

before the Association in February last, I made, on pathological grounds, a grouping of 122 cases of insanity into five cases, namely, (1) cases without appreciable dementia, (2) cases with barely appreciable dementia, (3) cases of chronic insanity with obvious dementia, (4) cases of dementia which still exhibited symptoms of insanity, (5) cases of gross dementia. Certain of the chronic delusional cases were placed in Group II., and it was to these cases that I referred during the present demonstration as chronic delusional cases without dementia. A large number of delusional cases were, however, placed under Classes III and IV.

(1) For further details see *Phil. Trans.*, Series B, vol. cxci, pp. 165-222.

Physical and Moral Insensibility in the Criminal. By
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THESE observations, carried out at H.M. Convict Prison, Portland, were undertaken to ascertain whether the moral insensibility of the criminal, which is so prominent a psychical characteristic, had any physical parallel.

For this purpose one hundred convicts have been examined as to the proficiency of their special senses. The ages of these men varied from eighteen to sixty-six years; they were undergoing various terms of imprisonment, from three years up to life sentences; some were first offenders, others in addition to numerous short sentences had served from one to four separate terms of penal servitude. The crimes included burglary, theft robbery, receiving stolen goods, forgery, fraud, coining, blackmail, murder, manslaughter, wounding with intent to murder or cause bodily harm, procuring abortion, assault, rape, carnal knowledge, unnatural offences, bigamy, arson, and perjury.

To obtain a standard with which to compare the criminal sensibility, ten similar examinations were carried out at Guy's Hospital on senior men, six of whom were holding or had held house appointments; one was qualified but had held no house appointment, and three were unqualified. To these gentlemen my best thanks are due.

Vision was tested by the usual test-types of Snellen; colour vision by means of Holmgren's wools; hearing, after removing any cerumen, by taking the mean distance at which a lever watch was heard on receding from and approaching each ear separately. The solutions used for testing olfactory sensibility were

varying strengths of oil of cloves in "Lucca oil," the actual strengths used being 1 in 200, 1 in 100, 1 in 80, 1 in 60, 1 in 40, 1 in 20, and 1 in 10; the bottles containing the solutions all being of the same size and containing the same quantity of fluid, thus ensuring equal fluid surfaces and an equal depth from the mouth of the bottle. Beginning with the weakest solution, the prisoner in whom this aroused no sensation was tested with gradually increasing strengths till olfactory sensation appeared; by a rearrangement of the bottles, and by getting the prisoner to arrange them in strength sequence, any attempt at deception or carelessness was discovered, and no further observation made on that case. The solutions used for testing gustatory sensibility were composed of aqueous solutions of glycerine, the strengths being 5, 10, 20, 40, 60, and 80 minims of glycerine in an ounce of water; sweet tastes were chosen for convenience, being easily analysed and best appreciated on the tip of the tongue. As in testing smell, the weakest solution was first used. A glass rod was dipped into a given solution up to a certain mark, and then placed on the tip of the tongue; if no sensation was elicited the rod was carefully cleaned and dipped into the next strongest solution; if no result was obtained the next strongest solution was tried, and so on till sensation was aroused. Similar precautions were taken against any attempt at deception or carelessness as in testing for olfactory sensibility. Tactile sensibility was examined by Sieveking's æsthesiometer, the centre of the forearm being the part chosen. The tip of the tongue was also examined, but the instrument not being graduated finer than the tenth of an inch the results were unsatisfactory; inasmuch as at times the minimum could not be determined nor the small differences occurring at this part of the body be gauged. These results have therefore been neglected.

No observations were carried out to estimate vaso-motor sensibility or painful or thermic sensations, but in passing it may be remarked that one has frequently been surprised to find that on going into a cell to examine a man, with the solution bottles and case of Holmgren's wools, his face has become suffused with an unmistakable blush. It has been stated that the criminal blushes with difficulty; in carrying out these observations one has noticed it so frequently that this statement cannot be taken unreservedly. It must be remem-

bered that the examination has taken the prisoner by surprise, he is at once on unfamiliar ground ; this would appear to be the reason for the discrepancy, for on other matters—his crime, habits, companions, and the like—one is obliged to agree with those who consider it to be of rare occurrence.

Although no direct observations have been made on painful sensations, sensibility to pain is probably diminished. In the extraction of teeth one has frequently been struck by the absence of pain. Again, a prisoner applied for treatment on account of a swollen big toe, which on examination proved to be due to a fracture. On inquiry a history of an accident a fortnight before decided its origin ; no complaint had been previously made, and he had been performing hard outdoor labour with this injury. A homicidal case requested to have an ingrowing toenail evulsed without an anæsthetic ; a solution of eucaine was, however, first injected.

As an example of the diminished sensibility to pain, the frequency with which tattooing is found in criminals has been brought forward as supporting evidence. It would scarcely appear, however, to be conclusive ; of 500 convicts examined for this purpose, 216, or 43 per cent., were tattooed—probably a less percentage than found in the army or navy ; and many people other than criminals whom I have questioned say that the pain was not excessive : further, there are many inducements for criminals to be tattooed, the commonest of which is undoubtedly vanity.

In a careful analysis of the situations and designs found tattooed on one hundred prisoners, the hands and forearms—that is, the parts exposed in their everyday life and labour—were the most frequent sites. It must be regarded as a persistent adjunct to personal adornment, and would appear to have its parallel in the tight shoes and tighter corsets affected by some ladies. Other causes and inducements for the custom appear to be commemorative, professional, licentious, rarely religious or erotic. A man imprisoned for rape had designs of eight female figures on various parts of his body—an unnecessary number of sexual and amorous reminders. Still another powerful inducement is an effort to avoid identification by the police. A professional criminal informed me that it was his practice to have his designs altered immediately on being discharged from prison, and this was true, as shown by a

careful inspection revealing evidence of past designs worked into new patterns.

