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Contributors

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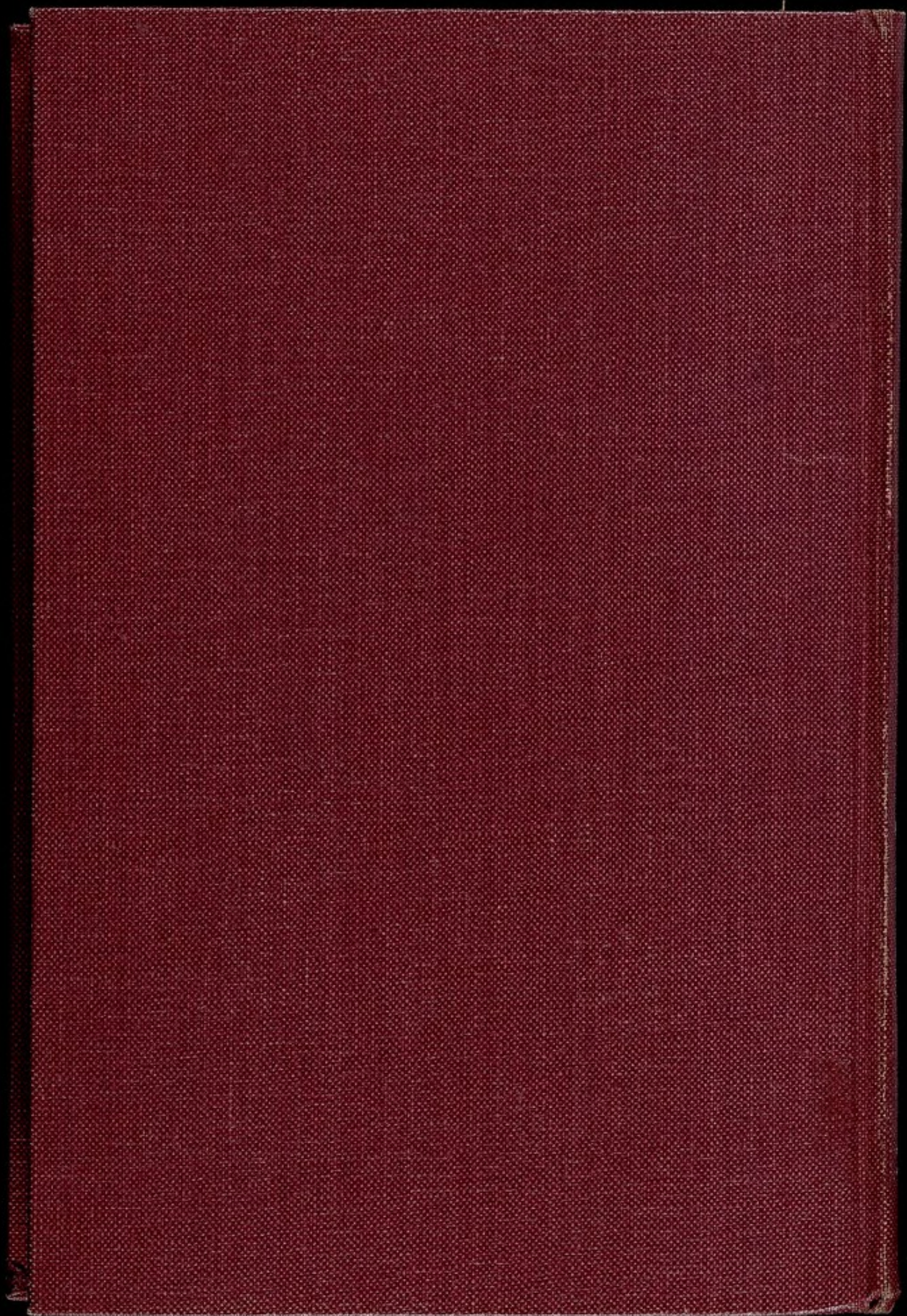
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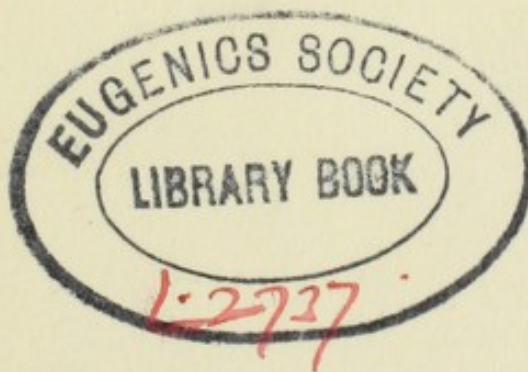
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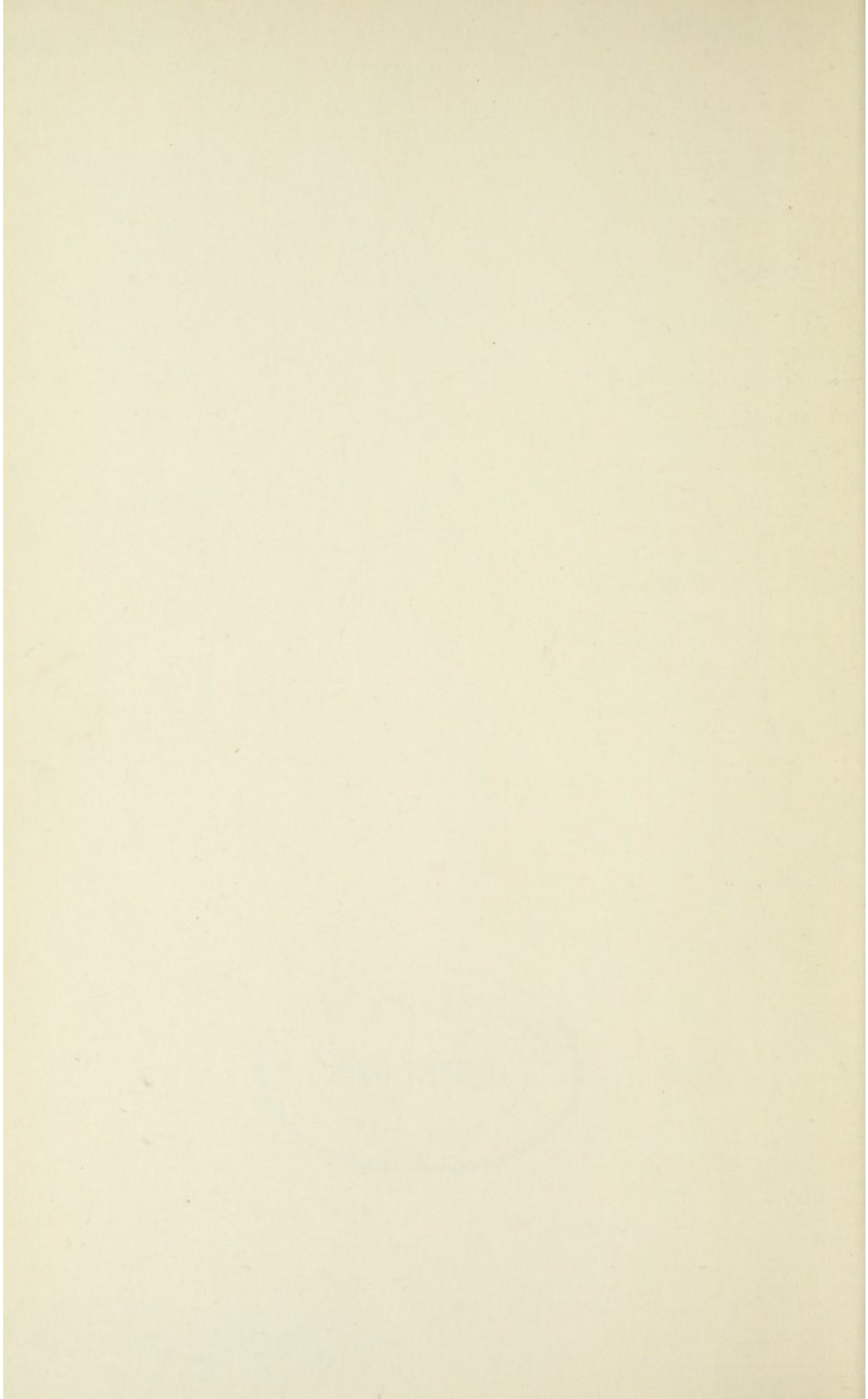


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AND
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BY
MORRIS SIEGEL, M.D.

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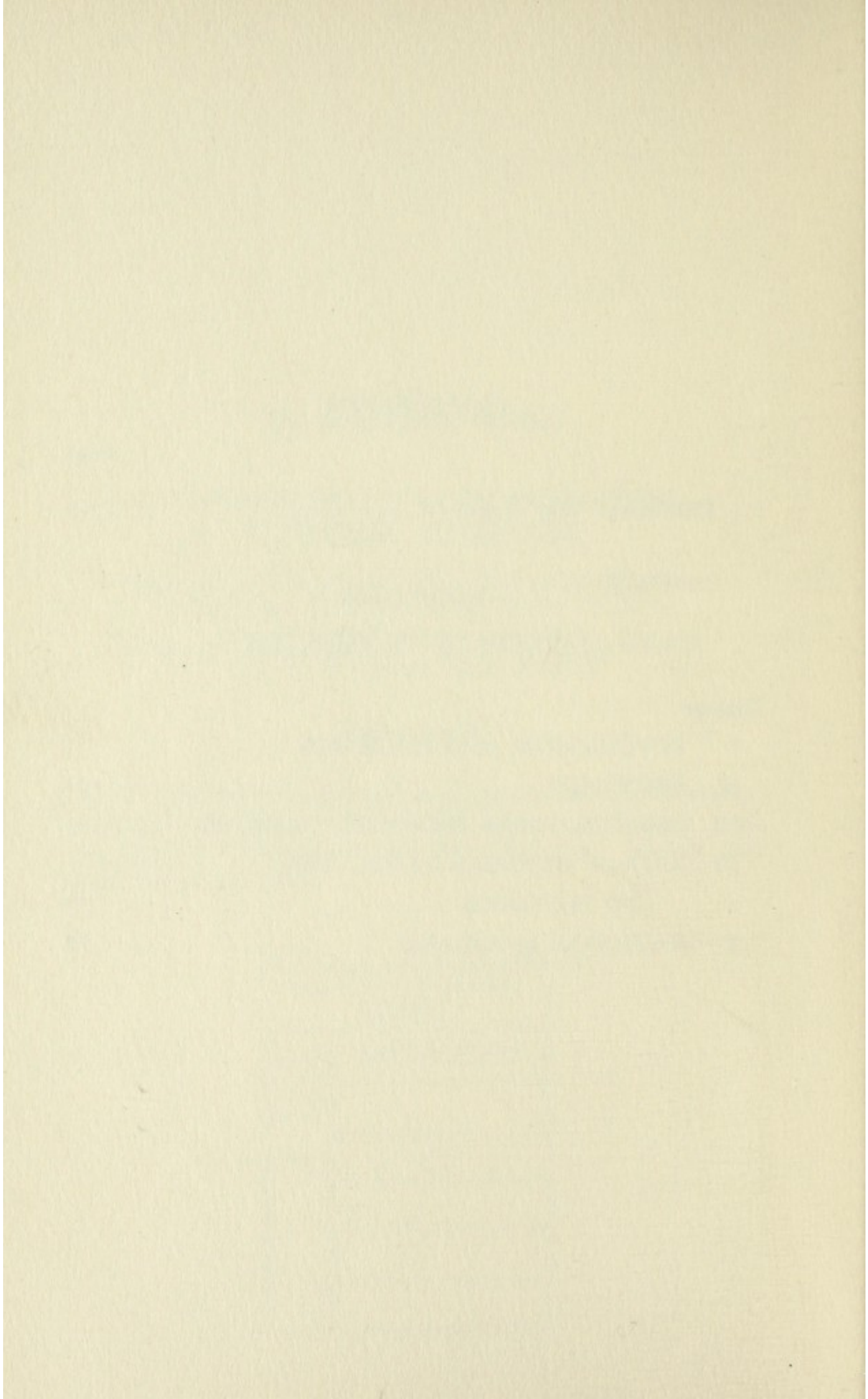
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PREFACE

WHY EUGENICS?

Sir Francis Galton, the founder of modern eugenics, has given the following definition:—
“Eugenics is the study of agencies under social control that may **improve or impair** the **racial qualities** of future generations, either physically or mentally.”
This definition has received universal acceptance.

The interpretation of the words ‘racial qualities’ is usually taken as meaning ‘inborn’ or ‘hereditary’ qualities. The phrase ‘improve or impair’ suggests a twofold policy, a **negative** and a **positive** one, and that is exactly what constitutes the science and movement of eugenics.

NEGATIVE EUGENICS

Clinically and statistically it had been demonstrated that some diseases, anomalies and defects show some ‘familial concentration,’ i.e., they appear with greater frequency in some families than what one would expect to find in an unselected population taken at random.

In some cases it was found that the incidence of certain diseases or defects in certain families run as high as twenty-five or fifty times in comparison to the average. This phenomenon could not be explained in any other way but on the ground of heredity. This indeed was the only conclusion that

was reached by practically all clinicians with vast experience. Statistical data, on a very large scale have given full support to this view.

In some cases such as Huntington's chorea, fragilitis ossium, haemophilia and others the mode and mechanism of transmission has been carefully worked out. In others, such as feeble-mindedness, epilepsy and mental disorders, the mode of transmission is not yet fully understood. Nevertheless, from careful analysis of family histories and reliable statistics as gathered by careful scientific methods it has been definitely established that a considerable percentage of these are hereditarily transmitted.

Hereditary disorders and defects, once they appear in a stock, do not yield readily to treatment. But a good deal could be accomplished in the way of prevention. Those who suffer from serious transmissible diseases or disorders should not be permitted to propagate.

Classes that fall within this category chiefly are some of the feeble-minded; some of those suffering from mental disorders; the epileptics; some of the congenitally blind, and some of those suffering from congenital deaf-mutism. These classes indeed constitute a great social menace. It has been estimated by sociologists and psychologists that from 5% to 10% of the entire world's population are victims of these anomalies and maladies. A great proportion of these are due to faulty heredity. There is a considerable amount of evidence to show that these conditions are slowly but steadily on the increase.

It is the aim of eugenics to study all the factors that lead to the birth of individuals with mild or serious physical or mental handicaps. It is the aim of eugenics to devise methods that will ultimately lead to a considerable reduction in the incidence and frequency of congenital degenerations and hereditary mental disorders.

This, however, constitutes only a part of the eugenic programme. The positive part is considered by most scholars to be even of greater importance.

POSITIVE EUGENICS

In recent years statistical data disclosed the fact that there exists a tendency among the educated, intellectually endowed and socially efficient to remain celibate. Thus we find that about 50% of women who are engaged in the teaching and nursing professions never marry. This appears to be the rule for all women-university graduates. To a less extent the same appears to be the tendency of men who succeed in life either financially or intellectually. Furthermore, when these people do marry, they usually limit the size of their families to such an extent that on the average, they do not leave sufficient descendants to replace themselves. The social duties and privileges of reproduction appear to be entrusted largely to the less successful and less efficient members of the community.

Right-thinking and socially-minded men naturally see a serious problem confronting them. A logical question has been asked by students of sociology; is

the structure of society built on a solid foundation when sterility, (partial or complete) is the price that man has to pay for education and success? After all, survival is the only true yardstick wherewith to measure **fitness**. It, therefore, follows that our educational system or our ideas of value or success must be lacking in something that is vital and essential for race survival.

It is the aim of eugenics to search for the factors that lead to a negative corelation between fertility and cultural and intellectual attainment. It is the aim of eugenics to devise methods whereby this correlation may be reversed.

BOOK ONE

POSITIVE EUGENICS

CHAPTER I

POPULATION AND EUGENICS

In recent years there has been carried on an intensive study in regards to the reproductive rate of the world's population and its bearing on the progress of society in all of its phases. Some of these investigations have revealed facts which are of utmost eugenic interest.

It has been definitely established from various surveys that the rate of increase of the world's population from generation to generation has been considerably falling in the last fifty years. The trend of reproduction throughout the civilized world appears to be falling yet, although at a lesser rate than what it was in the last twenty years. Should this tendency persist, a time will soon arrive (about twenty years hence), when there will be no increase at all in the world's population from generation to generation.

It has further been shown that the rate of decline in birth-rate varies greatly among different regional or occupational groups. As a rule, the reproduction rate is greatest in agricultural regions. The rate is less in small towns but is still very high. The rate is smallest in large cities.

According to figures of the Statistical Bureau of the Metropolitan Life Insurance Co., 1925-1930, it has been shown that each one hundred women in

rural districts in the United States were bearing during their lifetime, enough children to supply the next generation with 162 women, while each 100 women in large cities in the United States, (two hundred and fifty thousands and over), were producing only seventy-seven surviving females.

