a hole of fire. Their spirits he will use to
"cleanse the others. God will take the Spirits this
"(illustrating with his clenched fist) and we must let
"war alone and only pray. We must all go to our
"several homes - England, Natal, India, etc. So that
"each will be in his place when the time comes. The
"American boys (negroes) must come here because they
"are the Zulus children and bring boxes in which are
"bones. It is a difficult job to open the boxes
"because the nails are as long as your forearm. The
"boxes are nice and you would not say there were bones
"in them. The boxes will be buried and then people
"will rise up" - and so on, apparently adinfinitum.
He says he learnt all this in dreams. He has been
told that someone will come from above, pull his hair
and so make him taller. He dreams every night of
these things. A bird occasionally speaks to him at
night but he cannot hear distinctly what it says.

It told him last night he must not scratch his skin.

24:7:12. Discha He admits smoking dagga: always smokes it morning and evening and sometimes during the day as well. He uses a ground pipe. It makes him feel nice and very strong so that he can do any work. Progress. 24:7:12. Rather quieter during the day but still very restless, noisy and talkative at nights.

He is still very religiose and exalted. He makes errors of identity, sayd his two brothers are here and they must all go to Pretoria in their motor which is waiting outside for them. His memory is better; he gives a fair retention test recalling 10 out of 14 objects shown him. He is still hallucinated at nights.

24:9:12. Steadily improved after last note - became quieter at nights, lost his restlessness and excitability Still a trifle religiose and exalted. Doing a little work.

24:10:12. His improvement is well maintained. Sleeping well at nights and quiet during the day. Is an excellent worker. Has lost his delusions and hallucinations but is a little exalted.

24:11:12. Has good insight and realizes that he has been mad, but not very ready to accept the suggestion increased and he exhibits flights of ideas at times.

that Dagga is the cause.

27:11:12. Discharged Recovered.

Case 3150. Delirious Mania. Admitted 16:12:11

without any history.

On Admission. Physical examination: no abnormality; reflexes increased. Mental state:- Expression is silly and excited. He is very restless, constantly talking to himself, putting questions and answering them, thus "Who are you?. I'm a snake. Did you pick up my Star?. No. Then you ought to be killed. "Where is my Cap?. I don't know. What is your name?." and so on. If interrupted in his duologue he becomes very threatening and abusive: attempted to strike a native nurse. He takes no interest in his surroundings. It is very difficult to gain his attention and it is immediately lost. His answers are extremely irrational and irrelevant. He is completely disorientated for time and place. His memory, as far as can be judged from his answering, is grossly impaired. He remembers nothing of coming here, he says, and he can give no account of himself. Emotionally he is markedly exalted; his mood is usually merry. He laughs frequently sings, dances in office. His psychomotor activity is greatly increased and he exhibits flights of ideas and at times

incoherence. - There is much clouding of consciousness.

He expresses fantastic delusions of grandeur and is actively hallucinated. He says he was sent to Hospital for picking up a star and bringing it down from the sky to find it was Queen Victoria. He is God - he found it out by the snake. He is a white man - English or Scots - and cannot speak kaffir. He sees devils and snakes in the corners of the office. He carries on a conversation with his wife who, he says, is just outside. He can see her and hear her speak from where he stands.

He made many mistakes in naming common objects, calling a crocodile a lion "because it has four legs"; a lizard he called a tiger, a pen an assegai, and so on.

30:12:11. He says he smoked dagga regularly. Grasped dagga pipe in approved fashion and gave an exhibition as to how to smoke it. Has improved somewhat: does not talk so much to himself. His attention is better and his conversation generally more relevant.

6:1:12. Improvement continues. He gives a fair account of himself but remembers little of his stay here. He has lost his hallucinations; and delusions.

He has however no insight. He is still exalted and talkative.

31:1:12. Now rather dull and retarded but still improving. No insight into past attack: denies that he has ever been mad.

16:2:12. Brighter; converses well and rationally; working very well. Slight returning insight.

16:3:12. Discharged Recovered.

C. Stuper.

Definition. A type of dagga insanity characterised by distinct psychic inhibition, with resulting dulling and retardation of the reactions.

Frequency. Only 13 cases have been collected out of 103 for all types of Dagga Insanity.

Symptoms. These are in the main the converse of the corresponding symptoms of the manic type already described. The three principal symptoms are :-

- (1). Reduction of Psychomotor activity.
- (2). Dulling of the Emotional State.
- (3). Retardation of Physical and mental reactions.