It will at once be seen that these observations have not been conducted in the exhaustive manner scientifically desirable. Vision has only been tested with the types, no ophthalmoscopic examination was made. Hearing has only been tested with the watch ; it was not possible, therefore, to determine what part of the auditory apparatus was at fault. Again, taste has only been tested by sweets ; sour, acid, and bitter substances having been disregarded. This incompleteness, whilst being unsatisfactory has appeared unavoidable. In examinations such as these much must be left to the willingness and judgment of the subject, and it seemed that more valuable general results would be obtained by the method employed than if detailed results were sought for by more elaborate inquiries, which would of necessity be so prolonged that most criminals (in whom deficient mental inhibition is very marked) would easily tire, and their attention wander. One did not consider that their interest would be aroused for a prolonged period, and unless this could be guaranteed only careless answers would be obtained. This actually proved true ; generally the subject was interested, and therefore attentive. In a few cases towards the end of the examination the attention began to wander, and the results were therefore discarded.

The examination concluded, the criminal history of the subject was considered, the salient points abstracted, the physical results added, and the whole collected as an appendix for reference.

In compiling the tables the figures were obtained in the following manner :

Vision	$\frac{6}{8}$	Snellen's test-type	was taken as	1
"	$\frac{6}{8}$	"	"	2
"	$\frac{6}{12}$	"	"	3
"	$\frac{6}{18}$	"	"	4
"	$\frac{6}{24}$	"	"	5
"	$\frac{6}{36}$	"	"	6
"	$\frac{6}{40}$	"	"	7

If $\frac{6}{40}$ could not be seen (Cases II, 11 and 40 ; III, 3) 8 was taken to represent the vision, both eyes being tested separately: if one eye was lost (II, 2, and III, 9) it did not seem justifiable

to consider that its vision had been equal to its fellow ; it did not, therefore, appear when working out the averages.

Hearing was taken in inches. If the watch could not be heard at all (I, 3, and III, 12) it was considered equal to 0 ; if at one inch, as equal to 1 ; if at two inches as 2, and so on.

Smell	1	in 200	was taken as	1
”	”	100	”	” 2
”	”	80	”	” 3
”	”	60	”	” 4
”	”	40	”	” 5
”	”	20	”	” 6
”	”	10	”	” 7

If no smell could be elicited (II, 47 ; III, 2, 4, 5, 29, 33) it was taken as 8.

Taste	5	in 480	was taken as	1
”	10	”	”	” 2
”	20	”	”	” 3
”	40	”	”	” 4
”	60	”	”	” 5
”	80	”	”	” 6

If no taste could be elicited (II, 10, 47 ; III, 33) it was taken as 7.

Tactile sensibility is given in inches.

There was no case of colour-blindness.

A consideration of the above will show that in the columns of the tables the more acute the visual, olfactory, gustatory, and tactile sensibility, the lower the figure, but the more acute the auditory sensibility the higher the figure. The last columns in the tables were obtained by adding up the position of each sense. The lower the figure in this column, therefore, the more acute the senses considered collectively of that class.

The sane criminal belongs to one of three classes—accidental, occasional, or professional. Cases I, 1 to 13, are examples of the first ; II, 1 to 52, of the second ; and III, 1 to 35, of the third.

The accidental criminal is the realisation of the potential criminal, his moral sensibility need not be far removed from the normal ; as the name implies, he commits crime accidentally. The crime and its punishment is the single criminal experience in his life history, incited by passion or great mental or emotional stress, sometimes in addition by alcohol ;

it remains separated from his past life which has been honest, and his future which will continue so. It may be compared to an acute illness from which he may entirely recover, leaving him none the worse for his experience. Of the thirteen cases of accidental criminals ten were committed for murder, manslaughter, or wounding—crimes committed suddenly in anger, and which are easily seen to at once belong to this class; one case of arson (I, 13), committed by an extremely violent-tempered man acting under an acute but false sense of injustice; one of forgery, and one of theft.

These last two cases require some explanation, as they do not at first sight appear to fall into this category. Case I, 8, was an industrious, sober, well-educated man, having a wife and family dependent upon him, and up to the age of fifty-five he had held a responsible position with credit; he then got into debt, and being continually harassed by his creditors, fearing he would lose his post and means of support for his wife and family by the exposure, in a weak moment he forged a cheque, trusting by this means to tide over his difficulties till he could repay all. This man felt his position in prison acutely, his instincts were not antisocial, and a close acquaintance with the man left one no room to doubt that the memory of the crime, more than its legal punishment, would always be before him and prevent him from again offending.

Case I, 10, was a well-educated, sober, industrious man of refined tastes and pursuits, also holding a responsible position. After having been married a short time his wife became a confirmed invalid. This threw a lot of additional expense upon him, and as a consequence he got into debt. To pay off these debts he stole his employer's money, retaining some to speculate with in the hope of being able to refund. His employers begged that his sentence might be made as light as possible, thus proving their high opinion of him. Whilst undergoing his sentence he was an exemplary prisoner, at all times behaved as a gentleman, and on the completion of his sentence sought advice as to the medical suitability of a certain colony where he intended to start life afresh. One could not doubt, knowing the man, that he was sincere, and that thenceforward he would never again become the inmate of a prison.

The occasional criminal may commit one or several crimes. His crime, be it the first one in his career, is not so antagonistic

to his moral sensibility as is the case in the accidental; his moral perceptions are less acute, his moral energy, his power of mental inhibition, and of selective action weaker, and he may again become an offender from slight causes—difficulty in obtaining work, slight temptations, and the like. He may commit many crimes, but if he will work when work can be obtained he has been classed as an occasional and not a professional, irrespective of the number of his sentences. All crimes occurring in the 100 cases under consideration are included in this group except coining, of which there was only one case (III, 28), a professional criminal.