The migration tendency of the people appears to be steadily from country to city. The urban population in the United States in 1920, was 51.4%. In 1930, it rose to 56.2%. This indicates a tendency to further reduction trend in reproductive rate.

SOCIAL OCCUPATIONAL FERTILITY

It has been definitely established that the upper social groups, namely, the wealthy, the more cultured, the more influential, the professionals, etc., give the lowest fertility rate. As one steps down the social scale, the size of the family increases correspondingly. The average largest families are found in the lowest financial strata, among the unskilled labourers, the miners and farm hands.

Figures based on the United States Birth Statistics, 1928, give an estimate of the net reproduction rate, among the different occupational groups to be as follows:—

Agricultural	1.32
Unskilled	1.17
Semi-skilled	1.03
Skilled	1.06
Business and Clerical85
Professional76

According to the Milbank Memorial Fund Researches, the social, cultural, occupation differential ratio, appears to be about the same in the different types and sizes of communities. The differential exists in the same ratio in the metropolitan community as in the small towns and villages.

This differential ratio is not affected by the difference in national groups. There appears to exist a difference in fertility rate among the foreign-born, but this appears to be only temporary in nature. There is no appreciable difference in fertility rate among the native born of foreign parentage, and native born of native parentage in the United States.

The fertility rate is the lowest when the wife is a college graduate.

Figures from Wellesly College show that their graduates contribute to the next generation less than one child on the average.

Similar figures are obtained from investigations of graduates from other colleges.

The data from Mount Holyoke College, as collected by Professor Hewes, shows the following figures:—

Decades of Graduation	Children per Graduate
1842-1849	2.37
1850-1859	2.55
1860-1869	1.60
1870-1879	1.63
1880-1889	1.46
1890-1892	0.95

This condition has been recognized for almost a century. Many remedies have been proposed, but nevertheless, it is steadily growing worse.

The latest data reveal that at present, the net reproduction rate among these graduates is barely .30 per family.

Frederick S. Crumm's investigation of New England's geneologies which include 12,722 wives show that among the upper classes in that state, there is a rapid and steady decline in the birth rate as follows:

1750-1799 average fertility rate 6.43 per family

1800-1849 average fertility rate 4.94 per family

1850-1869 average fertility rate 3.47 per family

1870-1879 average fertility rate 2.77 per family

At present the birth-rate in the same group is less than two per family.

This is not a particular phenomenon of the American people. It is universal.

In England in the census of 1911, the entire population was divided into 8 classes, as follows:

(1) Upper and Middle Classes.

These included professionals, artists, manufacturers, merchants, clerks and insurance agents.

(2) Intermediate, between classes 1 and 3.

(3) Skilled mechanics and skilled labourers.

(4) Intermediate, between classes 3 and 5.

(5) Unskilled labourers.

(6) Textile workers.

(7) Miners.

(8) Agricultural labourers.

The net reproduction rate per hundred families in each respective group was found to be as follows:

1	2	3	4	5	6	7	8
186	205	232	237	268	191	282	284

Data gathered in Berlin, Paris, Stockholm and other metropolitan cities the world over, show that similar differential birth rates running inversely to social educational strata exist practically in all civilized countries.

MARRIAGE RATE

There is not sufficient reliable data available in regards to the relationship of marriage and social-occupational status. In many parts of the world it is not required to give one's occupation in applying for a marriage license. The census of most countries do not show definitely the relationship between marriage and occupation. However, from the meagre statistics available it has been learned:

(1) That as far as males are concerned, there appears to exist no appreciable differential in marriage rate among the various social groups. Even college graduates (men) do not fall much below the average, (if at all). The marriage rate of professionals (males) falls between 84-91%. As a rule, however, the marriage age of university graduates, is a few years higher than the average marriage age in the population at large.

It is different in the case of the women college graduates. There is an unusually large number

among them who remain single at the age of forty or over.

Figures at Mount Holyoke College show that the tendency of women graduates to remain unmarried is steadily growing as indicated by the following table:

Dates of Graduation	Percentage Married
1842-49	85.5%
1850-59	75.5
1860-69	60.9
1870-79	59.4
1880-89	57.6
1890-92	50.0

Similarly:

Barnard College Classes of 1867-71 gave 56.3% who have married up to 1919.

Bryn Mawr Classes of 1902-7 gave 54.8% married up to 1929.

Smith College, 1904-8, 65% married up to 1930.

Vassar Classes, 1867-1916, percentage of those who married in different classes ran between 53% minimum and 72.5%, maximum.

Investigations of graduates from a large number of nurses' training schools indicate that among nurses the marriage rate is about 50%.

The marriage rate among women teachers, social service workers and librarians is very low.

EUGENIC SIGNIFICANCE

It is here proper to enquire as to whether or not these findings have any eugenic bearing.

Is there any evidence to indicate that cultured parents are more likely to have cultured offspring

than uncultured parents? In other words, is there any evidence to show that there is a correlation between the cultural attainment of parents and offspring?

This question is of utmost importance. It demands a positive answer. The entire policy of positive eugenics depends on this. Unless it can be shown that there exists a cultural intellectual correlation between parents and children, eugenicists have no case, and there is no reason for the formulation of a positive eugenic policy or programme.

A vast amount of study and research has been carried out in this field throughout the world.

In every survey, use has been made of the intelligence tests and the determination of the I.Q. of public school students. It is the belief of most psychologists that the intelligence tests give the best (although not absolute) reflection of the innate mental capacities of individuals. Furthermore, it has been shown by Schwesinger and others that the intelligence quotients in individual children remain constant during the entire public school period. The findings of many investigations, although surveyed independently by many workers, in regions far remote from one another, and by various scales and standards, have, nevertheless, shown a striking similarity in their findings.

In England, according to the census of 1911, the I.Q. of children in the different social groups varied from an average of 110 in professional and high

commercial groups to an average of 89 among the children of the unskilled labourers and farm helpers.

Three extensive surveys were recently made by Dexter, Madison, Wisconsin; Collins, Ohio City; and by Haggerty and Nash, New York Village.

The results are tabulated below:

	Madison Survey included 2782 children	Ohio City Survey included 4727 children	New York Village Survey included 6688 children
	Mean I.Q.	Mean I.Q.	Mean I.Q.
(1) Professional	115	115	116
(2) Business Clerical	105	110	107
(3) Skilled, semi-skilled..	95	102	97
(4) Farmers			94
(5) Unskilled	89	94	91

Haggerty and Nash have also shown the proportional frequencies of different I.Q. levels as they appeared in their series in the various social groups as follows:

POPULATION AND EUGENICS

I.Q.	Unskilled	Farmers	Semi-skilled	Skilled	Business	
					Clerical	Professional
140 up	.40%	.87%	1.15%	1.94%	3.04%	11.75%
130-9	1.07	1.61	2.67	3.50	6.78	14.04
120-9	3.22	4.04	4.20	7.50	17.19	17.48
110-19	9.66	9.36	10.31	13.71	17.16	20.63
100-9	12.35	15.88	20.80	19.74	19.92	19.63
90-9	20.81	23.33	22.90	23.63	17.16	10.88
80-9	19.86	22.50	20.33	17.41	11.55	5.44
70-9	18.66	14.72	12.59	8.27	5.08	.57
60-9	10.34	6.00	4.19	3.59	2.01	.00
50-9	3.36	1.93	.95	.58	.01	.00

The frequency of appearance of children with high cultural ability in the different social groups have been most effectively demonstrated by Professor Terman, in his study of the mental and physical traits of one thousand gifted children.

These children were selected from a large group in the vicinity of Los Angeles and San Francisco. Only those who gave an I.Q. of 140 and over were included. Data regarding the occupation of the fathers were collected in the course of this study.

The group had 560 fathers.

Of these, 163 or 29.1% were professionals; 259 or 26.2% were commercial; 113 or 20.2% of the fathers belonged to the industrial group; 25 or 4.5% were of the public-service group.

The percentage composition of the different groups to the population at large in Los Angeles and San Francisco, in 1910 is given in the table below for purpose of comparison:

	Percentage in Population	Fathers of Gifted Children
Professionals	2.9%	29.1%
Public Service	3.3%	4.5%
Commercial groups	36.1%	46.2%
Industrial	57.7%	20.2%

This table shows distinctly that among the professionals there appeared to be 10 times as many gifted children as would be expected on the percentage basis, while among the industrials there appeared only a little more than one-third gifted

children as would be expected on the percentage basis. In other words, the ratio of gifted children (in Dr. Terman's study) among the professional on the upper end and industrials on the lower end was found to be 30 to 1.

It is useless to give more data on the subject. To report the surveys that have recently been made by psychologists and sociologists would fill many volumes. In the main, all the studies point to one conclusion, namely, that there is a definite correlation between the cultural intellectual abilities of parents and offspring.

These and similar studies form the basis for the formulation of a positive eugenic policy.

Combining the two sets of data, we see a problem before us that demands immediate action and solution. On one hand, we see the upper cultural groups among whose children we find the greatest frequency of intellectual ability, fall short, by far, in their reproductive rate, while, on the other hand, these groups among whose children it is comparatively rare to find cultural ability, are the most fertile.

Should this tendency go on unchallenged or unchecked, it will be only a matter of a few generations before the average level of intelligence of man will be considerably lowered.

There is a question which one often hears raised by the laity. Suppose these findings are correct, how can one account for the familiar fact that almost in every endeavour of life we find men who rose from the rank and file? How can one account for the

great number of students in the Universities who are the children of the poor and of unskilled labourers? And what of the millions of "self-made" men who have risen from the bottom, having started out in life under the most adverse conditions?

The answer is evident. Those that ask these questions do not fully comprehend the subject under discussion. Scientists are not blind to the fact that great cultural, intellectual ability, even genius, is found among the children in the lower strata of society, but at the same time, sociologists point out that the **frequency** of appearance of such abilities is considerably less common among the children of the industrial and agricultural groups than in the groups above them. The findings of Professor Terman and those of Haggerty and Nash clearly show that a considerable percentage of outstanding and gifted children are found in the lower social strata, but the frequency and percentage of their appearance is much smaller than in the occupational groups above them.

Furthermore, it is a well-recognized fact that whenever intellectuals rise from the ranks, they too follow the fashion of the upper groups and either they stay celibate or have small-sized families. This indeed tends to accentuate the problem. It seems that whenever intellectual ability manifests itself, the fashion of low fertility or sterility is sure to follow.

There is still another question. What harm will society suffer if the level of intelligence should fall slightly? Couldn't men be happy, even though less

intelligent? Isn't the workman happy when there is work in plenty? Isn't the miner, the farm-hand or any ordinary employee contented when he is working and earning his livelihood?

The answer is plain. Intelligence is a great asset. It is through intelligence that man has acquired the supremacy over the kingdom of life. To relinquish this great attribute even to a slight degree, is a backward step, and in the long run, may bring about serious results, even to the extent of slow yet progressive mental deterioration. It is the claim of many eugenic scholars that the decay and ultimate collapse of ancient cultures and empires could be traced to a differential birth-rate that was operating then, similar to the one existing now. These scholars sound the warning that unless society succeeds in reversing the vicious existing birth-rate differential, the present civilization will meet the same fate that has befallen the older cultures.

There are, however, a great many scholars and sociologists disagreeing with these views. Recent studies have shown that intelligence is not altogether and solely due to heredity, but is also partially influenced and affected to a very great extent by environment. There is an accumulated mass of evidence to show that undernourishment in early life affects the mind deleteriously and may cause permanent mental damage. Undernourishment or serious prolonged illness in a pregnant woman does also at times appear to affect the mentality of the child.

The influence of the home in early life affects the development of intelligence to a very marked degree.

Dr. I. Newton Kugelmass in a paper read at the Therapeutic Society at its last annual meeting has pointed out that mental growth is greatly retarded by malnutrition in infancy and early childhood, but may be regained by instituting sound and plentiful nutrition. He has based his findings on a study of 164 undernourished but mentally normal children. The children in question showed an average rise of twelve points on I.Q. scales when properly fed. He also pointed out that complete mental recovery is possible only if corrective measures are undertaken before or about the age of 4 years. Recovery is less striking when measures of dietary corrections are undertaken between the ages of 4 and 6 years. There was hardly any recovery in his cases after the age of six. According to Dr. Kugelmass, "the damage to mental growth by malnutrition is irreparable, if not corrected before the age of six years."

A very important study has been carried out by Freeman, Holzinger and Mitchell under the auspices of the University of Chicago.

These investigators have carried out an extensive study on a large number of foster children in an effort to determine whether or not the environment of the foster home had any effect on the intelligence of the adopted children. The tests used were the Stanford revision of the Binet-Simon Scale and the International Group mental tests. A great many

children were given a Binet-Simon test before being placed in the foster home.

Among other findings these authors summarize the results as following:

(1) "A group of children were tested before placement and then re-tested after several years of residence in the foster home. A comparison of their ratings on the two tests gave evidence of a significant improvement in intelligence. A study of certain sub-groups showed that the children in the better foster homes gained considerably more than did those in the poorer homes. Furthermore, the children who were tested and adopted at an early age gained more than those adopted at a later age. These facts appear to indicate that an improvement in environment produces a gain in intelligence."

(2) "A comparison was made between the intelligence of siblings (brothers and sisters) who had been reared in different homes. The correlation between their intelligence was found to be lower than that usually found for siblings raised together . . . These facts make it appear that a part of the resemblance between siblings reared together is due to influence of a similar environment."

(3) "A group of siblings were divided into two groups by putting into one group the member of each pair who was in the better home and into the other group the one in the poorer home. The mean I.Q. of the group in the poorer homes was found to be 86, while the mean I.Q. of those in the better homes was 95. An analysis of the conditions of

adoption made it seem unlikely that there was any marked tendency for the brighter member of a pair of siblings to be taken into the better foster home. A random formation of two groups from pairs of siblings would give groups of equal intelligence. The superior intelligence of the siblings in the better homes appears, therefore, to give evidence that the character of the home affects the child to a marked degree."

(4) "Two unrelated children reared in the same home were found to resemble one another in intelligence . . . This resemblance is probably due for most part to the similarity of their environment."

(5) "The influence of the home is further shown by the fact that there is a correlation between early placement and intelligence and (only) a slight relationship between the child's intelligence and the length of time he has spent in the foster home."

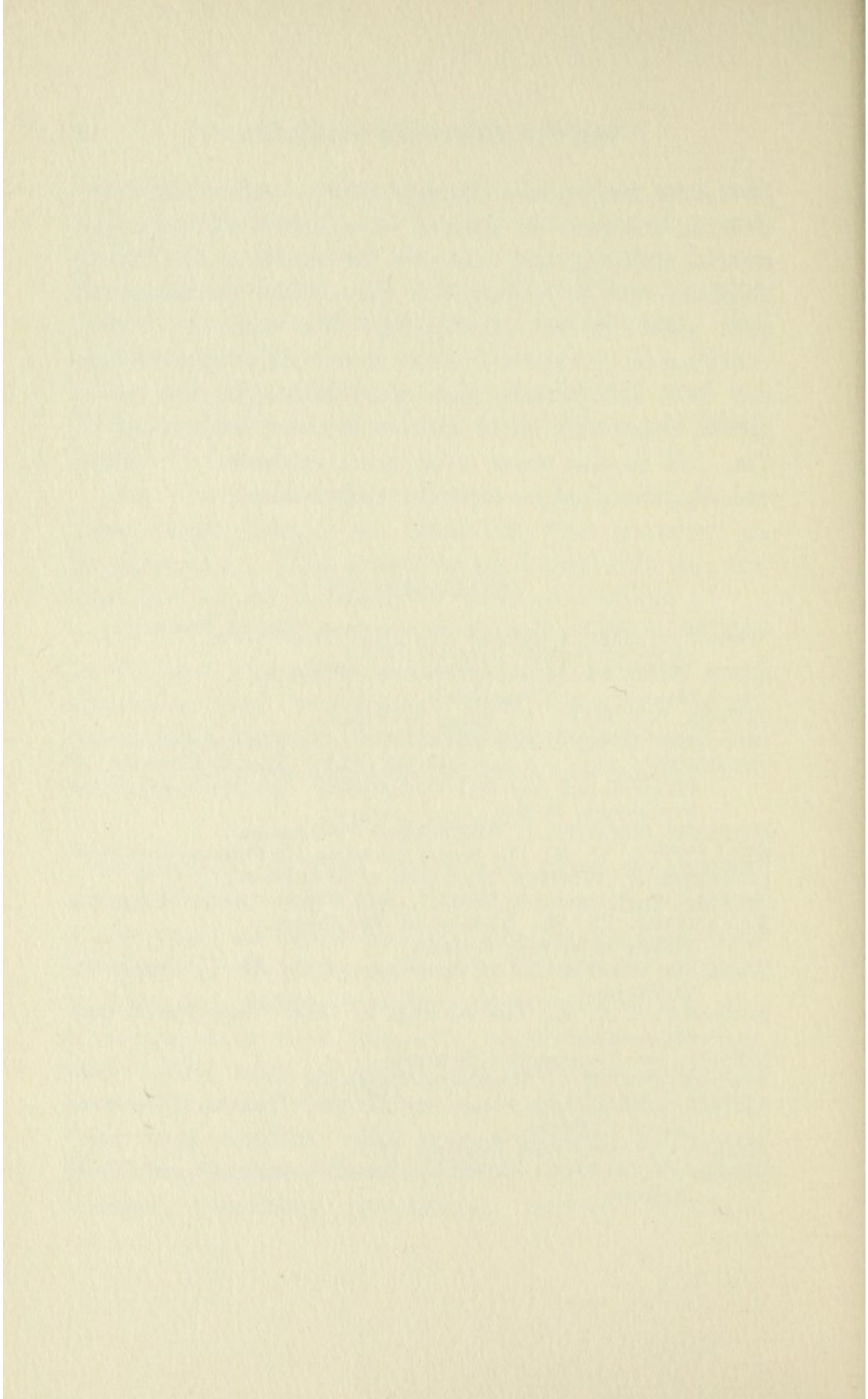
CONCLUSIONS

Regardless of what views one takes we cannot overlook facts which are pointing to serious defects in the trend of reproduction. We do see that those groups who are either gifted by nature or are in a position to create suitable environment for the offspring have as a rule very small or no families, while those who are either less gifted or otherwise unable to create suitable environment for the young have large families. We cannot say that all is well with the structure of society when about 50% of all women university graduates, women teachers,