(1). Reduction of Psycho-Motor Activity. In all cases this is reduced to a greater or less extent. Patients sit about the airing court taking no interest in their surroundings. They are unsociable and rarely speak to their fellows, owing to lack of interest. They often have to be dressed and undressed, they frequently need to be taken to the table for their meals, but rarely need any forcible feeding. Association of ideas is sluggish and retarded in all cases. One idea does not readily call up another. The reaction time for thought is unduly prolonged.

(2). Dulling of the Emotional State. In the milder forms the Emotional State might be described as indifferent; but in the more severe forms there is undoubtedly some mental pain, which however is never very marked.

(3). Retardation of Physical and Mental reactions. External stimuli such as sharp commands, or pin pricks, always produce a reaction; but only after a varying period of delay. Answers are typical of the condition. They are always retarded, and very frequently monosyllabic. One patient could not be bothered to

think, and after an interval invariably made the same reply to every question - "I don't know". In some cases the patient refuses to speak.

(4). Power of Attention. This is not so pronouncedly imperfect as in the manic type. The patient seems self-absorbed and it is difficult to gain his attention. Once gained it can be retained for a while. As a rule, towards the end of an examination, it is noticeable that the attention tires.

(5). Consciousness. The consciousness is usually clouded or confused to a variable degree.

(6). Orientation. As consciousness is clouded we naturally find impairment of orientation but not as marked as in the manic form.

(7). Memory. On the whole is not badly affected. If only a patient can be sufficiently roused he usually manages to give a fairly good account of himself especially for remote events.

(8). Impulses. To display any impulse requires an effort both of the will and body. Such an effort is absolutely foreign to this state of stupor and consequently we notice that impulses are very rare.

(9). Hallucinations and Delusions, etc., are not often met with. Two patients had both auditory and visual hallucinations, and one auditory alone. Regarding delusions it is necessary to note that only one is of the self accusatory type; three are of persecution. The scarcity of delusions and their nature is an important point in differential diagnosis.

(10). Expression of Patient. Patients are usually dull vacant and stupid in appearance rather than miserable, sad or depressed. This whole condition of stupor is more one of retardation, than actual depression or melancholia.

Relapses. Roughly half (6 out of 13) of the cases had one relapse.

Length of Stay in Asylum. 254 days is the average stay for all cases.

Result of Treatment.

Discharged Recovered.....	9.
Discharged Unrecovered.....	1.
Died.....	1.
Patient-under average stay-...	1.
" above average stay.....	1. 2.

The case who was discharged unrecovered, and the one who died, were both improving and were both in the Asylum for only a few months. Of the two cases at present under treatment one has only been in for three months and is almost convalescent, the other has been in for two years and may be regarded as incurable. This will give a recovery rate of over 90% with a duration of 250 days for treatment.

SPECIMEN CASES.

Case 2796. Admitted 15:1:11. No history of duration. On Admission. In the Physical examination a dirty tongue and a high narrow palate are the only abnormalities noticed. His appearance is dull and silly. He takes no interest in his surroundings, never speaking voluntarily. He resents any attention paid to him, thus struggles apprehensively when dressed or undressed. It is difficult to gain his attention, questions having to be repeated frequently before he answers - this grew more marked as the examination proceeded. His answers are short, generally monosyllabic and considerably retarded. His orientation for surroundings is lost and he has no idea of time. Considerable impairment of memory for recent events exists, he does not know

how many days he has been here, and gives a very imperfect history of his doings during the last week. His emotional tone is indifferent, he says he does not care whether he stays here or goes home. There is marked reduction of psychomotor activity and his association of ideas is very sluggish. There is no posturing, grimacing or stereotypy. No evidence can be obtained of hallucinations or delusions - he states he sleeps well at night, and has never seen or heard anything unusual.

He admits to being a dagga smoker but denies alcohol.

Progress. 20:1:11. He has remained in the above condition but no longer resists being dressed and undressed.

15:2:11. Is a little brighter, converses more readily. Is doing a little ward work. But is still dull and Retarded.

15:3:11. Conduct and conversation are now quite rational. Works well on farm, and is distinctly more brisk mentally and physically.

12:4:11. His improvement is maintained. He has now complete insight admitting that he has been insane. He ascribes his illness to dagga smoking and states

that after a smoke he always becomes stupid and sleepy.

13:4:11. Discharged Recovered.

Case 2297. Admitted 7:7:09. as having been of unsound mind for 10 days.

On Admission. His expression is dull and vacant.

Stands or sits in a listless attitude, taking no interest in his surroundings and giving the impression that at any moment he will fall asleep. He never enters into conversation with other patients. On one occasion since admission he has "wet" himself. His attention is somewhat difficult to gain, he coöperates badly and great perserverance is needed to obtain any history from him. He is correctly orientated for self and place but imperfectly for time. His memory appears to be fair. In answering he exhibits considerable retardation by repeating the essential word of the question in a puzzled tone of voice.