The professional criminal becomes classified as such when he has committed many crimes, and when from the rapidity with which one sentence follows upon another it is obvious no attempt at honest work has been made. No prisoner has been placed in this class without great care. In some cases the occasional becomes almost the professional, but if there is any evidence of an attempt at honest living he has not been placed in the latter class. The crimes include burglary, theft, receiving, coining, and one case of wounding by a professional thief (III, 32). Of all sane criminals moral sensibility is least developed in this class; generally they are apprenticed to crime from their early youth, and as the years pass on crime succeeds crime. Though looked down upon by other criminals they boast of their exploits and proficiency, they have no pity or compunction for their victims; without gratitude, truth, or affection; idle, malicious, surly, cunning, and egregiously conceited, their mental vision becomes obscured by an exalted *ego*; their actions, instead of producing self-degradation, are by their moral insensibility distorted into pride-producing achievements, elevating them above hard-working honesty. Not only in the matter of their crimes is this conceit shown. Whilst dilating on his skill as a thief a man told me that amongst his associates he was known all over Europe as “the Masher Thief,”—this from a man with a scarred, repulsive countenance, who had almost certainly never been out of England! To the professional criminal his crimes are in no way antagonistic to his deficient moral sensibility; his antisocial life, when not imprisoned, consists of crime upon crime. Prison appears to him as his normal environment—liberty and crime his occasional holiday.

One is forced, on a consideration of these three classes, to conclude that the accidental, occasional, and professional criminals represent three levels of moral sensibility, the accidental being the highest, the professional the lowest. It must, however, be remembered that the occasionals include more various crimes than either of the other classes; that the sexual offenders—cases of rape, carnal knowledge, and bestiality—cannot be said to have higher moral perceptions than the professionals. This will be referred to later, and it will be shown that their physical sensibility is not greater, but as a class one must consider the occasional more acute in his moral sensibility than the professional.

TABLE I.—*Special Sense Averages of Criminal Classes.*

Criminal class.	No. of cases	Vision.	Colour vision.	Hearing.	Smell.	Taste.	Touch.	Total showing position.
Accidental . . .	13	2'038	No colour-blindness	7'259	2'230	2'384	1'946	7
Occasional . . .	52	2'359	"	8'828	2'746	3'115	1'825	9
Professional . . .	35	2'246	"	5'828	3'40	3'171	2'0	14

Table I represents the average physical sensibility of the cases examined, classified as accidentals, occasionals, and professionals. Remembering that the lower the figure the more acute the sense in each column except in hearing, which is the reverse, it will be seen that in each case the special sense of the accidental is more acute than of the professional. It has been shown that the moral sensibility of the former is also more acute; here, therefore, we have a definite parallel between the physical and moral sensibilities. The occasional class will be seen to lie midway between the accidentals and professionals as regards smell and taste, but have more acute touch and hearing, and less acute vision. Adding up the positions for each sense, the totals show that the accidental has the acutest physical sensibility, the occasional less, and the professional least. Treated as classes this is parallel to the above estimate of their moral sensibility.

TABLE II.—*Special Sense Averages of Educated and Non-educated Criminals.*

Educated or not.	No. of cases	Vision.	Colour vision.	Hearing.	Smell.	Taste.	Touch.	Total showing position.
Educated . . .	14	2.895	No colour-blindness	8.098	2.571	2.857	1.970	7
Non-educated . . .	86	2.151	"	6.908	2.965	3.069	1.890	8

Table II shows that the difference between the educated and uneducated criminal is slight. In hearing, smell, and taste the educated has the advantage; in vision and touch the non-educated. The educated include two accidentals, ten occasionals, and two professionals (I, 8, 10; II, 5, 6, 11, 16, 21, 33, 38, 47, 49, 52; III, 14, 23). It is interesting to note that the greater number of educated criminals are occasionals, not accidentals; in other words, that the educated man more frequently commits crime callously. No case has been considered educated who at the least does not reach the standard usually required of a clerk.

TABLE III.—*Special Sense Averages of Crime Groups.*

Crime group.	No. of cases	Vision.	Colour vision.	Hearing.	Smell.	Taste.	Touch.	Total.
I. Burglary Robbery Theft Receiving	57	2.219	No colour-blindness	6.964	3.157	3.099	1.949	17
II. Forgery Fraud Coining Blackmail	14	2.107	"	8.794	3.357	2.928	1.892	12
III. Homicide Assault Wounding	29	2.172	"	9.116	2.310	2.578	1.958	10
IV. Rape Carnal knowledge Bestiality	9	2.66	"	7.50	2.22	3.22	2.40	18
V. Bigamy Arson Perjury	6	1.818	"	8.583	3.166	3.33	2.45	18

Table III classifies the cases under consideration into crime groups ; as one case at times includes more than one crime, it appears in more than one group, hence the averages in this table are worked out from a total of 115.

GROUP I.—Burglary, robbery, theft, receiving, 57 cases, includes 34 professionals, 1 accidental, and 22 occasional criminals ; the majority being men of deficient moral sensibility, *i. e.*, professionals, it will be anticipated that their physical sensibility will also be deficient. A glance at the last column of this table will show this to be the case, that practically the obtuseness of the special senses in this class is almost equal to that of Groups IV and V.

GROUP II.—Forgery, fraud, coining, and blackmail, 14 cases, is composed of 1 accidental, two professional criminals, and 11 occasional ; compared with Group I they may be considered as cases of theft at a distance, having similar aims, but differing essentially in the manner of conducting the crime. One is not surprised to find that the type of man is distinct from the above and from all other criminals in that he almost always has more intelligence : of them 8, that is over 50 per cent., were educated ; 7 (II, 5, 6, 7, 11, 21, 33, 38, 52), although occasionals, were of distinctly higher moral type than is usual in this class. From a knowledge of the men it is probable 5, 4 first offenders (II, 5, 6, 7 ; I, 8), and 1 (II, 38) who had been sentenced twice will not again commit crime. The last column shows that of the five crime groups their position is second.