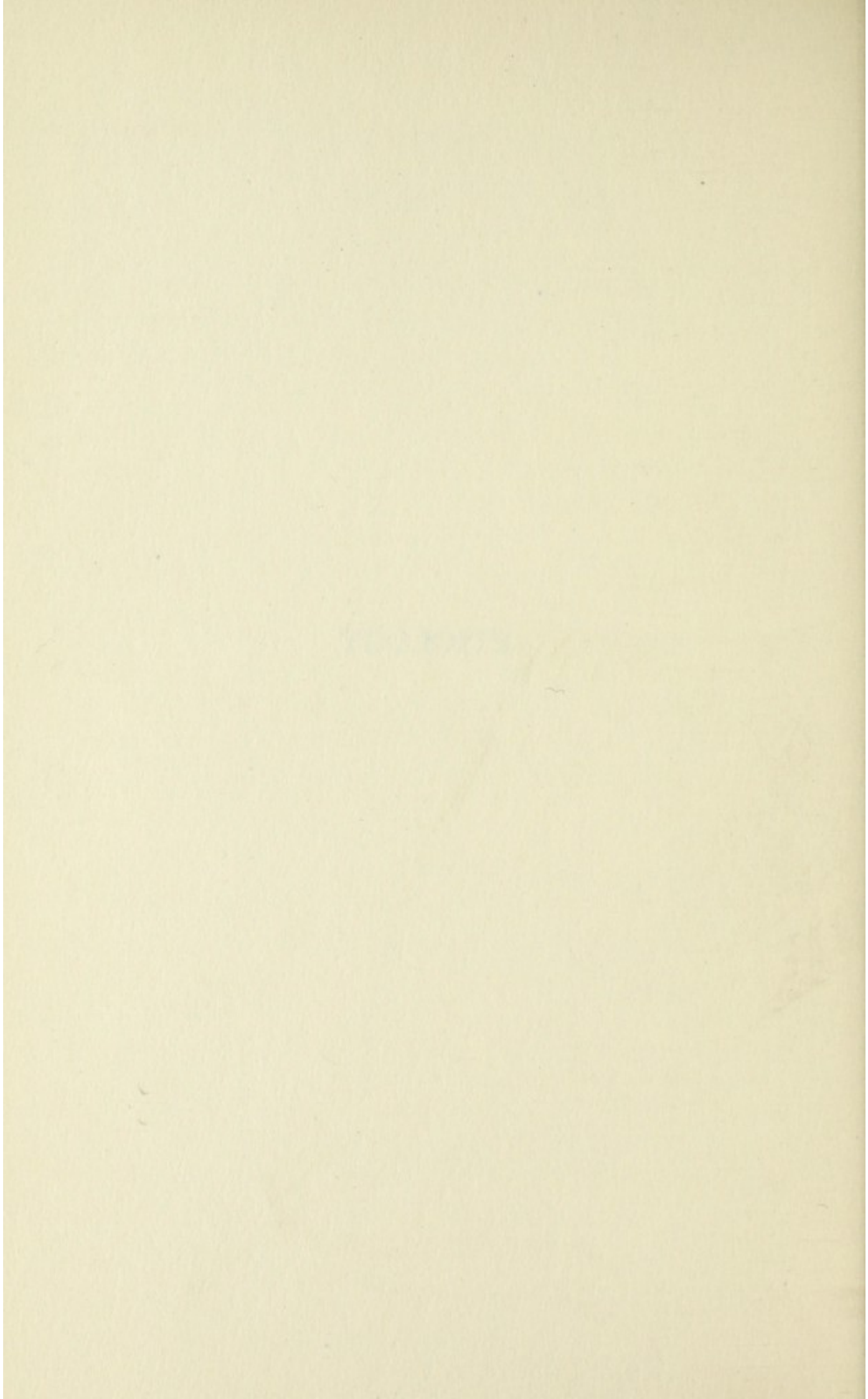
librarians and nurses do not marry. After all, these women, because of proven intellectual abilities and special training, are most fit for the task of rearing children and providing for them ideal environment and ideal home conditions. We cannot expect mankind to go forward in the march of progress when the best individuals, the most cultured, the most gifted, those who show success in every endeavour of life, fail in the most vital trust endowed in them, namely, the trust to reproduce their kind.

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ETIOLOGY



CHAPTER II

ETIOLOGY

The underlying causes responsible for a greater fertility rate in rural districts, than in cities, and also a higher fertility among the poor than in the well-to-do appear to be due chiefly to the fact that in the present state of society a high standard of living is incompatible with the raising of large (or even moderately sized) families.

(a) It is difficult to obtain suitable houses or apartments in the city when one has a large family. Modern and properly equipped apartments are built in most cases for the housing of small families. Large apartment houses are either antiquated or located in slum or near-slum districts. Rather than raise a family under adverse conditions, cultured or moderately well-to do people will rather limit the size of the family.

(b) **Birth Control:** Advice about birth control is quite easy to obtain in cities. It could be obtained either from the family doctor, or birth control clinics. Literature on the subject may be found on the shelves of any modern library. Lectures and open discussions on birth control are not of rare occurrence in cities. Contraceptives of all sorts are sold over the counter in almost any urban drug store.

Hardly any of these facilities exist in rural districts.

This factor alone is responsible to a very great extent for the marked differential birth rate between urban and rural districts.

Some eugenists have suggested that the difference in birth rate between the various groups may be partially accounted for by the fact that the upper classes are biologically less fertile than the people in the lower strata. This view is not supported by any data whatsoever. It is not rare to see that when people from the masses rise to fame and success, they at once become less fertile, although their sisters and other immediate relatives, who have not gained material success, are as fertile as ever. This suggests voluntary rather than biologic infertility to be the main operating factor.

In my practice, I have gained the confidence of hundreds of families. The patients usually give me an honest account of their most intimate family relationships. Invariably, they have told me that they voluntarily limit the size of their families. To be sure, that occasionally, we come across some families showing a great amount of partial sterility, due to a variety of causes, but these are neither regional nor are they confined to any particular group of society.

(c) Differences in the expense of raising children is also to be taken into consideration. In rural districts, an extra child is not much of a drain on the family budget. They are dressed simply and cheaply. Houses and grounds are usually spacious. Accommodations for one or two newcomers are

always ready. At an early age they are able to help along with some work in the field, garden or looking after poultry. Children on a farm are a real asset in the family. It is not so in the city. Children have to be well-dressed. With each arrival of a new child, the family has to move to a larger apartment and pay more rent. Mothers' help in the city is quite expensive. Children are a liability until the age of 18 or over. In the upper middle-classes and professionals, where a great many are sent to take training at a University, children are dependent on their parents for support until they reach the late twenties. It is, therefore, only natural to find large families in the country and small-sized families in the city. This tendency is of course more intensified in the middle and upper classes.

(d) **Late Marriages:** Late marriage is another factor to be taken into consideration.

People who are preparing for professions, careers, or those trying to get established in business, usually marry late in life. Data indicates that late marriages are either sterile or (as a rule) are of limited size.

It should be pointed out that the optimum period for the first child-bearing is between the age of 20-30.

In the first place a woman of twenty or over is fully mature, mentally and physically, and therefore, most adaptable for the difficult task. First labours are usually difficult ones. Vigour and strength is the greatest in the third decade of life. The uterus (womb) is most adaptable in that period for the first

labour. Obstetricians know that a first labour is usually very difficult after the age of thirty because the cervix, (neck of womb), is then rigid and doesn't dilate readily during labour. Lacerations in the cervix are more common after the age of thirty (in first labours) than in younger patients.

Furthermore, should the young people decide to have a normal sized family, (3 children or more), if the woman be over thirty at the time of marriage, there would be hardly enough time left for the proper spacing of children, which ought to be about 3 years apart.

Peureperal infections (fever in confinement) is more common in older patients than in younger ones.

Again, a child is dependent on mother's care and guidance for many years after birth. A mother between 45-60 (if child be born close to the age of 40) is not likely to be as efficient as a younger mother would be in this respect.

Some pseudo scientists have advanced a theory that in most cases, gifted children are born when the parents are about the age of 35 or over. Based on this theory, they encourage late marriages. In support of this view they point out that the first-born is usually the 'dullest'. This finding is, however, not supported by statistics. The Brock Committee has found that there appears to exist no difference in the incidence of retarded or feeble-minded children in respect of the place or order of the child in the family. Of course, the first-born always runs a greater risk of injury at birth because of the usually

more difficult labour, but that risk increases considerably with the age of the mother at the time of the first confinement. The erroneous idea has probably arisen from the fact, that, gifted children usually have parents of mature age. But age really has nothing to do with it. It is a mere coincidence, simply, because intelligent parents have developed a fashion of (or compelled by circumstances to) marrying late in life.

(e) **Economic Conditions:** One of the foremost factors in the postponement of marriage and the delaying of having children is economic insecurity. We live in an environment which is all the time becoming more difficult for young people to find gainful and steady employment. Intelligent people will not plan marriage unless they are fairly sure that they are able to support a family within a certain standard. There are also a great many young men and women who when finding gainful employment are burdened with the upkeep of an old parent or other dependent. Many a nurse, teacher or clerk will forego marriage because of having to take care of old or sick parents.

(f) **Attitude Towards Marriage:** Marriage is looked upon by most people as a personal convenience. Very few marry with the thought of performing a social duty.

In rural districts, men or women hardly have another alternative. Either they marry or otherwise they must spend their lives in lonesomeness. Social functions are far and wide apart in the country.

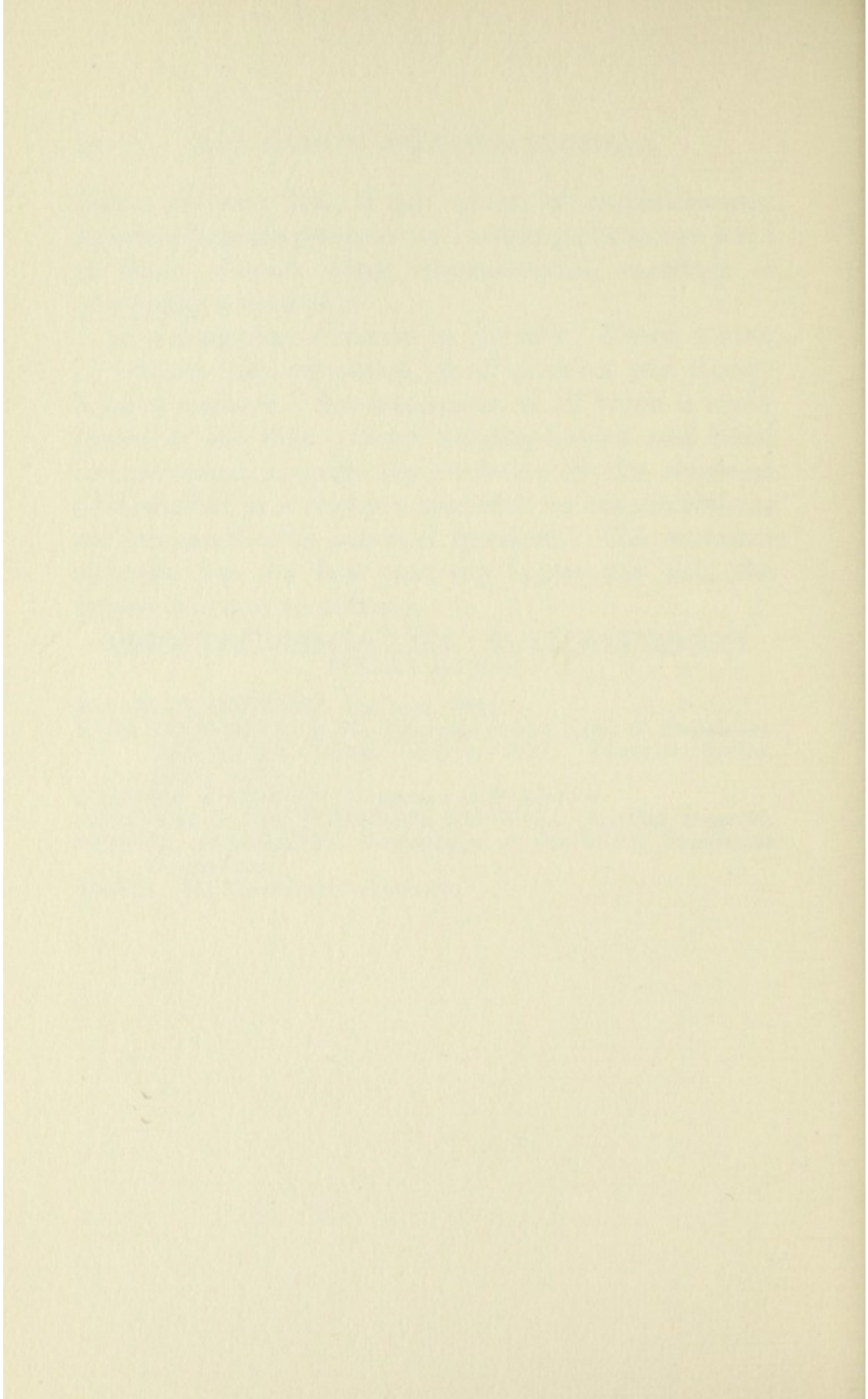
There are very few, if any, places of entertainment. Suitable boarding-houses and lodging-places are hard to find. Under these circumstances, marriage is practically a necessity.

It is altogether different in the city. There, a man or woman with education, good position and money is not lonesome. Entertainment of all kinds is easily found in the city. Good lodging-houses and hotel accommodations gives the bachelor all the comforts of home-life at a cheaper rate with no responsibilities and no sacrifice to personal freedom. This accounts partially for the fact that the larger the city, the greater the rate of celibacy.

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CONSTRUCTIVE RECOMMENDATIONS



CHAPTER III

CONSTRUCTIVE RECOMMENDATIONS

From the very brief survey in the previous chapter of the main causes that are leading to a differential marriage and birth rate which is negatively related to intellectual cultural development, it is evident that in order to reverse the present trend many changes in our social life have to be advocated.

(1) Housing conditions, especially in large cities, must be changed so that families with children be able to find accommodation with modern hygienic conveniences in respectable districts. Cultured people will not agree to have children raised in the slums. Regulations must be made in such a direction that it will be profitable for builders and owners of real estate to erect such homes and apartments. If this be impossible, the government must undertake to supply such accommodations. It may be advisable to raise taxes on small houses or apartments and reduce correspondingly taxes on larger ones. A municipal council with an eugenic outlook may limit the erection of bachelor-apartment houses in the municipality to within a certain ratio of the erection of larger accommodations. Such and similar schemes may go a long way towards correcting the housing conditions in cities.

(2) The economic system must be altered in such a manner that young people in the twenties be able to support a family. This, of course, is a subject all by itself. It is not here the place to discuss it at length. It is, however, in order to state that such proposals as unemployment insurance, sickness insurance, mother's allowance, the retiring of men from all sorts of work at the age of sixty, with an adequate pension, and similar reforms, have positive eugenic values.

We are accustomed to look on economic depressions as being temporary in nature, leaving no appreciably permanent damage on the progress of society. Little do we think that a business depression, lasting for a number of years, deprives millions of young people of the opportunity of getting married and raising families. Because of the depression, some have postponed marriage temporarily, while many others will never marry. Data shows that millions of young, fit and able people who struggled against 'bad times' and yet managed to get along without government relief had to postpone marriage indefinitely, while those on relief and living under most unhygienic conditions, have married and were breeding as fast as ever.