There is considerable emotional dulling, his interest was aroused only by the placing of a dagga pipe in his hands. His psycho-motor activity is markedly reduced. He is probably hallucinated. To the leading question he replied. "I hear voices calling me names day and night". He states that it is the other patients who

are annoying him in this way (He sleeps in a single room). He admits dagga up to the time of his admission.

Progress. 28:7:09. Very retarded and unsociable. Is now definitely hallucinated. Voices from above call him obscene epithets.

4:8:09. Much worse. It is with difficulty that he can be induced to speak at all. Dull and apathetic. Retardation very marked.

6:11:09. Is now beginning to improve. His reaction however remains very sluggish. On occasions refers to the voices which abuse him. Doing a little ward work in a mechanical manner.

13:12:09. Improvement continues. Has lost his hallucinations and recognises them as imaginary. He is considerably brighter, less retarded and now gives a fair account of himself. The Farm Bailiff reports him as a good worker.

13:1:10. Appears to be completely recovered and relations to be informed.

2:2:10. Discharged Recovered.

For a second person is the analogue a plane of paper is other success. Another visible effect of an

Hallucination is that it absorbs the subject. He is self centered and lives in a world of his own free will which he can see.

D. Hallucinoses.

Definition. Insanity characterised by presence of Hallucinations, auditory and visual, but without much impairment of ideation, or marked change in the emotional state.

Frequency. As one of the features of Dagma Intoxication is the occurrence of transient Hallucinations it is not surprising that this type of Hallucinatory Insanity should be one of the most common. 34 out of 103 collected cases fall into this type.

Symptoms. (1). Hallucinations. The feature of this type is the presence of one or more Hallucinations. While these Hallucinations are most common and best marked during the night, it has been noted that quite 50% occur in the day time. The presence of an hallucination is commonly portrayed in the patients' manner. He sits alone talking to himself or an invisible person, in a whisper or merely moving his lips, he gesticulates freely at the same time; and frequently pauses and assumes a listening attitude. For a second person in the dialogue a stone or piece of paper is often chosen. Another visible effect of an

hallucination is that it absorbs the subject. He is self centered and lives in a world of his own from which he can however be roused.

In the cases under discussion the hallucinations are as follows:-

Auditory alone.....	7.
Visual alone.....	2.
Auditory and Visual.....	24.
Auditory and General Sense.....	1.

To these must be added as being closely related.

Hypochondriacal Illusions.....	1.
Auditory Illusions.....	1.
Dreams.....	1.

Auditory Hallucinations are by far the most common being present in every case except two. In one patient the Hallucinations were heard in only one ear - the right.

(2). Association of Ideas. In 24 of the cases the association of ideas was quite normal. Of the remainder five showed a slight tendency towards flights of ideas; three had their ideas closely centred round their hallucinations and delusions; and two were sluggish and a trifle confused.

(3). Emotional State. The majority of cases exhibited a normal stable emotional state. Others were stable but were depressed, happy, apprehensive or slightly exalted according to their hallucinations. It is clear that while a patient is obsessed by vivid hallucinations they completely colour his emotions; but get his hallucinations eliminated for a time, and his emotional state becomes quite normal.

(4). Psychomotor activity. In most cases there is no deviation from the normal. But in a few the psycho-motor activity is either reduced, or increased, in accordance with the change in the Emotional State.

(5). Power of Attention. The attention is frequently not readily gained, but once gained it is usually well retained, except in an acutely hallucinated patient. Towards the end of an examination it tends to tire and is apt to wander.

(6). Consciousness, is almost always lucid. In a few instances there is some clouding or confusion.

(7). Orientation. Is the least impaired of all in dagga insanities and in those cases where there is any imperfection it is usually only an impairment, not a complete loss.

(8). Memory. Is usually good. Though in his account of himself a patient may be somewhat rambling owing to his hallucinations obtruding themselves.

(9). Answers. Occasionally a patients' answers are, at first glance, irrational or irrelevant and even incoherent. This indicates that his attention has not been properly gained and his thoughts are still engrossed with his hallucinations. If the attention is thoroughly gained and retained the answers are good, though occasionally voluble and contradictory.

(10). Impulses. Only two cases showed any definite impulses ^x one homicidal and one destructive, these being dependent on the hallucinations.