GROUP III.—Homicide, wounding, assault, 29 cases, made up of 10 accidentals, 1 professional, and 18 occasionals,—usually passion crimes, often the result of provocation ; the moral sensibility of the offender may approach the normal. The last column shows the physical sensibility in this group is the most acute of all the crime groups.

GROUP IV.—Rape, carnal knowledge, and bestiality, 9 cases ; essentially men of low moral sensibility, of deficient mental inhibition, their physical sensibility is more obtuse than any of the above groups.

GROUP V.—Bigamy, arson, and perjury, a miscellaneous collection of 6 remaining cases ; the bigamist can scarcely be considered to belong to a higher moral type than the sexual offender generally, it may be regarded as a refined sexual offence ; it has been separated from Group IV as Group II

has been from Group I, as including a somewhat different type of man. The incendiaries were 3 : one (II, 23), a man of marked antisocial instincts, another (II, 47), a malicious but well-educated man, the third (I, 13), an accidental, a man of excessively violent temper. The perjurer (II, 43) was a man of decidedly low moral perceptions. The last column shows that the physical sensibility of this group corresponds with that of the sexual group.

From a consideration of this table also it is seen that, as in Table I, there exists a close relation between the physical and moral insensibility in the criminal.

TABLE IV.—*Special Sense Averages of Guy's Cases.*

Examination of ten medical friends at Guy's Hospital.										
No. of cases.	Vision.	Colour vision.	Hearing.	Smell.	Taste.	Touch.				
10	...	1'15	...	17'6	...	1'4	...	1'15	...	0'66
		No colour-blindness								

Table IV is the result of the examination of ten medical friends at Guy's Hospital ; comparing the average in any of the columns in this table with that in any other table, the very striking fact is at once apparent that the acuteness of any of the special senses (save colour vision, in which no case of colour-blindness was found) is considerably greater. As it has been shown that between moral and physical sensibility a parallel exists, this result would have been anticipated.

SUMMARY.

1. The normal individual has more acute moral and physical sensibility than the criminal.
2. Considered as classes, the accidental, occasional, and professional criminal represent three degrees of moral insensibility.
3. Considered as classes, the accidental, occasional, and professional criminal represent three degrees of physical insensibility.
4. The difference between the moral insensibility of the accidental and occasional is greater than that between the occasional and professional.
5. The difference between the physical insensibility of the

accidental and occasional is less than that between the occasional and professional.

6. The parallel between the physical and moral insensibilities of the three classes, although definite, is not exact.

7. The influence of education on moral or physical insensibility appears to be unimportant.

8. Crimes against the person, commonly passion crimes, have least moral and physical insensibility.

9. Crimes against distant property, commonly intellect crimes, have more moral and physical insensibility.

10. Crimes against near property, sexual crimes, and the miscellaneous Group V in Table III have still more moral and physical insensibility.

11. The influence of age on moral and physical insensibility is negative.

12. Sensation is impaired in the criminal,—that is, the number of conscious elements are less than in the normal human adult; that is the number of perceptions possible to the criminal are less, and so the ideas of the criminal mind are less than in the mind of the normal human adult. A mind lacking in ideas is a mind presenting some enfeeblement; the evidence of this enfeeblement is most commonly expressed in the criminal by deficient moral sensibility.

APPENDIX OF CASES.

I. *Accidental Criminals.*

CASE 1.—Æt. 44, manslaughter. A poorly educated labourer inflicted, in a passion, such injuries upon his wife as caused death. Before conviction he fell from a scaffold, receiving head injuries and a compound fracture of the right leg; he states that before this accident his hearing was good. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R. 1 inch, L. $\frac{1}{2}$ inch; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $2\frac{1}{10}$ inches.

CASE 2.—Æt. 48, murder. A labourer of poor education, violent and alcoholic, killed in a passion a girl with whom he had been intimate. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 1 inch, L. $\frac{1}{2}$ inch; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $2\frac{1}{10}$ inches.

CASE 3.—Æt. 52, manslaughter. A man of violent temper killed a woman in a drunken brawl. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: *nil*; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $2\frac{1}{10}$ inches.

CASE 4.—Æt. 40, wounding with intent to murder. An artisan, honest, sober, industrious, having respectable friends and associates, was deserted by his wife; he attacked in the street the man who he

supposed had ruined her, and attempted to kill him. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 14 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{800}$; touch: $1\frac{5}{10}$ inches.

CASE 5.—Æt. 28, wounding with intent to cause grievous bodily harm. Honest, industrious, sober, being accused by his wife of being intimate with another woman, got into a passion and fired a revolver at her. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{800}$; touch: $1\frac{5}{10}$ inches.

CASE 6.—Æt. 66, murder. A man of poor education, honest and industrious, killed a woman in a passion. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 5 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{800}$; touch: 2 inches.

CASE 7.—Æt. 38, shooting with intent to murder. A violent-tempered man, honest, sober, and industrious, attempted in a passion to kill another man. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{800}$; touch: $1\frac{7}{10}$ inches.

CASE 8.—Æt. 57, forgery. An industrious, well-educated, sober man, having respectable associates and friends; got into debt, being continually harassed for money he was afraid the fact would become known to his employers and cause him to lose his post; he committed forgery to try and tide over his difficulties. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{40}$; taste: $\frac{2}{800}$; touch: $2\frac{2}{10}$ inches.

CASE 9.—Æt. 25, manslaughter. A man earning an honest living by laborious work fought with a man who had stolen from his barrow, as a result the man received fatal injuries. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{800}$; touch: $2\frac{5}{10}$ inches.

CASE 10.—Æt. 40, theft. A man of superior education, sober, industrious, and of refined tastes, got into debt through obtaining comforts for an invalid wife; to relieve this he stole money from his employers and gambled with it to pay his debts and replace what he had stolen; being unsuccessful he was detected. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{200}$; taste: $\frac{2}{800}$; touch: 1 inch.