A severe economic crisis creates a definite tendency to accentuate an already existing negative differential marriage and birth-rate. A maladjusted economic system may be retained for long periods, either by force, giving dole or any other means, but it is only a matter of time (a few generations) when a country with a sound economic system will get ahead

in cultural development to such an extent as to leave all others (with less sound economic policies) far behind.

(3) The extension of efficient birth control clinics into rural and industrial districts may have positive eugenic merits. By giving instructions to those who are already overburdened with the care of large families, also by providing these people with suitable contraceptive devices, a great charitable and humane deed may be accomplished. At the same time, it will also help considerably towards the levelling of the existing differential birth-rate. There is positive eugenic value (and social value as well) in giving birth control advice to dull and retarded people no matter where they live. Among the retarded it is urgent to establish very efficient clinics, staffed by tactful and clever workers in order to meet with some degree of success. Retarded people learn very slowly. It requires a great amount of patience and tact on the part of the worker before one may expect to get any co-operation from these people.

(4) By far the most promising effort appears to me to be in the attempt of changing the attitude towards marriage. We must preach that marriage besides being a social convenience has a greater and nobler purpose. We must bring to the attention of the young people that men and women have been entrusted with a sacred trust, the germ of life. Therefore, marriage is not only a state of convenience but more so an act of honour and duty. This ideal must be taught in many different ways and through

many avenues of distribution. It should be embodied in sermons, anecdotes, story, novel and play. The advantages of marriage and home-life must be vividly shown to the young. An earnest effort must be made to do away with some of the disadvantages of married life. It is within the field of eugenics to study the causes that lead to happy marriages, and to pass on such knowledge to young people . . . It is within the field of eugenics to study the causes that wreck married life and warn young people against them. I think that one of the reasons why eugenists have met with little success in their efforts to promote the fertility of the fit, is because they have laid too much stress on scientific methods and very little stress on the creation of a strong moral appeal. Moral appeal is indeed the foundation of social progress. Take, for example, loyalty. It is only a moral concept. Yet, in the name of loyalty, men will face danger and death bravely and cheerfully. It is the moral force, more than all other forces combined, that keeps society intact. It is quite logical, therefore, to teach that there can be no true and lasting loyalty unless each fit individual is willing to help in the perpetuation of society.

(5) The present economic structure based on a system of profit makes it extremely difficult for the married man to compete with the single man or woman. The slogan of the workers of "equal pay for equal work" makes the problem still more complex. A society that is properly constructed would naturally allot more of its possessions to the

head of a family with dependents than to an individual with no dependents. But in the present system of society this is unconceivable. To offset this defect, governments in many civilized countries have adopted a system of differential taxation. Under this system, heads of families are given greater exemptions from certain taxes than single men and women. This, however, touches only the very edge of the problem. Tax exemptions are applicable only to direct taxations such as income tax, business tax and inheritance tax (or succession duty), but these constitute only a very small portion of the governmental income (probably less than 10%). The main income of the government is derived from indirect taxation such as land and property tax, custom and excise duties, sales tax, etc. All these taxes are paid alike by all citizens regardless of whether married or not.

The bachelor tax in France has some eugenic merits, but is of limited value. With all the differences in taxations it is still much cheaper to stay single than incur the expenses and responsibilities of maintaining a family.

A partial remedy suggests itself through the medium of government employment. At present, the government is the greatest single employer of labour. From 15%-20% of the entire population is employed by the government in one form or another. By government employment, I mean all phases and types of government and employment.

These include the municipal, state and federal

governments with a very wide range of work. Health, education, police and fire protection, some public utilities, forestry, road construction and many other major projects are under direct government control. In these groups, an effective eugenic program can easily be introduced.

The practice should be to start young men (whenever vacancies arise) at an adequate salary. With marriage the salary or wage should be immediately increased sufficiently to take care of the extra expense. With the arrival of each child further wage increases should be made corresponding with the added expense. The maximum increase should be fixed with the birth of the third or fourth child. Thereafter, no further increase should be made with additional children. The extra allowance for children should cease when the respective children attain the age of eighteen.

Of course, exceptions may have to be made in certain cases. There may be some individuals who excel greatly above the average in intelligence or other attributes. It may be advisable in such special cases to continue increases in salary even after the birth of the third or fourth child.

Likewise, men of sixty in government employment should be retired on an adequate pension. The retirement should be based not on ability to continue in his work, but with a view of creating positions for young people.

The right of enforcing such a scheme can hardly be questioned. The home and family form the backbone

of society. Those who refuse to be home-builders must not capture social jobs and positions in competition with home-builders. These regulations should be enforced with all employees, all the way through, from junior clerks to high executive officers, or from average school teachers to University professors.

A regulation of this nature will also have a tendency to alter the fashion of celibacy. Men in government offices are men of reputation, when they are married, others will copy their type of living. When the purpose of such a plan be properly explained, there is no doubt that many heads of private concerns, who are conscientious and loyal to society, will adopt similar policies in their enterprises.

(6) In addition to all that was stated here, there is also another way of guarding the intelligence of the people. Up till now, we were dealing with data and spoke in terms of averages. At the same time, however, it must be stressed that the individual with outstanding ability, deserves more attention than has been hitherto given. Children with superior abilities appear among all groups of society, although less frequently in some groups than in others. These should be given all assistance necessary for the development of their innate capacities. About 0.5% of all children in the United States and Canada give an I.Q. index of 140 and over. It is reasonable to expect that, given the opportunity, these may grow up to become real leaders of men. These should be educated and maintained at public expense until their

abilities have been fully developed. Considering the small percentage of such gifted children, the public expense of educating and maintaining them will be slight in comparison to the benefits that society may derive from their leadership, learning and discoveries. One Lincoln, Banting, Pasteur, Edison or Marconi pays back many times over again the amount that the public may spend on all the gifted children of a generation put together. In this class should be included not only children with high I.Q. indices, but also such who may excel in different arts such as music, painting, dramatics, poetry, etc.

There is a current belief (even among the educated) that true genius is never lost. Somehow, the genius, (so it is claimed) is able to overcome all sorts of difficulties and is ultimately bound to climb to the top. This idea should be most vigorously protested against. Even if this claim be true, it is most cruel and inhumane to let a future or possible benefactor of mankind fight through his own way unaided to such an extent that at times, even of being obliged to deprive himself of his daily necessities. But this belief is, however, contrary to actual findings. Witness the fact that in the last few generations when educational opportunities have been extended to larger groups there has appeared an unusually great crop of highly cultured men, as well as a great amount of real genius. Had these opportunities not been extended, we have reasons to believe that many of those great men would have never succeeded to develop their innate abilities. Indeed, they have

appeared in much smaller numbers before such opportunities have been widespread.

Among the children of the immigrants who come from undeveloped countries, there are found many who really possess superior abilities and attain success. The fathers and mothers of those children, in most cases, were just as ^{well} much endowed, but because they have lived in backward countries, they have had no opportunities to develop their innate capacities and have remained ignorant and achieved nothing of value.

To be sure, that if such a policy will ever be adopted, there will be some disappointments. A good proportion of those who show promise of greatness in childhood may fail to live up to them for various unforeseen reasons. But this furnishes no argument against the adoption of the scheme. Failures are the rule in every enterprise or endeavour. Let us take, for example, the methods that are used for the development of natural resources of a country. Practically, in every case on a slight prospect of a 'find', individuals and governments are prepared to spend millions for developing purposes, in spite of the fact that most prospects end in failures. Yet if we were to refrain from spending for fear of failure, the natural resources could not be brought up to the surface. The prospect of success among the gifted children is many times greater in comparison to what one would expect from any mining or similar project. The real assets of a country ^{is} not to be measured in terms of gold and silver, but in the great

attributes and qualities of men and women. The key to this treasure is hidden within the gifted children of the people.

SCHOOL MEDICAL OFFICER

This office could be taken advantage of and be made the most productive research department in the interest of eugenics. At present, the school medical officer is doing excellent work and is recognized by many boards of education as indispensable. On many occasions, the medical officer makes an attempt to test the intelligence of all the children under his command, and sometimes, reports of such tests are being published. These reports are, however, of little value, because firstly they are sporadic, and secondly, there is a lack of uniformity in the tests. Each examiner employs different methods and standards in the testing of intelligence. The picture, (as obtained from these reports), is often fragmentary and confusing. To make this office fully efficient and worthwhile, from the eugenic viewpoint, (its efficiency from a health standpoint is fully recognized), we must adhere to the following regulations:

- (1) The School Medical Officer should be under the supervision and part of the Provincial or State Board of Health.

- (2) The School Medical Officer should not be chosen because of holding a good reputation as a general practitioner, but he should be required to take a training specially designed for that purpose. In addition, to other requirements, he should receive

a training in psychiatry; psychology, theoretical and practical; to be able to perform and interpret mental tests and also to be able to draw up and interpret family pedigrees accurately.

(3) In addition to other duties, it should be the duty of the School Medical Officer to give all pupils in his district, attending public schools, a mental test once a year. Provisions should be made that all pupils within a given State or Province to undergo an intelligence test once a year. In rural districts where there is no resident medical officer, a travelling officer can be appointed for that purpose. The test and scale should be the same and uniform throughout the entire Province or State.

(4) If it be discovered that a child falls below 65 I.Q. for 3 consecutive years, the case should be reported to the provincial board of health. In all such cases it should also be required to study carefully the family pedigree and report results to the office of the provincial board.

(5) The same procedure should apply also to superior children, i.e., the students who give tests of over 130 I.Q., for 3 consecutive years, and also those who show unusual talent in arts, music and dramatics.

Should a policy of that nature be adopted, it will be only a matter of time before we shall have definite and fairly complete information in regards (1) the incidence of feeble-mindedness; (2) the extent to which feeble-mindedness, on one hand, and superior intelligence or talent on the other hand, are due to heredity. (3) The average level of intelligence of

the community; (4) Fluctuations in the average level of intelligence within a given period or periods. Data based on these findings will yield fairly accurate knowledge as to whether the average level of intelligence is on the decline or on the upgrade. Such information would be of very great value to the national welfare of any country.

The taking of census at certain periods has long been recognized as of vital need in almost all civilized countries the world over. Much effort, time and expense is given to the gathering of data which show the growth, strength or decline of the respective people in its various phases. If it were possible to add to these an item relating to the intelligence of the people the census would verily become a living organ in the make-up of society. Intelligence is a great asset. The soul of society. It behooves that society ought to take stock of this great asset at any cost.

I think that these proposals ought to be seriously considered. It is my opinion that the reason why the public is either indifferent or opposed to many eugenic proposals, is because of the controversial and confusional data given by different investigators.

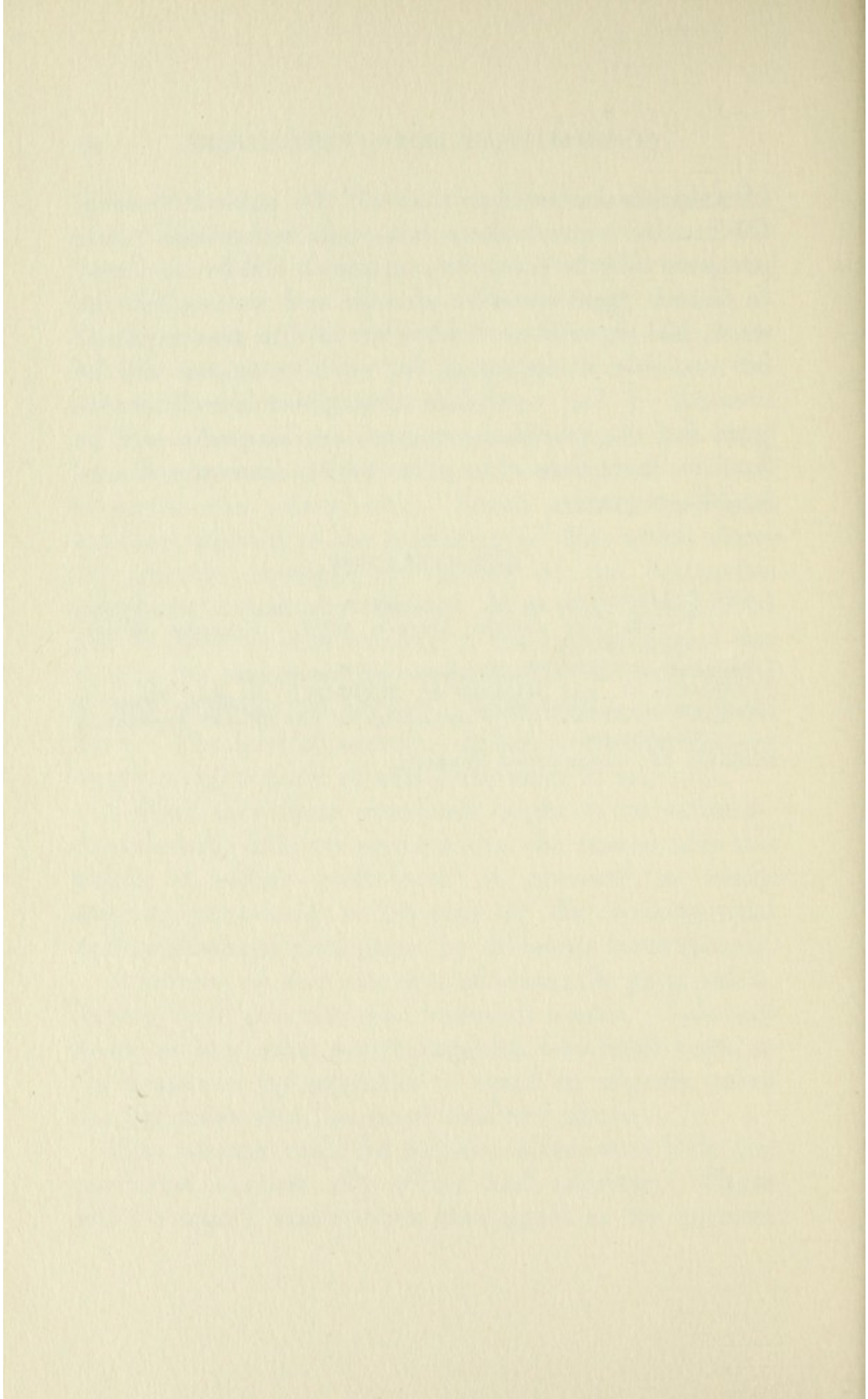
A scheme of that nature is of unusually great value, having both practical and research merits. I do not know of any other single measure that have been so far proposed by eugenists to equal in eugenic value the program that has been outlined above.