(11). Delusions. Delusions play a very subsidiary part being merely projections of the hallucinations. When a patient receives messages from God he sometimes forms Religious Delusions of Grandeur, declaring himself a prophet or a member of the Divine Trinity. Religious and Grandiose delusions are the commonest, next comes Persecution and Hypochondriacal. About one third of the cases have no delusions at all.

Relapses. Twelve cases showed one or more relapses but these as a rule clear up quickly. One case had

3 relapses, two cases had two relapses and the remaining nine one each.

Length of Stay in Asylum. 219 days is the average stay for all cases.

Result of Treatment.

Discharged Recovered.....	26.
Discharged Unrecovered.....	2.
Died.....	1.
Patient - stay under average. . .	5
" stay over average....	0.
	<u>5.</u>
	<u>34.</u>

The 26 cases discharged recovered were on an average 239 days under treatment. The patient who died had been an inmate for over two years and was possibly non-recoverable. Of the remainder none were in the Asylum for longer than 3 months and were all improving. This gives a recovery rate of over 95%.

He may not report God's messages to him till the appointed time.

He started Daga smoking as a child and has smoked regularly ever since. On an average he consumes 4 to 5 pipes full per day. He does so because it is "nice and he sees nice things" (visions).

Progress, 17:10:11. Quiet and well behaved. Retains
hallucinations, but Specimen Cases. and him to disclose

Case 3062. Admitted 10:10:11. Enjoys God and his

On Admission. His expression is slightly excited.
He frequently talks and laughs to himself giving the
impression of being hallucinated. His attention is
easily gained, as a rule, but during conversation he
sometimes appears to be listening to inaudible voices
and then the question needs repetition. In these
periods his answers become irrelevant, otherwise they
are prompt and relevant. His memory and orientation
are good. There appears to be no emotional disturbance
nor impairment of ideation. His consciousness is lucid.
He has both auditory and visual hallucinations of a
religious character. He sees God at nights, he is a
white man, dressed in beautiful clothes and on his
head a crown of light. God talks to him day and night
in various languages, which patient says he understands.
He may not repeat God's messages to him till the
appointed time.

He started Dagga smoking as a
child and has smoked regularly ever since. On an
average he consumes 4 to 5 pipes full per diem. He
does so because it is "nice and he sees nice things"
(visions).

Progress. 17:10:11. Quiet and well behaved. Retains hallucinations, but nothing will induce him to disclose the Divine messages, as it would anger God and his Angels.

17:11:11. Still hallucinated, but has gained sufficient insight to attempt to conceal them. He no longer sees God and only receives messages very occasionally and only at night time.

17:12:11. Resents being questioned re Hallucinations saying he has forgotten all "that talk". Constantly asks to be allowed to go home. Says he has never been mad but was bewitched by a Kaffir Doctor.

17:1:12. He now denies ever having had hallucinations. Excellent worker as Kitchen boy.

17:2:12. Appears to have gained complete insight and acknowledges being mad on admission. Admits hallucinations for the first three months after admission, and now realizes their nature. Still attributes illness to bewitchment.

17:3:12. Apparently rational. Cannot be brought to see that Dagga is harmful. Promises however not to smoke again if discharged.

21:3:12. Discharged Recovered.

Case 3077. Admitted 6:1:12. On Admission. His expression is self-absorbed and somewhat sad. He is inclined to be unsociable. Generally sits apart and has been frequently observed talking and gesticulating as if "hallucinated." His attention is not readily gained. He frequently breaks off in the middle of an answer to address a remark to the corner of the room, such as, "are you there my girl? Its all right". His orientation and memory are good. Emotionally he is somewhat depressed. His association of ideas is interfered with by his hallucinations continually obtruding themselves.

He describes auditory and visual hallucinations. He constantly hears his girl (paramour) speaking to him from her home - "she just talks of what goes on at the farm".

Doves and other birds fly round him, call him by name and talk to him. He cannot hear distinctly what they say. At times people speak to him and make vile charges against him. "I see these people behind me, but when I look round they are gone". He states that he ought to be killed but gives no reason.

Discharged Referred.

He denies dagga. But given the pipe he grasped it correctly and at once asked for some dagga to smoke. 13:1:12. Still abstracted and unsociable. Yesterday refused food because "George was in the food". Today he denies that this happened, saying he knows no one called George. Is very actively hallucinated. Talkative at nights.

13:2:12. Much improved. Working and sleeping well. Hallucinations appear to be in abeyance. He has no insight.

25:2:12. Is worse again, practically his condition is as on admission. Has numerous Hallucinations of sight and hearing. People under the floor climb into his room at nights, sit down beside him and read aloud out of a book. Several of his dead friends are amongst the reading party and they tell him his Mother is dead. He can also hear them speaking to him during the day. Repeats their conversation ~~xxx~~ ad infinitum.