CASE 11.—Æt. 40, wounding. An illiterate, honest, industrious miner wounded his housekeeper in a temper as she was persistently running up bills. Vision: R., L. $\frac{6}{8}$; no colour blindness; hearing: R., L. 12 inches; smell: $\frac{1}{200}$; taste: $\frac{2}{800}$; touch: $2\frac{2}{10}$ inches.

CASE 12.—Æt. 39, wounding. A violent-tempered man but honest and industrious, working as a weaver, attempted to injure his wife against whom he had a grievance. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{800}$; touch: $1\frac{5}{10}$ inches.

CASE 13.—Æt. 40, arson. An imperfectly educated plasterer, being dismissed from his employment and being a man of excessively violent temper, finding himself suddenly out of employment and considering himself unjustly treated, set fire to the building on which he had been

employed. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{5}{480}$; touch: 2 inches.

II. Occasional Criminals.

CASE 1.—Æt. 26, bigamy. Living apart from his wife, married another woman who was engaged in the same business as himself. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 7 inches, L. 8 inches; smell: $\frac{1}{100}$; taste: $\frac{3}{480}$; touch: 3 inches.

CASE 2.—Æt. 39, bigamy. Living apart from his wife, married another woman; a quiet, well-behaved, hard-working man. Vision: R. eye lost, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 14 inches; smell: $\frac{1}{80}$; taste: $\frac{3}{480}$; touch: $2\frac{1}{10}$ inches.

CASE 3.—Æt. 47, rape. A man of industrious but alcoholic habits criminally assaulted a girl. Vision: R., L. $\frac{6}{4}$; no colour-blindness; hearing: R. 4 inches, L. 6 inches; smell: $\frac{1}{100}$; taste: $\frac{3}{480}$; touch: 1 inch.

CASE 4.—Æt. 34, forgery. An imperfectly educated artisan got into debt through gambling and forged a cheque to meet his losses. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 20 inches; smell: $\frac{1}{10}$; taste: $\frac{3}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 5.—Æt. 29, forgery. A well educated man of good social position leading an immoral and dissipated life, got into debt and forged a cheque to recover himself. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 15 inches; smell: $\frac{1}{200}$; taste: $\frac{3}{480}$; touch: $1\frac{7}{10}$.

CASE 6.—Æt. 52, fraud. A well-educated man of good social position, living beyond his means, committed fraud extending over a long period. Vision: R. $\frac{6}{30}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R. $\frac{1}{4}$ inch, L. $\frac{1}{8}$ inch; smell: $\frac{1}{100}$; taste: $\frac{1}{480}$; touch: $1\frac{4}{10}$.

CASE 7.—Æt. 50, fraud. Lived for ten years by a system of fraud. In prison behaviour exemplary, industrious, and civil. Vision: R., L. $\frac{6}{12}$; no colour-blindness; hearing: R., L. 5 inches; smell: $\frac{1}{30}$; taste: $\frac{3}{480}$; touch: 2 inches.

CASE 8.—Æt. 26, inflicting grievous bodily harm. A violent, idle, and insolent man; has served four short sentences for stealing, but appears to work when he can easily obtain it. Vision: R., L. $\frac{6}{34}$; no colour-blindness; hearing: R. 16 inches, L. 14 inches; smell: $\frac{1}{100}$; taste: $\frac{3}{480}$; touch: 2 inches.

CASE 9.—Æt. 48, murder. A violent and alcoholic man killed a relative; he had been previously sentenced for unlawfully wounding his wife. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; taste: $\frac{3}{480}$; smell: $\frac{1}{80}$; touch: $1\frac{6}{10}$ inches.

CASE 10.—Æt. 51, rape. A crafty but not idle or insolent man. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 3 inches, L. 2 inches; smell: $\frac{1}{80}$; taste: *nil*; touch: 2 inches.

CASE 11.—Æt. 31, fraud. A well-educated man of good social position committed fraud that he might spend and enjoy the money.

Vision: R. $\frac{6}{80}$, L. less than $\frac{6}{80}$; no colour-blindness; hearing: R. $6\frac{1}{2}$ inches, L. 7 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{80}$; touch: $1\frac{5}{10}$ inches.

CASE 12.—Æt. 65, burglary. Has served three previous sentences for burglary, but has chiefly worked honestly for his living. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 4 inches, L. 3 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $2\frac{5}{10}$ inches.

CASE 13.—Æt. 32, burglary. Has received four short sentences for theft, but appears to work honestly when he can obtain it. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. $7\frac{1}{2}$ inches, L. 6 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{80}$; touch: $1\frac{5}{10}$ inches.

CASE 14.—Æt. 28, wounding. Has been previously imprisoned for assault. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 4 inches, L. 3 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $2\frac{3}{10}$ inches.

CASE 15.—Æt. 25, wounding with intent to murder. Was attempting burglary when committed present crime; has previously committed theft; works when he can obtain it. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{80}$; touch: $1\frac{7}{10}$ inches.

CASE 16.—Æt. 45, theft. A well-educated man, usually obtaining his living as a teacher of foreign languages, has served two short sentences for theft and burglary, and one sentence of penal servitude previous to the present term. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 4 inches, L. 6 inches; smell: $\frac{1}{80}$; taste: $\frac{1}{80}$; touch: $1\frac{7}{10}$ inches.

CASE 17.—Æt. 42, blackmail. Has undergone three short sentences previously, one for fraud; works for his living honestly at times. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 8 inches, L. 6 inches; smell: $\frac{1}{40}$; taste: $\frac{2}{80}$; touch: 2 inches.

CASE 18.—Æt. 26, manslaughter. Previous to present conviction has once been sentenced for theft. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 12 inches, L. 11 inches; smell: $\frac{1}{40}$; taste: $\frac{1}{80}$; touch: 2 inches.

CASE 19.—Æt. 37, assault. Assaulted a man against whom he had a grudge; has served five short sentences previously, but works honestly as a rule. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{80}$; touch: 2 inches.