This scheme could be put into effect with little (or moderate amount of) effort and expense. These will be repaid many times over again in the amount

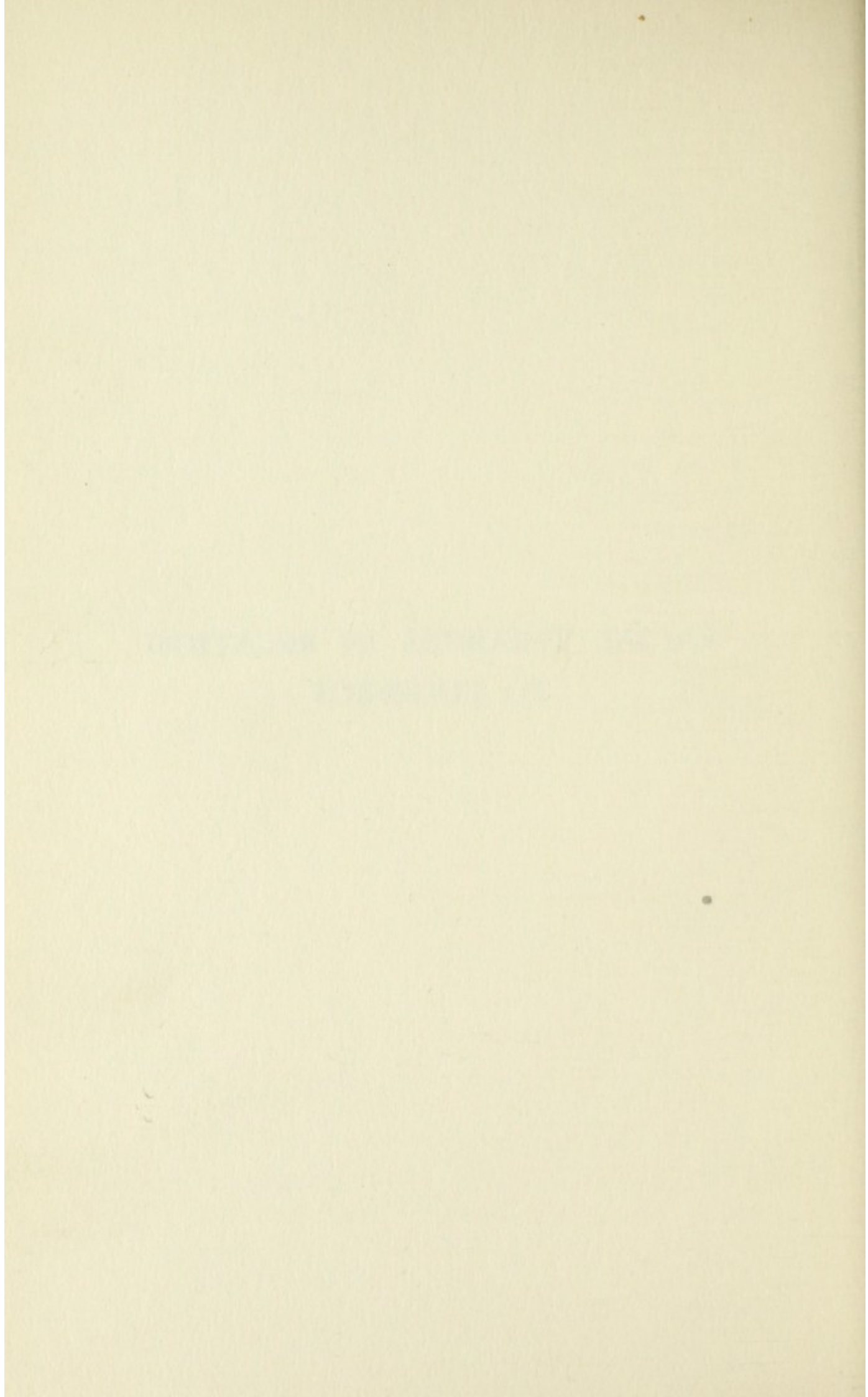
of valuable knowledge that will be gained thereby. Of course, it may take a few years before the entire program may be put into practice. It will be necessary to train a great number of men and women for the work, but there is no doubt that in due time men will be available if openings for such positions will be created. I feel confident that great laurels are in store for the province, state or country who will be first to introduce this plan in its educational and health program.

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RACIAL THEORIES IN RELATION
TO EUGENICS



CHAPTER IV

RACIAL THEORIES IN RELATION TO EUGENICS

Historical

Speculations about race origins have been of widespread occurrence through all ages and people. Every nation or tribe of antiquity had its own legend about its respective ancestry. There has existed a similarity in the purpose and nature of all these legends. Each tribe boasted in the belief that his ancestry was the best and noblest of all mankind. Some tribes have endeavoured to trace their origin to gods or semi-gods. In times of peace, the legends, stories and anecdotes have served the purpose of uniting the people in a common brotherhood; in times of war, as an inspiration for valour and courage. The conquerors have always considered themselves to have arisen from a better and nobler stock than the weaker people whom they have conquered.

The ancient Greeks used the argument of 'better birth' in an attempt to justify slavery and the brutal treatment of captives.

Thus Aristotle states "Nature herself has destined some men to rule and others to serve, since to the former she gives higher capacities and to the latter the brutal strength of animals. The right of master

over slave is like the right of man over beast. This relationship is also in interest of those in subjection since they have no reasoning power and need the guidance of those who rule over them. The conquering people is always superior by all excellent qualities. And so barbarians are born to be slaves."

The Romans have believed that the Patricians possessed better blood than the Plebians. Patricians were not permitted to marry Plebians on the theory that such intermarriages must result in pollution of the pure Roman blood of Patricians. This theory was used as an argument against the granting of franchise to the masses or Plebians.

During the middle ages the aristocracy of all lands have claimed to have sprung from better stock than the peasantry or masses. Because of the claim of pure parentage the rich reserved for themselves the 'divine right' of exploiting the masses and ruling over them with an iron fist.

A ray of hope appeared in the beginning of the 19th century. For a while it looked as if all these theories, prejudices and privileges based on birthrights will disappear forever. These hopes were based on two major happenings.

(1) France and the United States ^{had} overthrown the rule of the aristocracy and instead ^{had} formed democratic governments ruled by the people.

(2) The science of anthropology began to develop by leaps and bounds. By means of scientific investigations, anthropologists made startling discoveries about ancient life and movement of races

in the dawn of history. By means of excavations, great discoveries came to light. The cultural life of the ancients was carefully traced back through the unearthing remains of arts, architecture, tools, weapons, historical records and alike. The differences and resemblances of man began to be traced through the finding of skeletons in different parts of the world and at different levels.

By carefully measuring these skeletons and the different parts thereof in relation to one another, scientists have arrived at definite conclusions in regards to the physical appearances and conditions of men in different stages of history. It appeared only natural to believe that with further advances in the science of anthropology an end will soon be put to all speculations in regards to the origin of man.

All optimistic hopes became evaporated towards the end of the last century. Side by side with the development of anthropology sprang up a new psuedo-science named by some adherers, Anthropo-Sociology, laying the foundations for modern race theories. Generally speaking, these new theories about race origins were in reality old theories but remodelled and dressed up in scientific settings. All these new theories had one and singular purpose. They all endeavoured to prove that the present European aristocracy and the well-to-do, are the descendants from an old heroic Nordic race whose origin has been traced to northern parts of Europe. These early Nordics (according to this theory) excelled all other races in great attributes. Physically,

mentally, spiritually, morally and in virtue they towered above all other races of men. These great attributes of the Nordics have passed on from parents to offspring even to this day. Nordics, according to this theory, are supposed to be living now mainly in Germany and Norway. In smaller concentration the Nordics are also supposed to be found in England and France.

It is further claimed that practically all the achievements of man from the early days in history up to the present ^{time} are attributable and can be traced chiefly to the Nordics.

The chief originators of this theory were Count Arthur Gobineau; G. Wachter Lapouge (French), Otto Ammon; (German) and Houston G. Chamberlain (English).

These theories did not receive many followers in England or France. Neither Gobineau nor Chamberlain were awarded with any recognition at home. Not so in Germany! Towards the end of the last century Germany became extremely nationalistic accompanied by an extraordinary growth of racial pride and arrogance. The Germans began to look down with scorn and disdain on the 'inferior' Latin, Celtic and Slav people. In these new theories the Germans believed to have found 'scientific' justification for their vain pride. Pride soon turned to impudence. In their illusion they saw the Germans to be the chief descendants of the noble race and thus destined by nature to dominate the world. H. S. Chamberlain became the real hero in Germany.

Ex-Kaiser William II used to refer to him as 'my Chamberlain'. The Kaiser himself used to read the chief works of Chamberlain to his sons. An edict was passed to the effect that the works of Chamberlain be distributed among the officers of the army. Free copies of Gobineau's and Chamberlain's works were placed in many libraries throughout Germany. It is claimed by many authorities that the precipitation of the World War was partially due to the race madness which made the Germans so exultant as to believe that they have the right as well as the power to dominate the world. The Nazi ideology of the Third Reich is based on the very same belief.

Race theories found a fertile ground in the United States of America. Gobineau's books were translated into English in the early sixties of the last century and widely distributed with the purpose of justifying slavery in the United States. An extensive literature sprang up in the days preceding the Civil War, attempting to prove that the Negroes belong to the most inferior races of men, and thus born to serve, and to be slaves.

The theory of Nordic superiority was imported into America by a great many authorities on the subject of eugenics. These theories were largely used in the United States in arguments on behalf of restricting immigration to the United States from Eastern Europe, on the grounds that the Latins and Slavs (some also included Irish (Celtics)) are morally and mentally inferior to the noble Nordics. It matters not whether the Immigration Laws of 1924 in the

United States were enacted in benefit of society or not. I shall not discuss this here. But it matters a great deal that in this particular instance scientific facts were distorted for political aims. This is a dangerous practice. Such practices are apt to undermine the very roots of society.

ANTHROPOLOGY IN RELATION TO RACE

It has been established that all men are members of the species, Homo-Sapiens. There is no perfect definition of the term species. The term as is used in biology designates a group of animals that is distinct in its anatomic, physiologic, pathologic, and psychic characters; which does not grade freely with any other group; which interbreeds and produces offspring that are alike the parents (usually) within the group. Under this definition, all men belong to one species.

Homo-Sapiens appeared late in the evolution of life. The existence of modern men is probably not more than 20,000 years. The divisions of men into distinct lines, called races, came about through migrations of early men into different regions of the earth and settling in the most habitable parts. Travelling in early days was extremely slow, difficult and dangerous. In most instances large groups lived in narrow ranges of territory for immensely long periods of time and through the effects of various factors became to look different from the men who lived in other parts of the world. Thus were formed the three large races of men,—White, Yellow-Brown and Black.

The factors that were chiefly operating in the differentiation of men into races were (1) climatic, (2) exposure to disease, (3) means of sustenance, (4) inbreeding, (5) encounters with animals, (6) warfare with nearby tribes, (7) and cultural development.

As time went on, further differentiation was recognized within the respective races, and these are called sub-races. Sub-races were formed by similar processes that were responsible for the formation of the main races but on a smaller degree. For example, people living in Northern Europe were subjected to a climate, soil and vegetation that was entirely different from those living in Southern Europe but the degree of difference was less marked than that from Northern Europe to Africa. The chief sub-races of the white men are (1) the Mediterranean Race; (2) The Alpine Race; (3) the Nordic Race; (4) the Australian Race; (5) the Hammitic Race; (6) the Semitic Race. The chief sub-races of the Yellow-Brown race are (1) The Mongolian Race; (2) the American Indian; (3) the Malay Race. The chief sub-races of Black Race are (1) the Negro Race; (2) the Negrilo Races, and (3) the Bushman. For the purpose of this discussion I shall dwell very briefly only on the sub-races of the White Race.

THE MEDITERRANEAN RACE

The Mediterranean Race is characterized by a white to tawny skin, darker than that of the Nordic. The skin tans very easily. The eyes are medium to dark

brown. The stature is medium height. The head is usually long and narrow and the back of the head projects considerably. The hair is usually dark or black; may be straight or loosely curly. The face is oblong. The lower jaw of medium strength. The nose is usually straight and comparatively broad. The lips are well curved and usually thick. The Sumerians, Phoenicians, the Cretons, and Persians were the best known representatives of this stock.

THE ALPINE RACE

The Alpine Race is characterized by skin that is intermediate between dark and fair. Hair mostly brown or black. Head is broad, high and protrudes only a little in the back. The nose is straight, usually broad. Stature is usually medium in height with a tendency towards a heavy build.

THE NORDIC RACE

The Nordic Race has a very fair complexion, which does not tan readily. The hair is light or golden in colour, straight or slightly wavy. The head is long and high, the face long with prominent features. The nose is long, straight and narrow. The eyes are light blue. Stature is usually ~~very~~ tall.

THE HAMITIC RACE

The Hamitic Race is characterized by dark brown or black hair, moderately coarse. Skin usually brown. Head long, narrow; long face, lips usually thin or medium. Stature medium or sub-medium, usually slender in build. The Egyptians and other groups around the Nile were chiefly of the Hamitic stock.

THE SEMITIC RACE

The Semitic Race is characterized by black hair, long face, dark eyes, curved nose. Skin is white, tans easily. Stature is medium or a little above medium with a tendency to slender build. Arabs and Armenians are the chief representatives of this race.

With the advancement of men's knowledge and skill, travel became easier and more safe and men began to spread far beyond their original domain. Distant tribes met with one another. Sometimes they have united in peaceful treaties for commercial or protective purposes. At other times they have met on the battlefield. Conqueror and captives have settled together, intermarried and mixed. In the course of time (a few centuries) a new form of society was formed, namely, **peoples or nations (or ethnic groups in Anthropological terminology.)** These new groupings were no longer based on racial lines but on broader social combinations. Nations or peoples were composed of members of different racial stocks who combined either through conflict or friendship to form one large unit for political, cultural, commercial and protective or aggressive purposes. This form of society has survived ever since the early Egyptian and Babylonian empires, even up to the present days. The great empires of the past were chiefly composed of members from Mediterranean, Semitic and Hamitic stocks. The mixing and inter-marrying between different races was greatest along the routes of trade and culture. Away from the main routes of civilization there lived less daring and more primitive

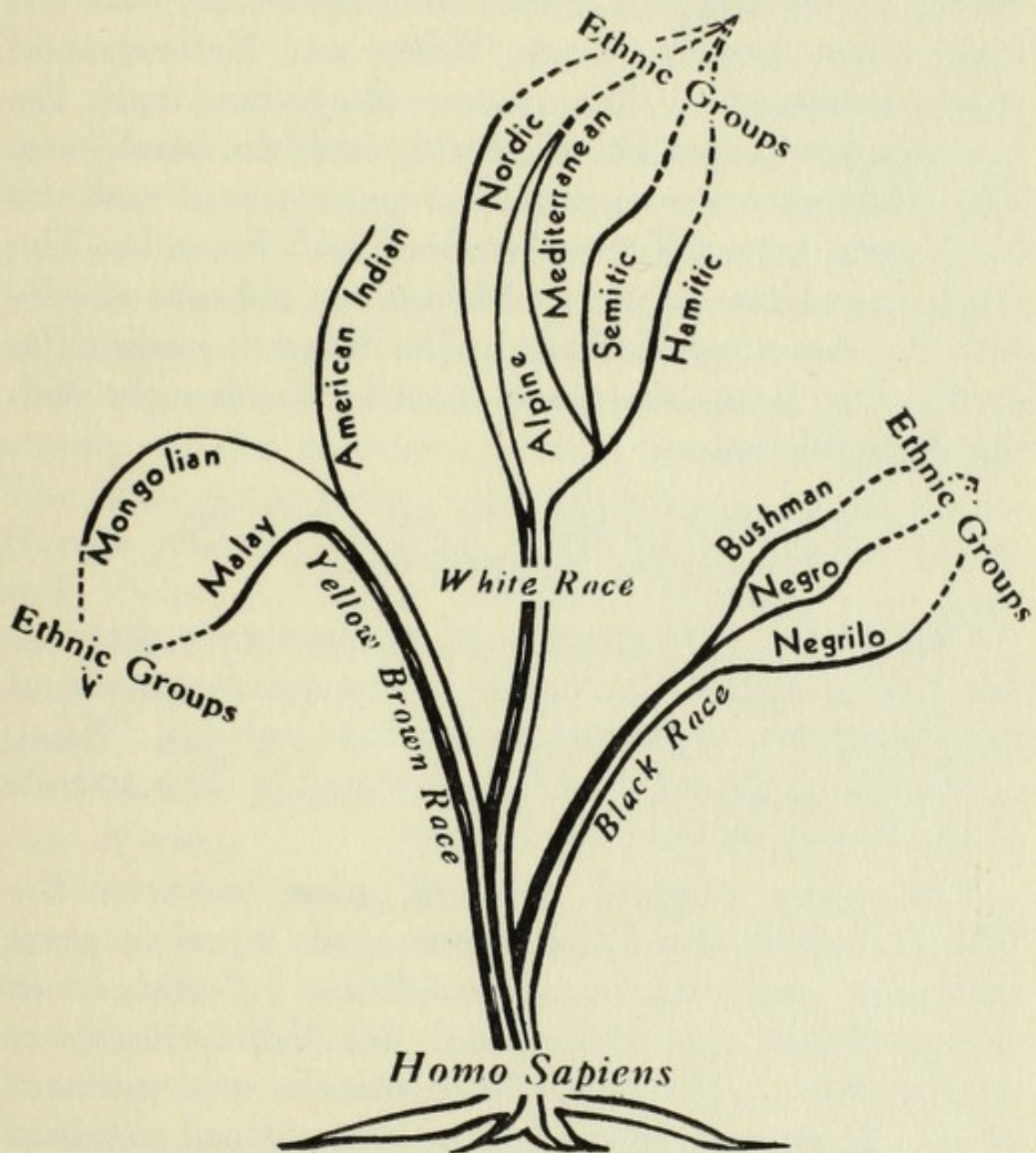
tribes who have maintained their racial lines in comparative purity.

The culture of the East was brought into Europe by traders and explorers from Asia Minor. These were chiefly composed of Semitic and Mediterranean stocks. They have settled in Greece and Rome and mingled with the then existing population who were chiefly composed of the Alpine Race and also of some Nordics.

The chief habitat of the Nordics, however, was at that time in Sweden, Norway, Germany and parts of the British Isles. The Nordics at that period, even though great warriors and conquerors were somehow not yet fully matured and ready to receive and benefit from the great learnings and achievements of the East. The Nordics have retained the racial features (according to Greek historians) with comparative purity. There is, however, no doubt, that, even in that early period (1000-700 B.C.) they have already been mixed to some extent with the Celts, who were chiefly of the Alpine stock.