13:3:12. Again is becoming more settled. Hallucinations are only experienced at night.

13:4:12. Continues to improve steadily and is again working on the farm. He is no longer hallucinated and has some insight. To go on discharge list.

9:5:12. Discharged Recovered.

E. Dementia.

Definition. A chronic form of Dagga Insanity occurring only in habitual dagga smokers and characterised by a gradual general deterioration of the mental faculties frequently combined with ridiculous incoherent delusions and hallucinations. The age of onset is above that of other types of Dagga Insanity.

Frequency. This is one of the rarer forms of Dagga Insanity only 9 cases having been abstracted out of 103.

Symptoms. Expression is dull and vacant. In behaviour the patients are as a rule childish and silly often very garrulous but sometimes unsociable and morose. Attention is generally sluggish and difficult to hold. Orientation is almost always greatly impaired, patients usually fancy they are in their own kraals and among friends, this makes them childishly happy, and quite destroys all idea of Time and place. There is invariably gross defect of memory both for recent and remote events. Fabrications are typically common. Conversation is childish, voluble, irrational and frequently irrelevant, often showing many obvious

contradictions. As a rule there is more than the usual amount of suggestibility. The Emotional tone is generally one of euphoric irritability but pure depression is also seen. Ideation is usually sluggish with imperfect association which suggests flights of ideas, but the flights are very slowly expressed. In all cases there is defective apprehension.

Hallucinations and delusions are found in all but 2 of these 9 cases. As a rule they are marvellously irrational, for example: "I see three goats at night, one like a donkey, one like a corpse and one like a person with a skin hat. I have seen a fire with my left eye and a bird with my right". Or again: "A witch doctor put a blue bottle fly into my head, this fly begat a worm which now crawls round and round inside and I can't shut my eye while it moves". Another patient states: "When I put my hand on my head I am half a Msutu, otherwise I am not here".

Relapses. Are naturally not found in dementia; but two patients had sudden exacerbation of symptoms from which they did not improve.

Result of Treatment. Any acute symptoms become ameliorated leaving the underlying dementia. The recovery rate is nil and the prognosis is hopeless.

Specimen Case.

Case 2305. Admitted 15:7:09, with the history of having been "queer" for some time.

On Admission. Appearance is dull and fatuous. He constantly talks to himself in a droning voice. He converses in a dull monotonous way laughing frequently without cause. He is restless - fidgetting, scratching himself, etc. His attention is very poor, not readily gained and quickly lost, and he at once resumes talking to himself. He is orientated for self but not for time or place, thus he says this is winter and he does not know this place, the boys in the yard are not sick, they are just like himself.

There is marked clouding of consciousness, his reactions are dulled and delayed; his memory is apparently nil, thus he can give no account of himself, he does not know where he comes from or who brought him here and it took him "nine nice days" to come here. His comprehension is much impaired. Thus he called the goose and the crane each a crocodile

and the soap a spider. There are ten shillings, he says, in a pound, etc.

He is very amenable to suggestion agreeing with most leading questions, to the extent of completely contradicting a previous statement. Thus he is single he said, and a few minutes later said he had a wife, two children, and later, three. It is Winter - but it is also Summer. Emotionally, he is distinctly exalted. He appears to have auditory and visual hallucinations but as this was elicited by means of leading questions no reliance can at present be placed on his statements. "He hears them talking over there", pointing to the office door. "He is now talking to "Nicoris" who lives at his home".

Asked what he was talking about he said "we are just talking". At night he sees, he states, crabs walking all over him and his strength goes out. He admits smoking dagga - he smoked it so often that he could not count how often a day. Shewn a dagga pipe, he brightened at once, laughed aloud seized it and began to draw in the approved fashion and became very excited and talkative constantly repeating "It is very good". After the pipe was removed he again became dull and retarded.

Progress. 15:8:09. Is very childish in behaviour, sits all day long playing aimlessly with a few rounded stones. Was more communicative in answering. He has definite delusions and hallucinations. He is full of snakes which talk to him about his crops and home.

15:12:09. Remains happy and contented. He is very contradictory. Memory is grossly impaired, he states this is his home and he was born here 300 years ago.

15:12:10. Notes during the last year show that there has been no change in his mental condition. Has lost weight, and a "Calmette" test gave a positive reaction. No physical signs in chest.

15:12:11. Has improved in general health and putting on weight. No change mentally.

15:12:12. Is hopelessly demented, constantly observed "pulling snakes" out of his ears and mouth. Childishly happy, and pleased with any trifle. Often expresses his delusions which vary somewhat every few months.