CASE 20.—Æt. 27, wounding. A violent-tempered collier on very slight provocation nearly became a parricide; he has been sentenced twice before, once for theft and once for assault. Vision: R., L. $\frac{6}{4}$; no colour-blindness; hearing: R., L. 24 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{80}$; touch: $1\frac{5}{10}$ inches.

CASE 21.—Æt. 45, fraud. A well-educated man committed fraud in company with others. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{80}$; touch: $2\frac{5}{10}$ inches.

CASE 22.—Æt. 20, manslaughter. Robbed and assaulted a man, producing fatal injuries. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: $1\frac{7}{10}$ inches.

CASE 23.—Æt. 38, arson. An occasional farm labourer and tramp. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 2 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: $2\frac{7}{10}$ inches.

CASE 24.—Æt. 25, blackmail. Has been previously sentenced for a similar offence. Vision: R., L. $\frac{5}{12}$; no colour-blindness; hearing: R., L. 18 inches; smell: $\frac{1}{20}$; taste: $\frac{1}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 25.—Æt. 24, assault. A violent man but not badly behaved in prison. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 7 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 26.—Æt. 49, robbery. Has undergone two short sentences previously for stealing and one to penal servitude; has worked honestly for years between sentences. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 5 inches; smell: $\frac{1}{8}$; taste: $\frac{1}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 27.—Æt. 24, rape. A labourer; two previous sentences for theft. Vision: R. $\frac{5}{12}$, L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 28.—Æt. 37, theft. Has undergone nine short sentences for similar offences, but the total imprisonment does not amount to more than two years extended over a period of sixteen years; appears to work honestly when he can obtain it. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R. 6 inches, L. 4 inches; smell: $\frac{1}{8}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 29.—Æt. 57, procuring abortion. An imperfectly educated herbalist; his first imprisonment. Vision: R. $\frac{5}{8}$, L. $\frac{5}{12}$; no colour-blindness; hearing: R., L. 3 inches; smell: $\frac{1}{8}$; taste: $\frac{1}{480}$; touch: 3 inches.

CASE 30.—Æt. 26, assault. A violent, alcoholic man assaulted his wife. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 31.—Æt. 20, rape. A violent, insolent youth. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: $2\frac{5}{10}$ inches.

CASE 32.—Æt. 43, attempting an abominable crime. Of low moral type, but an industrious mechanic when at liberty. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 2 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: $2\frac{2}{10}$ inches.

CASE 33.—Æt. 56, fraud. A well-educated man; has been previously sentenced for fraud. Vision: R., L. $\frac{5}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{10}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 34.—Æt. 43, wounding. Has undergone one previous sentence for larceny and one for wounding; had a grievance against a man, went to his house, but on finding him out insulted his daughter, and

assaulted a woman who interfered. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: 12 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 35.—Æt. 22, rape. A farm labourer, does not always work; his first offence. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{480}$; touch: $3\frac{5}{10}$ inches.

CASE 36.—Æt. 36, rape. Has been previously convicted for theft, but when free is "fairly industrious." Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{100}$; taste: $\frac{4}{480}$; touch: 2 inches.

CASE 37.—Æt. 39, rape. Has been previously convicted for stealing and charged many times for drunkenness. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{480}$; touch: 3 inches.

CASE 38.—Æt. 40, forgery. Has been previously convicted for theft; well educated. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 14 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: 2 inches.

CASE 39.—Æt. 51, burglary. Is undergoing his third sentence of penal servitude, but has worked for years between his sentences. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 40.—Æt. 36, theft. Has been twice previously sentenced for petty thefts; works as a plasterer when he can obtain employment. Vision: R. $\frac{6}{8}$, L. less than $\frac{6}{8}$; no colour-blindness; hearing: R. 6 inches, L. 1 inch; smell: $\frac{1}{100}$; taste: $\frac{4}{480}$; touch: $2\frac{5}{10}$ inches.

CASE 41.—Æt. 21, manslaughter. In company with other men assaulted a woman and produced fatal injuries. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{4}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 42.—Æt. 21, rape. An imperfectly educated but industrious man. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 20 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{480}$; touch: $2\frac{5}{10}$ inches.

CASE 43.—Æt. 27, perjury. A man of low companions but industrious. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 44.—Æt. 45, attempted murder. To obtain money attempted to kill a relative. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 45.—Æt. 21, assault. A violent, idle, insolent, illiterate man. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 12 inches; smell: $\frac{1}{100}$; taste: $\frac{4}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 46.—Æt. 44, receiving stolen goods. A traveller added to his income by receiving. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 16 inches; smell: $\frac{1}{80}$; taste: $\frac{4}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 47.—Æt. 53, arson. Well educated; having a spite against a man, set fire to his shop. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: *nil*; taste: *nil*; touch: 3 inches.

CASE 48.—Æt. 33, robbery. Three previous sentences for theft, but has kept out of prison for ten years. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. L., 4 inches; smell: $\frac{1}{200}$; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 49.—Æt. 55, fraud. A well-educated man obtained money from a girl under the pretence of marrying her. Previously convicted for a similar crime. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{200}$; taste: $\frac{1}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 50.—Æt. 36, receiving stolen goods. Worked honestly as well as receiving. Vision: R. $\frac{6}{12}$, L. $\frac{6}{12}$; no colour-blindness; hearing: R., L. 16 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{480}$; touch: $1\frac{7}{10}$ inches.

CASE 51.—Æt. 26, robbery. Robbed a man in company with others; has also been sentenced for theft. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{200}$; taste: $\frac{1}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 52.—Æt. 47, theft. A well-educated man, not embarrassed for money, stole some entrusted to him. Vision: R. $\frac{6}{12}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R. $5\frac{1}{2}$ inches, L. 3 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{480}$; touch: 3 inches.

III. Professional Criminals.

CASE 1.—Æt. 40, theft. A crafty, insolent, bad-tempered, violent man, commenced a criminal career when fourteen years old with petty thefts. He was early sent to prison; he has undergone four sentences of penal servitude in addition to several short sentences; he is no sooner liberated than he starts crime again. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 6 inches, L. 12 inches; smell: $\frac{1}{80}$; taste: $\frac{2}{480}$; touch: 2 inches.