At the present time, the sub-races of the white man have long ceased to exist as distinct groups. Everywhere in any European country, we meet men showing mixed racial features. Tall men with broad heads and black eyes or short men with blue eyes and light hair or any other combinations of mixed racial features, are not rare to be found even in members of the same family. Mixing of types, (within the white race) is not a rarity in highly civilized communities, but is, indeed, the rule.

The classification of men is illustrated in the accompanying diagram:



The diagram gives only a rough outline of the races and sub-races of men for the purpose of simplification. To give a better sketch of the classification of men an important correction must be made. The diagram leaves an impression that the main races, namely, Black, White and Yellow stand apart, unmixed. This is not altogether true, the Hamites have mixed considerably with the black race. The white race is also mixed to some extent with the black race especially in America and France. The Americans have also some Mongolian mixture chiefly with the American Indians. The Russians, especially in the Far East, also have mixed considerably with the Mongolians.

RACIAL THEORIES IN RELATION TO RACIAL ACHIEVEMENTS

One of the first apostles of modern race theorists was Count Arthur Gobineau. The fundamentals of the theory are contained in his first volume, "Essay on the Inequality of the Human Races." The essence of the theory briefly is as follows:

The three original races of men, namely, the White, Yellow and Black, were never equal in great attributes and innate potentialities. Foremost in creation stood the White Race; the Yellow Race was next in rank. The Black Race was the most inferior of all. In its primitive form, while pure and unmixed neither of the races could make good use of their innate capacities. However, in the course of years or centuries the white race, in the plateau of Central

Asia took to wandering east and south. In the course of the wanderings they mixed freely with the natives. Those wandering to the east mixed with the yellow races; those wandering to the south mixed with the black races. The new combinations resulted in the formation of new white races. The Semitic races and the Hamites have resulted from crosses between the White and Black, while the Germans, English and Russians have sprung from crosses between the white and yellow races. In the mixed form the white race became capable of developing his innate potentialities and culture began to spread on earth.

The greatness of men or races depend entirely or mainly on the amount of white strain in his blood. The most white strain, least diluted was found in the Nordic groups inhabiting chiefly in England, France and Germany. The present Nordics are the descendants of the people who in the past up to the ~~very~~ present time, were the only ones who have created anything of worth and value. The present Nordics like their ancestors truly belong to the noble race of men.

The other races likewise rank in greatness in proportion to the amount of white strains in the blood. Mixture with black blood, no matter how thin or diluted, (chiefly Semites) has a tendency of lowering the creative ability of men. The only achievement that white-black hybrid is capable of is that of artistry and imaginative power. All the other attributes belong only to the noble race. Gobineau summarizes his theory in the following words: "I

have become convinced that everything in the way of human creation, science, art, civilization, all that is great and noble and fruitful on the earth, points towards a single source, is sprung from one and the same root, belongs only to one family, the various branches of which have dominated every civilized region of the world."

This theory marks the birth of (1) the myth of Nordic or Aryan superiority; (2) the claim of the Aryans to have a right to world supremacy and domination; (3) a scientific pretence for anti-Semitism (which unfortunately became synonymous with anti-Jewishness) and (4) the chief provoking agent for universal race prejudice.

nations
Gobineau's theories were received in the upper and learned German circles with great enthusiasm. However, they could not be fully accepted for these theories were lacking in sufficient scientific or historic support. They did not fit in well with the theories of evolution and anthropologic findings. Gobineau's popularity was quickly replaced by H. S. Chamberlain upon the publication of his "Fundamentals of the 19th Century". Chamberlain had no definite new theory to offer but he became outstanding because of the fact that he became the favourite of the ex-Kaiser and also because he was the first and foremost among the race theorists to pervert scientific facts for political or super-national purposes.

ANTHROPO-SOCIOLOGICAL THEORIES

The Anthro-Sociological school does not differ principally from the conclusions drawn by Count

Gobineau and others but has dressed up these theories with a scientific garment. These theories were originated by G. Vacher Lapouge, Otto Ammon and followers. The gist of all these theories are:

(1) The differences that have been recognized by anthropologists to have existed between the races and sub-races of men still do exist at present, and furthermore, these differences are not only physical in nature but are also (and maybe more so) temperamental and intellectual.

(2) The intellectual and temperamental differences as well as the physical differences between the sub-races cannot be bridged over. Environment and education may modify and cover up the differences to some extent but they do not wipe them out altogether.

(3) The Nordic (or Aryan) race is superior to any other race of men, past or present. Next in order comes the Alpine race; the Mediterranean race ranks lowest amongst the European races. The Semitic and Hamitic races are considered to be of non-European origin, and naturally, according to these teachings, rank still lower than even the Mediterranean race.

(4) The chief attributes of the Nordic race are, mental alertness, initiative, boldness, idealism, physical and mental strength, self-reliance, truthfulness, chivalry, compassion for the weak and true humaneness. The Nordics are also supposed to be great explorers.

(5) The representatives of the Nordic race in all

countries constitute the true aristocracy of the people. The Nordics usually live in cities where they rise to the highest social eminence in every endeavour of life. The successful industrialists, merchants, professors, scientists or inventors are almost always Nordics.

(6) Social progress anywhere and at all times is brought about only when a superior race conquers a lower race and holds the latter under control. Only a superior race (Nordics) is capable of understanding the needs for social progress.

(7) The masses of all peoples and peasants in all countries usually are round-headed and do not belong to the Nordics. Because of this inferiority they, (the masses) are unfit to partake and to have a voice in public affairs.

(8) The original habitat of the Great Noble Nordics has been in Northern Europe towards the end of the last Glacial epoch. The atmosphere was then very cold and life has been extremely difficult. The weak and less alert could not withstand the hardships of life, and therefore, have perished. Only the most robust and intellectually superior have survived and gave birth to the noble race. From the original habitat some of the selected survivors took to travel, found their way to the Mediterranean sea and thence to the central plateau of Asia. In Asia they have done their share in full measure (or might have been the only people) in establishing the great empires and cultures of the past.

(9) Crossing between a Nordic and another race always results in an inferior offspring.

(10) Cultural cycles have also been explained through the medium of Nordic superiority. It has been pointed out as an historical fact that cultures and general progress has been in the past cyclic in nature. There has always been a period of ascent when learning and achievement was on the upgrade, reaching a certain climax wherefrom no further progress was made. This period was usually followed by a rapid downgrade movement until the people who were the bearers of the particular culture went into almost complete oblivion. Such was the history of Babylon, Egypt, Persia, Greece and Rome.

The explanation given by race theorists is that the burden of carrying on the culture at all times fell entirely to the lot of the selected intellectuals (who no doubt were Nordics). The excessive strain has made them somewhat exhaustive and as a result they became less fertile, while the inferior groups, having very few responsibilities, retained their strength and virility and had large families. As time went on the numbers of the superiors became exceedingly small. So small, in fact, that public offices had to be filled by inferior individuals. These inferior office-holders introduced public policies that were detrimental to public welfare, and the downhill slide began. Furthermore, the superiors began to mix with inferiors and captives, thus hastening the downfall.

Now, these theorists point out that similar conditions are existing at present. The Nordics

usually live in cities and have to bear an unusual amount of strain. They contribute in taxes (chiefly for purposes of providing the inferiors with their needs), enormous sums of money. This makes their lot still more strenuous. So much so that many stay celibate, while those of the superiors who do marry have small families. The members of the Noble Nordics are continuously and gradually on the decline. Furthermore, the Nordics unfortunately marry quite often with immigrants and peasants which must drag the race down still further. And lastly, the extension of freedom and franchise to all gives a chance for inferiors to fill public offices, with the unavoidable results of eventual chaos and degeneracy.

Therefore, in order to save the integrity of the present civilization the race theorists claim that it is very urgent:

(1) That these countries that are still predominantly Nordics (the Germans claim to have the chief monopoly of the Nordic race) acquire supremacy in affairs of the world.

(2) That special privileges be extended to the purely Nordics, so that they may marry and have large families.

(3) That the freedom of the masses be limited so that public affairs be entrusted to and conducted only by superiors.

(4) That crossings between Aryans and inferiors be strictly forbidden.

The race doctrines in spite of having been enthusiastically acclaimed in Germany have shown very glaring errors. The falsities were too glaring to be overlooked. There were too many great men in the past and present who did not conform with the Nordic type of long-heads, tall, blond and blue eyes. It was therefore, necessary to amend the original text. In the amended version, the theorists claim that a man may still be a Nordic, even though he may not show Aryan features, because some crosses may not be bad. This, indeed, is a very convenient alibi. In the new interpretation, all great men may be (and in most cases are) claimed by the Aryans even though they may be swarthy, broad-headed, short, and containing any combination of non-Nordic features. Under the same criterion, all bad and criminal people, even though tall, blond and blue-eyed, may be rejected because of one evil non-Nordic feature, which surely could be detected in any individual if searched for.

Definite rules in regards to crossings were laid down. The relationship between the sub-races of the white man were placed in the following order: Nordic, Alpine, Mediterranean, Semitic and Hamitic. It is claimed that a cross between closely allied races may prove harmless while a cross between remotely allied races is always bad. Thus a cross between a Nordic and an Alpine is harmless and in certain cases even desirable. A cross between a Nordic and Mediterranean is doubtful. According to some it is harmless, while other 'authorities' consider it very deleterious. A cross between a Nordic and a Semite

or Hamite is always bad. Jews are classed as Semites by practically all race dogmatists.

Some theorists consider the Nordic, Alpine and Mediterraneans as being European races; the Semitic and Hamitic as belonging to Asia.

This part of the theory constitutes the chief basis for pseudo-scientific anti-Semitism.

This brief summary contains in substance the foundations and principles of all race theories. The multitude of books written on the subject all revolve around the above principles in one form or another.

ANALYSIS

In order to give these theories a semblance of truth some evidence must be produced in support of these views. It must be shown that

- (1) Semites and Hamites are strangers in Europe.
- (2) That crosses between races and sub-races that are 'far apart' or 'remotely allied with one another' result in inferior offspring and ultimately in race deterioration.
- (3) That Jews are Semites or predominantly Semites. And (4) that the Nordic race is really the Superior or Noble race. I shall briefly discuss each of these separately.

SEMITES AND HAMITES

Semites and Hamites are no strangers in Europe. Historical and anthropological facts show that both Semites and Hamites are really groups of the Mediterranean men. It was the Mediterranean race

from Egypt, Syria and Mesopotamia who spread into Europe bringing with them the culture of the East long before the rise of Greece. Settlements of Jews in Germany and Spain are more than two thousand years old. The synagogue at Worms is one of the oldest buildings in Germany. The Arabian rule in Europe which lasted for about eight centuries promoted culture, art and science to an unusually high level. The Arabian culture influenced European thought perhaps to a greater extent than Ancient Greece or Rome. The Arabian rule in Europe was mainly Semitic and Hamitic.

(2) Is there evidence that racial crossings lead to race degeneracy?

The race dogmatists point to Greece and Rome as examples. It is claimed that the decline of Rome and Greece was chiefly due to the fact that the respective aristocracy began to cross with the slaves from the East with ultimate, inevitable result of degeneracy. Yet it was the same Mediterraneans from the East who brought the culture to Europe. It is rather illogical to claim that the Mediterranean race was at the same time the bearer of culture and the destroyer of the same culture. The Greeks have been a very mixed race long before they attained the height of their intellectual level.

Spain, too, is often cited as an example of the deleterious effect of race crossing. But Spain indeed proved the opposite to be the truth. The Moors have mixed freely with the Iberians, Romans, Goths and

others, and yet the Moorish power in Europe lasted for about eight centuries—quite a long period. Even after the downfall of the Moors, Spain was still a world power for two centuries thereafter.

Many world geniuses were of mixed blood,—Pushkin, the great Russian poet, had Negro strain in his blood. Tolstoi and Gorki showed very distinct Mongolian features. Dumas was a mulatto. A great many Americans who rose to great prominence have thick strains of the American Indian in their blood. The late Will Rogers was quite proud of his Indian ancestry. It is particularly significant that when the Nazi Government introduced the sadly famous Aryan or Nuremburg laws, it was found that a great number of the so-called half and quarter Jews (Jews are, according to the race dogmatists, racially unrelated to the Aryans) were exceptionnally prominent in the professions, finance, science, art, industry, and in many other phases of life. This by itself should convince the German race fanatics that race crossing, no matter how far apart, is not detrimental to the progress of the race.

Sometimes there may exist certain social reasons that stand out as barriers between the mixing of different ethnic groups in the community. Religion, tradition, customs, language, marked differences in appearance and different standards of life are very potent factors in keeping apart different groups in the community for shorter or longer periods of time, but these have nothing to do with the theories of race and blood.

(3) Are the Jewish People Semites?

The Jews, like all other people, are very much mixed. This is evident from a study of the history of the Jews and from an anthropological viewpoint. From the early records we find that originally the Jews were nomads, mixing freely with the Egyptians, Assyrians, Hitties, Bablyonians, and Persians. Abraham had an Egyptian concubine. Joseph and his children married Egyptian women. Moses has married a Midionite. According to scriptures the Jews were permitted to marry captive women. I shall quote the following: "And seest among the captives a beautiful woman and hast a desire unto her, that thou wouldst have her to thy wife . . . and after that thou shalt go in unto her and be her husband and she shalt be thy wife" (Deutr. 21-11).

When the Jews were in exile in Babylonia, they mixed freely with the Babylonians and Persians. Right throughout their long period of existence the Jews have admitted proselytes, this was especially marked in the latter period of the Roman Empire. In the early period of the Middle Ages, the whole kingdom of Chasaar have accepted the Jewish religion. Accepting the Jewish religion regardless of race was always sufficient qualification for any one to be counted among the sons of Abraham.

Anthropologically, the Jews are composed of many mixed types. In external appearance the Jews in Eastern and Central Europe (Ashkenasim) look different than the Portugese Jews, these again are different looking from Yemenites or Ethiopian Jews.

The European Jews belong to various types—about 40% show Mediterranean features. About 25%-30% have either blond or red hair. Blue or grey eyes are found in about 20%. Fully 30% show predominating Nordic features. The Armenoid nose is characteristic in about 15%. The Jews throughout the world are and were held loosely together not through the medium of race and blood but through and by a common religion, history, tradition, culture and also to some extent by universal persecutions.

NORDIC SUPERIORITY

(1) There appears to be an inevitable discrepancy in the claims of the race dogmatists. Practically all claim that because of the great Nordic superiority this race was born and destined to rule and to become the real masters of the world. At the same time it is claimed by the same authorities that in the last 2,500 years it was chiefly Nordics fighting against Nordics in practically all the great wars, continuing to kill off and destroying one another. True leadership and self-destruction do not coincide. If in a period of over two thousand years the noble race couldn't grasp the idea that dead men cannot be master of the universe that race has no logical claim to wisdom, supremacy or leadership. It is a deplorable fact that all those people who have developed racial super pride to a high degree, do at the same time, even now, glorify war and bloodshed.

(2) All the basic industries and sciences had their birth in the Far and Near East, away from the scene of the Nordic habitat. The art of writing, the concept

of religion, philosophy and conduct; navigation; the use of metal tools, wheel industry in transportation, agriculture; the use of chemicals, perfumes and cosmetics; pottery, painting, architecture, sculpture, etc., were discovered and developed to a very high degree by men in the East for thousands of years before civilization (in the accepted sense) has even dawned on Europe. I do not mean to state that Nordic elements were entirely absent in the course of building up the Eastern empires of old, but I do emphasize that in the early Babylonian, Egyptian and Persian cultures, there was no predominance of Nordic elements.

(3) When civilization had finally reached Europe, quite late in the forward march of men, it was chiefly concentrated on the Mediterranean coast, viz., in Greece and Rome. The Nordics in the Scandinavian countries, France, Great Britain and Germany were quite unable to gain any benefit whatsoever from the learnings that was brought to them from the East. Furthermore, when the Nordics finally succeeded to ⁱⁿ break up the Roman Empire, they were totally unprepared to take over and maintain the cultures of the past. The torch-bearers of the shattered culture in Europe for a thousand years after the fall of Rome were not the victorious Nordics but the Arabs and Moors in Spain and Morocco.

These facts cannot be explained on the basis of Nordic superiority, but they do point to the fact beyond any doubt that the Nordic superiority is only a myth.

It is not true that (1) the Nordic race is superior to any other race of men; it is not true that the Nordic race has contributed a greater share towards the civilization of men than any other living race.

(2) It is not true on the basis of scientific and historical findings, that crosses between races of men lead to deterioration, and (3) it is not true that any race of men has any moral or practical claim towards world dominance and supremacy, and (4) it is not true that the fall of any civilization was due to the thinning out of any particular race.