CASE 2.—Æt. 27, theft. Has undergone numerous short sentences for stealing before being sent to penal servitude; he is satisfied with his surroundings, is always cheerful, and takes imprisonment as a matter of course. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 12 inches, L. 3 inches; smell: *nil*; taste: $\frac{1}{480}$; touch: 2 inches.

CASE 3.—Æt. 41, burglary. Has undergone several short sentences for theft, and one previous sentence of penal servitude for burglary. There is no evidence of any attempt at earning an honest living. Vision: R. less than $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: 2 inches.

CASE 4.—Æt. 42, burglary. When fourteen years old commenced stealing; at this age he was sentenced twice to short terms of imprisonment. When fifteen he was sentenced thrice, the following year he underwent twelve months' imprisonment again for theft; no sooner is he released than he again steals and receives a sentence of penal servitude; on the completion of this he is within a few months again sentenced to penal servitude for larceny from the person; on being released he is convicted for assault, and this sentence being completed he returns to prison in a short time for burglary. Vision: R. $\frac{6}{8}$, L. $\frac{6}{12}$

no colour-blindness; hearing: R., L. 5 inches; smell: *nil*; taste: $\frac{2}{480}$; touch: $2\frac{4}{10}$ inches.

CASE 5.—Æt. 54, theft. Begins stealing at eighteen, has undergone four sentences of penal servitude, and seven shorter sentences for theft; he is no sooner liberated than he steals and returns to prison. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. $\frac{1}{2}$ inch; smell: *nil*; taste: $\frac{4}{480}$; touch: $2\frac{7}{10}$ inches.

CASE 6.—Æt. 26, theft. Commences thieving at sixteen, between then and his twenty-second year he is in prison annually, undergoing short terms for theft, and ultimately becomes sentenced to penal servitude; has not made any effort to work honestly. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. 12 inches, L. 15 inches; smell: $\frac{1}{100}$; taste: $\frac{6}{480}$; touch $1\frac{7}{10}$ inches.

CASE 7.—Æt. 38, theft. Has been a thief since nineteen, between this age and thirty-three he was sentenced fifteen times; he then is sentenced to penal servitude; he has passed from crime to crime, and done no steady work when at liberty. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R. $\frac{1}{2}$ inch, L. 2 inches; smell: $\frac{1}{100}$; taste: $\frac{1}{480}$; touch: 3 inches.

CASE 8.—Æt. 51, theft. Commences a criminal career when twenty-four and is sentenced to twelve months' imprisonment, at thirty-one he is sent to penal servitude, between the ages of thirty-one and fifty-one he receives four sentences of penal servitude, all for theft; no sooner is one sentence completed than he again steals, and again is convicted. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 5 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $1\frac{5}{10}$ inches.

CASE 9.—Æt. 53, burglary. Originally a tailor of imperfect education, he adopts a criminal career when forty-two; his first crime is burglary, and he is sentenced to a short term of imprisonment; in the following five years he is sentenced four times for burglary and stealing, the last time being to penal servitude; within a few months after his release he is again sent to penal servitude for burglary. Vision: R. eye lost, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $2\frac{5}{10}$ inches.

CASE 10.—Æt. 30, burglary. When twenty commits burglary, within the next seven years he is sentenced four times, he then becomes sentenced to penal servitude; he has made no attempt to perform honest work. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{100}$; taste: $\frac{4}{480}$; touch: $1\frac{7}{10}$ inches.

CASE 11.—Æt. 33, receiving stolen goods. A violent and at times desperate man, when nineteen steals, in six years is sentenced five times for theft, the last sentence being to penal servitude; he is no sooner liberated than he returns, this time for receiving. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{100}$; taste: $\frac{2}{480}$; touch: $2\frac{5}{10}$ inches.

CASE 12.—Æt. 60, theft. Remained free from crime till thirty-six years old; he then commenced stealing, and has since received eleven short sentences, and at last penal servitude; he appears to have

made no effort to gain an honest living. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : *nil*; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $2\frac{3}{10}$ inches.

CASE 13.—Æt. 27, burglary. Commenced stealing at seventeen, since when he has been in prison every year for robbery, theft, or burglary. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 5 inches; smell : $\frac{1}{80}$; taste : $\frac{10}{480}$; touch : $1\frac{5}{10}$ inches.

CASE 14.—Æt. 60, theft. A well-educated man at forty-eight adopts crime as a profession; when liberated from prison he returns in a few months for a fresh offence. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 5 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $2\frac{3}{10}$ inches.

CASE 15.—Æt. 18, burglary. When eight is sent to a reformatory for five years; after he leaves, in six years he is sentenced seven times for theft and burglary, the last sentence being to penal servitude. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 10 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $2\frac{3}{10}$ inches.

CASE 16.—Æt. 45, burglary. Is sent to a reformatory when eight for stealing. Since he was sixteen, when he was convicted for theft, he has been eight times in prison, including three terms of penal servitude. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 4 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch $2\frac{7}{10}$ inches.

CASE 17.—Æt. 40, burglary. Has lived by crime for the last seventeen years. Has undergone seven imprisonments, one of which was penal servitude. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 2 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : 2 inches.

CASE 18.—Æt. 40, burglary. At fourteen stole, since when he has not been at liberty for more than a few months at a time, his sentences amounting to twenty-three years' imprisonment in twenty-seven years. Vision : R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 6 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $1\frac{5}{10}$ inches.

CASE 19.—Æt. 34, burglary. Crafty, violent, insolent, started thieving when seventeen; in fifteen years has been sentenced fourteen times for burglary or theft. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R. 12 inches, L. 4 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : 1 inch.