But it is true that (1) achievement and development of a high level of civilization in any given period in the history of mankind has been brought about through the interchange of ideas and co-operation between all the races of man. (2) It is also true that false theories about race superiority have led in the past and are leading at present to super-racial pride and arrogance; unjustifiable prejudice and persecutions, hatred between men and men and (3) inevitably, to wars and bloodshed. (4) And it is also true that prolonged warfare more than all other factors combined has always terminated in the ultimate destruction of great civilizations and great cultures. Victorious armies have not been appeased by murder and plunder alone but have almost always trampled upon everything that was holy and worthy in the enemy's camp. The decline of any civilization in the past has had its beginning with a severe defeat on the battlefield.

Recent research has been conducted on more

scientific lines. The relationship between 'racial' groups and intelligence has been widely tested in the U.S. by means of intelligence tests and competitive examinations. Lorimer and Osborn in their latest work, 'The Dynamics of Population' have devoted considerable space to racial and regional intelligence. These authors have gathered most reliable statistics from various sources, covering wide areas,—practically the entire territory of the U.S. According to their survey, it was found that those showing Nordic features have scored lower than some other groups. These authors rightly conclude: "In view of the ambiguity of the results obtained in most critical studies on this subject, we believe it wise to reserve judgment about the comparative hereditary capacities of large racial groups."

Of no little importance are the findings of Professor E. C. Hayes, (Scientific Monthly—February, 1928) of the University of Illinois.

An attempt was made by Professor E. C. Hayes and associates to classify students at the University of Illinois according to racial origin, and discover if any correlation does exist between racial origin and intelligence. It was found that very few students "could be definitely assigned to any racial group." He states "Our student population is very thoroughly mixed in blood and is descended mainly from European population, **each of which is very mixed.**"

Those that could be classified fell into seven groups—Nordics, (great majority) Mediterranean, Jews, Apines, Chinese, Negroes and "Foreign". Of these,

the Nordics proved less intelligent than any other of the classifiable groups.

The classifiable students on the average scored far below the unclassifiable groups.

The Jews did not conform to any racial type. "Thirty-four per cent. had grey, blue or greenish eyes, two per cent., red hair." Some were dolicephalic, many intermediate and some were distinctly brachycephalic.

In conclusion, Professor Hayes says, "So far as this group, (Jewish) indicates, they do not represent a racial type."

Professors J. S. Huxley, A. C. Haddon, and A. M. Carr-Saunders, in their latest book, recently published, "We Europeans," have surveyed the race problems scientifically and with a perspective entirely free from bias and prejudice. Their conclusions in part are:

"In most cases it is impossible to speak of the existing population of any region as belonging to a definite 'race', since as a result of migration and crossing, it includes many types and their various combinations . . . the Nordic race, like other human races, has no present existence. Its former existence like that of 'pure races' is hypothetical. There does, however, exist a Nordic type. This occurs with only a moderate degree of mixture in parts of Scandinavia, and is also to be found, but much mixed with other types, so that all intermediates and recombinations occur in Northern Europe, from Britain to Russia . . ."

"There exists what one can characterize as a Nordic myth, ascribing to this 'Nordic race' most of the great advances of mankind during recorded history, and asserting that their qualities of leadership fit them to rule over other races. The Aryan and Germanic myths are variants of the same theme."

"These contentions appear to be based on nothing more serious than self-interest and wish-fulfillment."

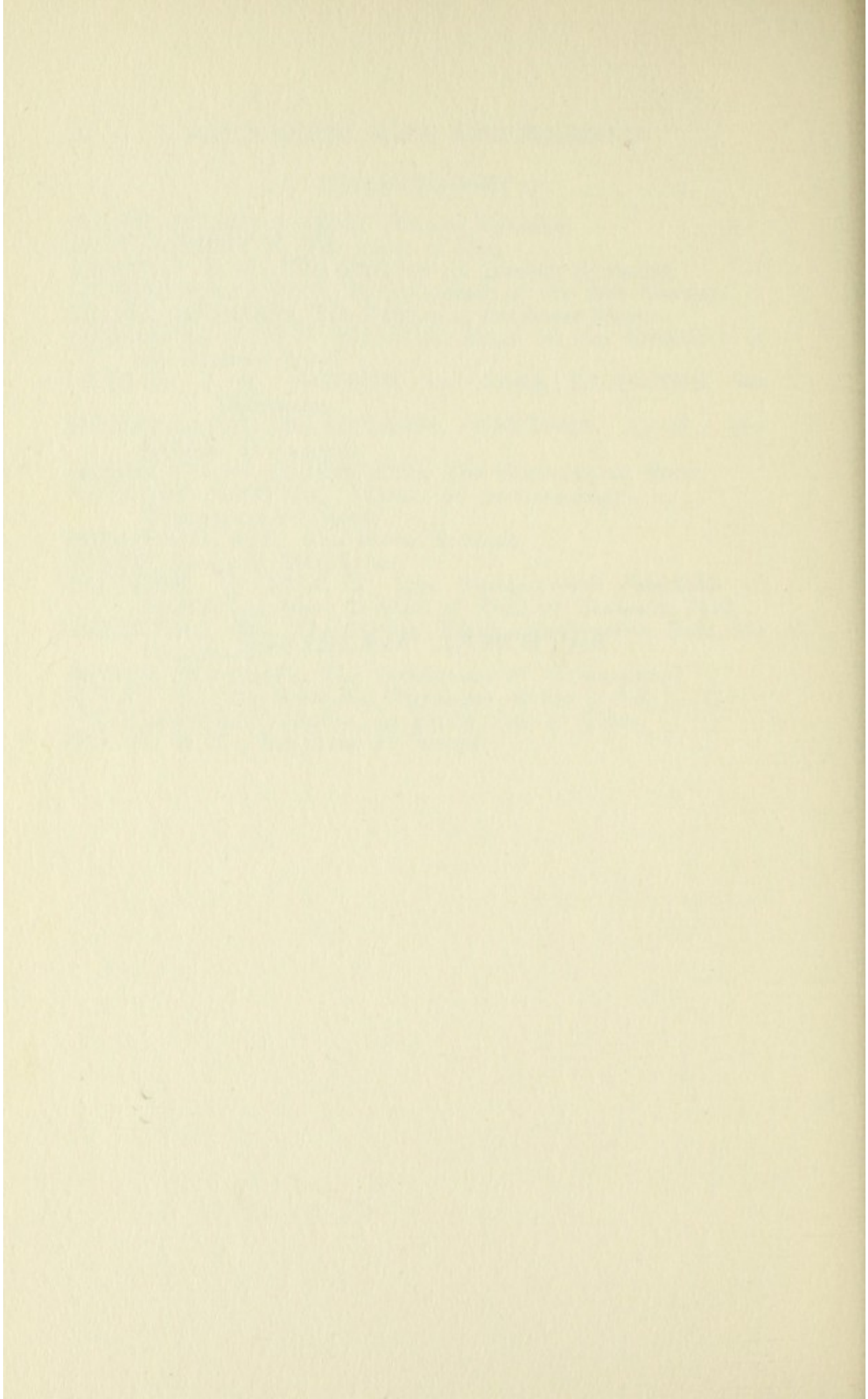
"Meanwhile, however, science and the scientific spirit can do something by pointing out the biological realities of the ethnic situation, and by refusing to lend her sanction to the absurdities and horrors perpetuated in her name. Racialism is a myth, and a dangerous myth at that. It is a cloak for selfish economic aims which in their uncloaked nakedness would look ugly enough. And it is not scientifically grounded. The essence of science is to appeal to fact."

In view of the fact that racial studies form a part and parcel of eugenics, it is urgent that eugenic societies throughout the world take an official stand on this most important problem. "It must refuse (emphatically) to lend her sanction to the absurdities and horrors perpetuated in her name." It is also to be hoped that at the next International Eugenic Congress, the entire issue of Racialism shall be satisfactorily clarified in the interest of science and society. Otherwise, honest world opinion will look upon the eugenic movement with fear and suspicion.

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RATIONAL MARRIAGE



CHAPTER V

RATIONAL MARRIAGE

Marriage is the institution which the ingenuity of man (or his divine power) has instinctively conceived and elaborated to a high degree away back in the ages. The main objects of marriage are (1) procreation in an orderly manner; (2) providing food, shelter and protection for the offspring during the entire period that elapses from infancy to adolescence, and (3) to create suitable home environment for the guidance, moulding and shaping the character of the young.

The comforts, companionship and other gratifications that married life holds, are only secondary, but nevertheless, important and indispensable to happiness.

It is chiefly through this scheme, viz., organized procreation, that man was able to distinguish between the good and bad. Also, this scheme has helped considerably, (if not mainly), in the dramatic rise of man in the kingdom of life.

In a crude manner, like mated with like. Soon, the good and capable were segregated from the bad and inefficient. The better stock gradually and steadily adapted itself to an ever-changing environment, while the weaker stock unable to such adaptations, kept on

perishing in the struggle for existence. As generations, nay, many centuries passed on, the surviving man became the veritable ruler and master over all life.

The vital importance of marriage in the evolution of man was recognized early in the history of civilization. Because of this importance, the institution of marriage has always been surrounded with a halo of holiness and sanctity. Marriage rituals occupy a central position in all religions of all times. Marriage laws and regulations have been enacted long before man has learned to record them. Marriage is indeed the essence of social progress.

Modern literature quite often shows a bravado spirit. Some modern writers dare at times to challenge the institution of marriage on various grounds. Some claim that the institution is a relic of old-fashioned customs which have long outlived themselves. It is often asked by many authors of the day, why all the fuss and the restrictions about marriage? Why cannot men and women cohabit together by mutual consent 'without the benefits of clergy' or without benefits of any kind? There is one positive answer. Give up marriage and the entire social structure will tumble with it.

Man, with his great intellect has not as yet discovered anything that may safely take the place of marriage and family.

Encourage promiscuity or free love and as a result there will be confusion and destruction. Paternity will be indistinguishable. Inbreeding will be

inevitable. The home and family will be destroyed. The young in institutions, (the only place left for them under a system of free love) may feel happy, getting enough food and proper training, but even under the best and most kindly management, no one can give them the warmth and love of a father and mother.

These are only a few of the many evils that must follow in the wake of abandoning or even weakening this most vital, or still better, sacred institution.

The foregoing is recognized by most conscientious people, but it tells only part of the story. It is not sufficient to eulogize upon marriage, but it is also necessary to stress that it is a sacred duty of each individual who is able and fit, to marry and reproduce his kind. It is necessary to stress that if we fail to do our share in the perpetuation of life we have missed out in the chief purpose of life. It is also necessary to stress that it is the duty of the state and society, as well as the individual employers of labour to create such an environment that will be favourable for the young to establish and build a home and family. This has been discussed at length in a preceding chapter.

Marriage always carries with it a great many risks. These risks are (1) personal and (2) eugenic.

(1) **Personal:** Incompatibility of character between partners in marriage is responsible for a great deal of unhappiness. In some states, this is recognized as a sufficient reason for divorce. It is not here the place to discuss this large subject in detail. Suffice it to say

that research in character analysis is indispensable to social progress.

(a) Incompatibility of characters is most likely to be avoided when marriages are contracted early in life (20-30). Also when a reasonable period of courtship (6-18 months) precedes marriage.

(b) Risks to personal health must always be taken in consideration before marriage is contracted. Of these, the most outstanding are tuberculosis, heart diseases and venereal diseases.

Pulmonary Tuberculosis: It is entirely beside the question as to whether tuberculosis is a hereditary disease or not. A person who is suffering from active pulmonary tuberculosis should not be permitted to marry, because the healthy partner is likely to contract the disease. Furthermore, should a child be born as a result of such a union, it is most likely to contract the disease, unless the child is absolutely and permanently kept away from the sick parent. Active tuberculosis in females is usually very much aggravated by child-bearing. Anyone living in the same house with a patient suffering from active pulmonary tuberculosis is constantly in danger of contracting the disease. It is generally agreed by clinicians, that one active case of tuberculosis not treated in a sanatorium is responsible for about three new sufferers. However, patients who have completely recovered from pulmonary tuberculosis should be allowed to marry, providing the opposite partner has been made aware of the condition.

Heart Diseases: Heart diseases are fairly common

in young people. Some of them, especially those following rheumatic fever, are quite serious in nature and are often crippling for life. A man suffering from a serious heart ailment should not be burdened with the excessive load of providing for a household. A woman with a serious heart disease is not fit to assume the responsibilities and burdens of housekeeping. As a rule, she is a poor companion. Child-bearing and after-care of the baby is often the beginning of circulatory decompensation or breakdown. In my practice, I have come across most pitiful cases which have resulted from such marriages.

Veneral Diseases: The chief veneral diseases are gonorrhoea and syphilis.

Gonorrhoea is a fairly common disease. It is more common in cities than in the country. It is quite widespread among men. To a less extent, it is fairly common in women.

In men, gonorrhoea is a disease usually lasting for about 6 weeks to 2 months. However, in about 15% of the cases, complications do set in. The complications of gonorrhoea are many and most of them do not yield readily to treatment. Gleet, which is a chronic form of gonorrhoea, showing a 'drop' on rising, is very difficult to treat. When suffering from this condition, the patient will almost certainly infect his partner (through sexual intercourse) with gonorrhoea.

Epididimitis and orchitis are quite common complications. When both testicles are affected the patient usually turns sterile. Gonorrhoea is responsible

for a considerable amount of sterility in both men and women.

In women, gonorrhoea is a very serious disease. Complications arise in more than 30% of all cases. Owing to anatomical structure, gonorrhoea in women spreads readily to pelvic organs, giving most tragic results. To effect a cure when the pelvic organs are involved, it is sometimes necessary to remove the fallopian tubes and ovaries.

Syphilis is a very serious disease. The initial sore usually appears on the external genital organs. It, however, soon becomes a systemic disease, invading almost any organ in the body. The disease is easily diagnosed, and by proper treatment may be brought under control. To effect a cure, however, usually requires many years of active treatment. Manifestations of the disease are known to have appeared thirty years or more after initial infection. It usually spreads by sexual contact. Occasionally it may be contracted by kissing or from drinking cups or toilet articles. Syphilis is a transmissible disease. When one of the parents, especially the mother, is suffering from active syphilis, abortions and stillbirths are quite common. When the parents are suffering from an attenuated form or when the disease exists in a quiescent stage, children may be born alive and appear normal yet may be suffering from congenital syphilis. It is accepted by authorities that mental defect in offspring is sometimes traced to syphilis in the parent.

Clinicians agree that no one who has suffered from

syphilis should marry unless he or she is free from symptoms of the disease, and the Blood Wasserman tests be negative, (on repeated examinations), for a period of not less than 3 years.

Prophylaxis: What protection can we offer marriage candidates against these grave risks?

Social hygienic agencies throughout the world are doing excellent work in this respect. Through their efforts, the public is constantly being aroused and informed as to the perils of venereal diseases. These agencies spread very effectively constructive advice and prophylactic instructions. Above all, it is stressed by all social agencies that chastity, clean-living, is the only sure protection against venereal diseases. However, it is felt that with all the efforts, it is impossible to eradicate these diseases entirely (unless a specific immunizing agent be discovered). It is therefore, suggested that all candidates for marriage should be required to produce a medical certificate prior to the issuance of a marriage license. Legislation to that effect if widely adopted, may become a real boon to mankind if the laws be properly drafted and enforced.

(1) Examination before marriage in regards to venereal diseases must always be under the supervision of and regulated by the Ministry of Public Health. (Dominion or Federal Board of Health.)

(2) No certificate of health should be valid unless it be issued by a legally qualified medical practitioner.

(3) The type of examination should not be left to the discretion of each examining physician but should

conform to a definite plan, approved by the Ministry of Health.

(4) A time limit of thirty days should be fixed as the maximum period that may elapse from the date of examination to the issuance of the marriage license.

(5) Each candidate for examination should be made to sign a sworn declaration to the effect as to whether he did or did not suffer at any time previously from a venereal disease. This safeguard is of utmost importance for the following reasons:—

In case of gonorrhoea, ordinarily it is sufficient to examine the external genital organs in order to determine the existence (or otherwise) of a gonorrhoeal infection. But if the candidate has been suffering from gonorrhoea some time previously, it is also necessary to determine as to whether the candidate has become sterilized from the effects of the disease or not. If sterilized, the opposite partner is entitled to know about it before marriage.

This safeguard is even more needed in the case of syphilis.

Ordinarily, a negative blood Wasserman reaction is sufficient to consider the patient free from syphilis. But a shrewd syphilitic may fool even the most careful physician. It is well known that active treatment with solvarsan and mercury or bismuth will render the blood negative for a while, even though the patient is not entirely cured. There is a danger that a candidate may present himself for an examination soon after having received an active course of treatment, and the examining doctor may consider the patient fit to

marry, even though he is not cured. A declaration under oath will hold the candidate responsible for fraudulent trickery of that nature.

Should it be discovered after marriage that a person has made a false declaration before marriage in this regard, he should be held liable and in addition to other penalties that may be imposed on the person by a court of justice, this offence should also be considered sufficient grounds for the granting of a divorce or annulment of marriage.