CASE 20.—Æt. 48, theft. Violent, ill-tempered, idle; when twenty-eight stole, and in twenty-seven years has received sentences amounting to seventeen years' incarceration for theft. Vision : R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 4 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $2\frac{3}{10}$ inches.

CASE 21.—Æt. 47, burglary. Sent to a reformatory for stealing; on leaving he appears to have lived honestly for a few years, but when twenty-two is convicted for burglary, and in twenty-five years his sentences amount to twenty years' imprisonment for theft and burglary; he is never out of prison for more than a short time. Vision : R., L. $\frac{6}{8}$; no colour-blindness; hearing : R., L. 5 inches; smell : $\frac{1}{80}$; taste : $\frac{20}{480}$; touch : $3\frac{3}{10}$ inches.

CASE 22.—Æt. 26, burglary. Stole when fifteen years old, and in ten years s sentenced nine times for theft and burglary. Vision : R.,

L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{10}$; taste: $\frac{2}{80}$; touch: $\frac{1}{10}$ inches.

CASE 23.—Æt. 27, theft. A well-educated man, stole at seventeen, the next year commits burglary; within a few months of release steals and is sent to penal servitude; completing this sentence, he soon returns to penal servitude for obtaining goods by false pretences. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{10}$; taste: $\frac{2}{80}$; touch: $\frac{1}{10}$ inches.

CASE 24.—Æt. 23, theft. Has successively undergone four sentences for theft and burglary. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 6 inches; smell: $\frac{1}{8}$; taste: $\frac{4}{80}$; touch: $\frac{1}{10}$ inches.

CASE 25.—Æt. 26, burglary. Began stealing at seventeen, since then no year has passed without imprisonment for theft or burglary; in eight years he has received twelve sentences. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 18 inches; smell: $\frac{1}{20}$; taste: $\frac{4}{80}$; touch: $\frac{1}{10}$ inches.

CASE 26.—Æt. 25, burglary. Commenced stealing at fifteen, and was imprisoned; he appears then to have worked honestly as a collier for two years, but again steals at eighteen, and since then no year has passed during which he has escaped imprisonment. He is idle, insolent, cunning, and conceited. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R. 8 inches, L. 1 inch; smell: $\frac{1}{10}$; taste: $\frac{4}{80}$; touch: $\frac{1}{10}$ inches.

CASE 27.—Æt. 30, burglary. At fourteen stole and has since lived by crime; in sixteen years he, for theft and burglary, was sentenced seven times, the length of his sentences being in the aggregate fifteen years. He is idle, insolent, malicious, cunning, deceitful. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{20}$; taste: $\frac{4}{80}$; touch: $\frac{1}{10}$ inches.

CASE 28.—Æt. 22, coining. Has stolen also, never attempted honest work. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{10}$; taste: $\frac{2}{80}$; touch: $\frac{2}{10}$ inches.

CASE 29.—Æt. 30, burglary. An idle, alcoholic, insolent man; for the last ten years has been in prison each year for burglary or theft. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: *nil*; taste: $\frac{2}{80}$; touch: $\frac{1}{10}$ inches.

CASE 30.—Æt. 31, burglary. Stole as a youth, since then has undergone seven sentences for theft and burglary, including two penal sentences; no evidence of having attempted to do any honest work. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 8 inches; smell: $\frac{1}{8}$; taste: $\frac{4}{80}$; touch: 2 inches.

CASE 31.—Æt. 54, burglary. Stole as a youth, next imprisoned for unlawful wounding, is now doing his third sentence of penal servitude for burglary; his crimes follow on one another as soon as he is released. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 4 inches; smell: $\frac{1}{10}$; taste: $\frac{2}{80}$; touch: $\frac{2}{10}$ inches.

CASE 32.—Æt. 34, wounding. A violent, insolent man, has sixteen offences for theft recorded against him; when being chased by a man who surprised him stealing he fired a revolver at him. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{8}$; taste: $\frac{3}{8}$; touch: 2 inches.

CASE 33.—Æt. 38, theft. Has not done any honest work, and has been sent twice to penal servitude besides undergoing short sentences for theft. Vision: R. $\frac{6}{8}$, L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. $\frac{1}{2}$ inch; smell: *nil*; taste: *nil*; touch: $2\frac{1}{8}$ inches.

CASE 34.—Æt. 45, burglary. Has previously served four short sentences for theft, and one previous sentence to penal servitude for burglary; on release he was almost immediately convicted. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 2 inches; smell: $\frac{1}{8}$; taste: $\frac{1}{8}$; touch: $1\frac{1}{8}$ inches.

CASE 35.—Æt. 52, fraud. Has been previously sentenced for fraud, and immediately on release commenced carrying out another similar system. Vision: R., L. $\frac{6}{8}$; no colour-blindness; hearing: R., L. 1 inch; smell: $\frac{1}{8}$; taste: $\frac{1}{8}$; touch: $2\frac{1}{8}$ inches.

Clinical Notes and Cases.

Three Cases of Melancholia with Symptoms of Unusual Clinical Interest. By R. R. LEEPER, F.R.C.S.I.

THE following cases of melancholia were recently treated at St. Patrick's Hospital, and as they presented unusual symptoms, the study of which possibly may help us to a better conception of the causation of some delusional states, or may throw some light upon the condition of so-called non-diabetic glycosuria amongst the insane, I beg to record them.

CASE 1.—H. J. L—, admitted to St. Patrick's Hospital, October 20th, 1899. Her father was insane and her mother a very neurotic and anxious woman. Her attack was of six months' duration, and was attributed to the anxiety and monetary difficulties which were consequent on her father's illness.

She had been a clever, accomplished, and industrious girl. On admission her palate was highly arched and abnormal, her bowels constipated, and her abdomen tympanitic. Catamenia were absent for two months prior to her admission. The examination of her urine shortly after admission showed a quantity of sugar to be present, sp. gr. 1030, but no noticeable increase of quantity passed per day. Heart normal. Her pupils were widely dilated and reacted sluggishly