(6) There should be a fixed maximum fee for these examinations. Doctors should be permitted to charge for the said examination a maximum not exceeding five dollars. Furthermore, when candidates are unable or unwilling to pay for the required examination, provisions should be made for free examinations conducted under the auspices of the health department.

Health certificates before marriage are required in Turkey, Germany, in eleven States of the United States and in Alberta, Canada. ||

Some severe criticism towards health legislation before marriage has been raised recently in the United States. The main points of objection are the following:—

(1) The tests, especially the Wasserman test, are not always reliable. A positive blood Wasserman does not always signify syphilis. Persons who have suffered from Malaria, Yaws or Relapsing fever quite frequently give a positive Wasserman. On the other hand, patients in the very early stage of syphilis or

those who had received an incomplete course of treatment may give negative results.

There is also the question of error. In laboratories supervised by public health authorities the margin of error is quite insignificant. It is entirely different when these tests are made in private laboratories. According to Surgeon General Thomas Parran there are a great number of laboratories in the United States that have shown a margin of error as high as 28 per cent.

(2) The fear of undergoing these special tests and in an attempt to escape the same may drive many young people to resort to "common-law" marriages.

(3) These being state laws instead of federal laws will cause many young people to go and obtain marriage licenses in these states where health certificates are not required.

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marriage.*
(4) It may expose candidates to shame and disgrace. When young people do intend to marry the event is usually known among their circle of friends, relatives and acquaintances. If the young people are unable to obtain a certificate of clean health, their friends and relatives will be able to surmise the reason.

These objections have to be taken in ^{to} consideration when proposing a workable health examination before marriage. It must be fully stressed that the Wasserman test even though a very reliable diagnostic test is not always infallible. Even though the margin of error is only 1%-2%, it is a very serious matter to bar an innocent person from marriage even though

this may occur only once in a hundred examinations. Likewise, it is a very serious mistake to give a clean sheet of health to a candidate on the ground of a negative Wasserman reaction if the patient is suffering from syphilis in any stage or degree, even though this may happen only once or twice in a hundred examinations. It is, therefore, necessary to stress with utmost emphasis that under no circumstances must we rely on laboratory tests **alone**. The laboratory tests must always be supported by a careful history of past illnesses and also by a thorough physical examination. Under such circumstances the chances of mistakes in diagnosis will be almost entirely eliminated.

I also want to point out that too hasty and high-pressure methods in the introduction and passing of marriage health legislations are bound to end in failure. The public must first be educated and aroused to the vital need of such a measure. The success or failure of such legislation will depend entirely on the public sentiment in back of it. All great public health measures that have been proposed in the past have invariably met at first with stormy opposition. However, through careful and systematic educational work, people have gradually learned that these measures contain a great deal of public good and became favourable towards the introduction of such measures. It is of utmost vital importance that a favourable public sentiment towards marriage-health-examinations be created in advance, before undertaking any legislative measures.

The actual number of people who may be barred from marriage because of being unable to produce a clean bill of health will be very small indeed. Young people contemplating marriage, if they be aware of the fact (or if even only suspecting) that they are suffering from a venereal disease of any kind, will take proper and adequate treatment and make certain that they are cured, long before submitting themselves for the required examination preceding marriage. The risk, therefore, of unduly exposing candidates to shame and disgrace is more imaginary than real.

This legislation may also become a potent factor in making people, who have been afflicted with venereal disease, to seek advice **early** and be treated by competent men or in well equipped clinics, with the best chances of complete recovery.

EUGENIC RISKS

The eugenic risks should be guarded against with even greater zeal than the personal risks. These risks should be guarded against in the interest of society, posterity, as well as ^{and} the individual.

The individual upon marriage, assumes responsibilities from which he cannot release himself during his lifetime and even thereafter. Married people spend the greatest part of their labour and earnings on their children. All this is wasted if the children are born handicapped with serious mental or physical defects. The blessings of parenthood turn to a curse if one has to raise an imbecile, an idiot, a cripple or a criminal. In many cases, such calamities may be

prevented if proper precautions are taken in choosing a mate.

Also when one possesses great natural attributes or great capacities for learning or arts these should be bequeathed to the children unimpaired or improved if at all possible. Oftentimes, through mistakes in marriage, natural gifts or talents are either diluted, lost permanently or lost for a few generations in the offspring.

A lesson must be taught with utmost emphasis that the custom of 'falling in love at first sight' is a pitiable state of affairs from an eugenic viewpoint. A girl may appear to be beautiful and pleasant and the possessor of many charms and yet at the same time may be the carrier of defective germplasm. The slogan "that one marries the girl and not the family" is absolutely false and misleading. In every case, the family history as far back as possible should be carefully studied. Not only is this necessary for the purpose of determining or searching for defects in the pedigree but also, and even more so, for the purpose of obtaining data in regards to family achievements and abilities.

It must here be stressed with utmost emphasis that this is no easy task. No individual, no matter how clever and educated, is efficient to draw up a reliable pedigree unless he has received proper training in this particular field. It is absolutely urgent that in every case a specialist be consulted. This suggestion may appear novel and far-fetched, yet it is in keeping with sound logic.

Let us look upon marriage in the same light as a business transaction. When we are about to buy a house, a farm or the like, we consider ourselves incompetent to close the deal all by ourselves. We usually engage a solicitor to look after and protect our interests. Why not do likewise when choosing a mate? Marriage is by far more serious and more subtle a transaction than any business deal, and yet we are taking the risk of acting on our own behalf without the advice and guidance of trained men.

Even the average physician in general practice cannot be looked upon to give an authentic advice in this respect. The subjects of heredity and eugenics occupy very little space in the curricula of the medical training in any of the universities. The young doctor on leaving school knows nothing about this most intricate and yet most important and vital subject. As he succeeds in getting established in practice, he finds a vast field of clinical and surgical studies to occupy his mind and time. As time goes on, the average physician is no more able to give a valuable opinion and advice in regards to the eugenic aspect of marriage, than the ordinary intelligent layman.

To place marriage on a rational basis the following requirements must be fulfilled:

(1) The subject of eugenics must be made a compulsory subject for senior classes in all high school curricula. Sociology in general as a subject for senior high school students is more valuable, more useful and practical and by far more interesting

and also ranking equally as high (if not higher) in academic merits, as Latin and similar subjects. Eugenics in particular, if properly taught is indispensable to the happiness of the individual and to the progress of society.

Likewise, lectures in eugenics for adolescents who are unable to attend high school should be arranged in every city, village and hamlet.

This type of education must not be introduced for the purpose of enabling individuals to choose mates by themselves without the aid of experts. That would be impracticable. The aim of the study should be to give students and individuals only an elementary knowledge of this great topic. But from such a course of teaching, we may reasonably expect to arouse public opinion to realize the importance of eugenics in contributing towards the happiness of the individual and progressive march of society. In the course of tuition it should be pointed out the advantages of married life. Factors that make for harmony and co-operation between married people ought to be thoroughly discussed. Within the scope of this study comes parent education, child psychology, proper relationship between young adults of opposite sex and the moral aspects of home life. Above all it should be pointed out that marriage is not only a privilege but also (and even more so) a duty. Indeed, it should be emphasized that the strength of a nation is not to be measured by the number of military units, or the amount of gold in its treasury, but by the number of ideal homes in the

community which provide for the young a healthy, enlightened and moral environment.

(2) Teachers engaged in the training of medical students must be made to realize and be convinced, that the subjects of heredity and eugenics are basic medical studies and deserve a place in the curriculum equal to such subjects as physiology, psychology and the like.

(3) The most important step towards rationalizing marriage, in my opinion, is the training of specialists for that purpose. It is of no use asking young people to seek advice before marriage unless we provide consultants capable of rendering an authentic decision. Elsewhere, in this volume, I have pointed out that the general practitioner is not equipped to act as an adviser in marriage, and specialists in that field are non-existent. It is the duty of the eugenicists to create them.

Owing to the fact that the decisions of such specialists will always be of a serious nature, it will therefore, be necessary to keep this specialty on a high, ethical, moral and educational level.

This specialty should be open for graduates in medicine only. The specialist will have to gain an adequate knowledge and training in biology, psychology, sociology, heredity, (theoretical and clinical), biometry and geneology.

Opposition to such a plan may be raised on the ground that at present there is no demand for the services of such a specialty. This is really a valid objection.

I fully realize that under present conditions it would be impossible to persuade young men to take up this specialty on the promise of pioneering in new fields. However, the neurologist with very little extra training may become quite competent as a consultant to those seeking advice before marriage.

(4) **Marriage Consultation Bureaus.**

Bureaus for giving free authentic advice to young people should be established in every city and town. Such bureaus could become a real aid in solving many intricate problems confronting young people today. Advice may be given by such agencies through personal contact, by mail or through special publications. Mail service may help considerably in the work of such bureaus. People seeking advice in regards to matrimony usually prefer secrecy. They may hesitate to pay a visit to a specialist's office or to a consultation bureau where they may meet friends or acquaintances. It is however different when people can explain their difficulties in writing and receive individual attention and authoritative advice by mail, or by special appointment with an expert in their own home.

(5) Birth Registration Forms, (which are compulsory in almost all civilized countries), should be enlarged so as to give information of detailed eugenic value about each of the parents. Such information should include the ages of parents at time of marriage; achievements at school; post-graduate work; musical or artistic attainments; occupation, hobbies, sports; fraternal associations,

religious affiliations and public services. The physical conditions of both parents should also be recorded. These should also include physique and stature; also colour of skin, eyes and hair. History of past illnesses, and whether recovery was complete or partial should also be carefully recorded.

With the enforcement of such a plan of birth registration, it will in time be exceedingly easy to trace the ancestry or family history of any one with a fair degree of accuracy.

A question is often raised, how could one account for the fact that for centuries men have married as they liked without consulting anybody and yet society has been steadily progressing? Why, all of a sudden, advocate to rationalize marriage? The answer is, that in recent years, drastic and rapid changes have taken place in our social life, as a result of which it has become necessary to make adjustments in the marriage customs in keeping with the changed environment.

(1) First in importance are the large cities. Up till recently, the proportion of men living in large cities was considerably smaller than at present. With the exception of a few metropolitan centres, most cities were quite small. The family history of practically every citizen was known to the entire community. Whenever there existed in a family, a drunkard, a crook, a criminal, etc., the whole town talked about him. Again, whenever there existed in a certain family a marked prevalence of disease or defect such as insanity or epilepsy, everybody was

aware of it. In a similar manner, the habitual criminal, the pauper and vagabond was known and excluded from the society of the respectable, industrious and law-abiding citizens.

However, with the advent of the industrial revolution and the subsequent expansion, cities began to grow by leaps and bounds. Young people on the farm, in the villages and towns flocked in millions to the large cities where opportunity was beckoning. Strangers have met in shops, factories, offices, dance halls and similar places. Family traditions, prides or even prejudices were entirely wiped out. In most cases, modern marriages are contracted on basis of personal attractions only. The family history is seldom, if ever, inquired into.

(2) Improvements in travel, transportation and communication has stimulated migration considerably. The number of immigrants and tourists in any country is now by far greater than at any time in history.

(3) The home environment has seen tremendous changes in recent years. Not so very long ago young adults, especially girls, were entirely dependent on their parents for support. The father was usually the unchallenged head in the household. In matters of marriage, the parents were, as a rule, always consulted. The blessing or consent of parents was practically always necessary before marriage. Many a time the father's veto was responsible for the breaking up of a love affair or an engagement. In most cases the parents raised objections when the son

or daughter fell in love with one below their social status. The judgment of the average parent in regards to social merits might have been (and quite often was) crude, inaccurate and unreliable, nevertheless, it aided considerably in keeping marriage on a selective basis. At present, however, the authority of the parents over their grown-up children, in general, and in matters of marriage, in particular, is next to nothing. The young people consider the choosing of a mate to be an affair entirely of their own. Under present modern conditions, this is probably the right attitude. The parents cannot be expected to keep up with a rapidly changing world. But it is to be regretted that up till now there has been devised no substitute to take the place of the former parental advice. We have as yet set up no machinery whereto young people may turn for authentic consultation.

It is quite often stated that young people of today need no advice. The youth of today is said to be more progressive and better equipped to face and solve problems than ever before. This may be true, but does not give the whole truth.

It is true that young people of today are more prepared and better equipped for careers than ever before. Young people are now taught to understand the intricate mechanisms of economics, the values of efficiency, and the like. But our educationists have failed to prepare the youth for the most important task in life, namely, marriage. We have failed to point out to our young people the values and

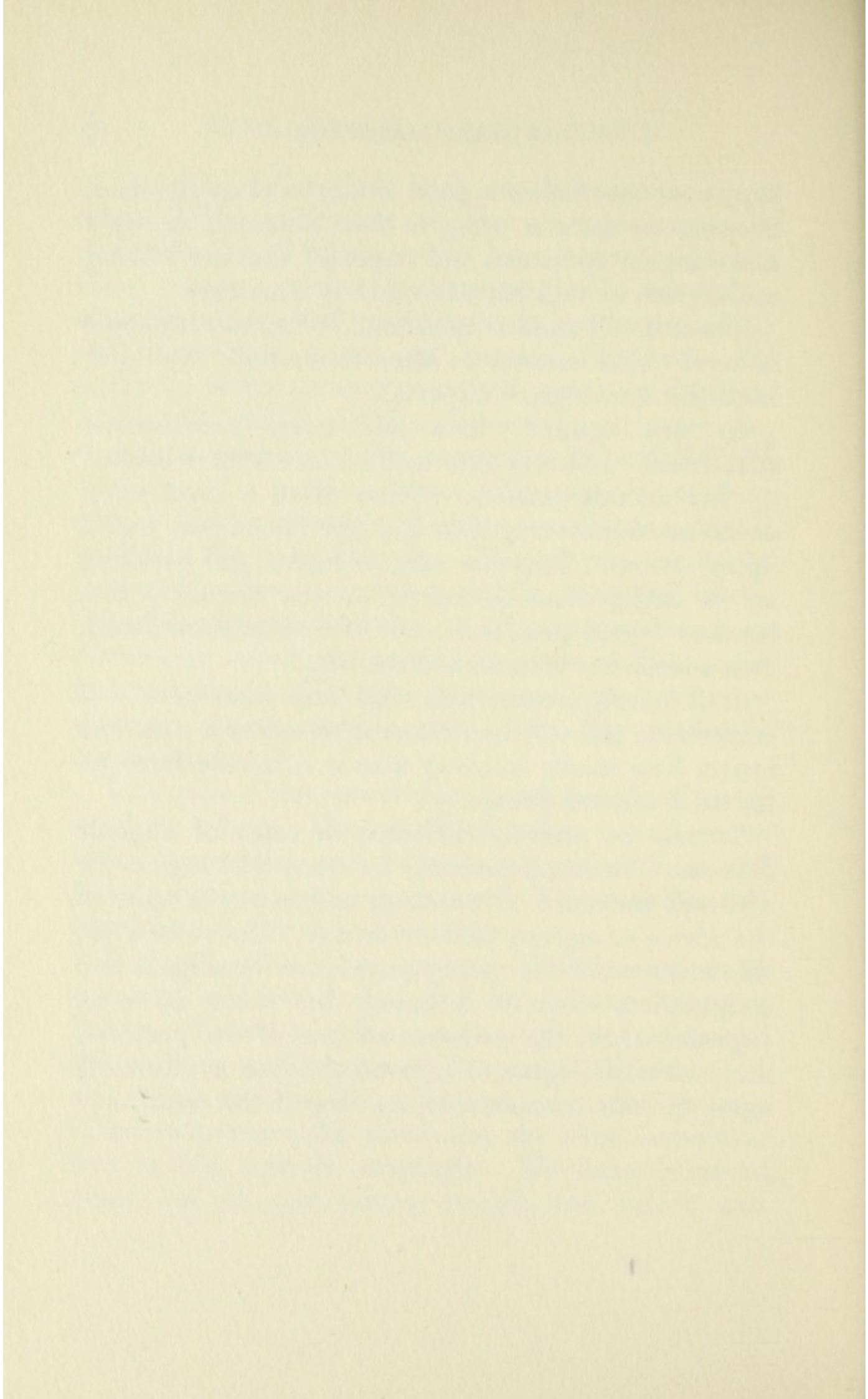
happiness that follow a good choice in marriage, and, likewise, we did not bring to their attention the risks and dangers (personal and eugenic) that are lurking in the path of reckless and careless marriages.

There is still another question. What about people in love? Will lovers ever listen to reason? Will they heed the warnings of experts?

In my opinion, ^{guided} love ^{can certainly be} has been considerably over-rated. It is not rare to find love affairs broken up for various reasons. Quite often a lover cools down on discovering that his girl friend has had a "past" secret. It is not rare to find a girl breaking up an engagement to marry, on the discovery that her boy friend possesses some temperamental faults, or is addicted to alcohol and the like.

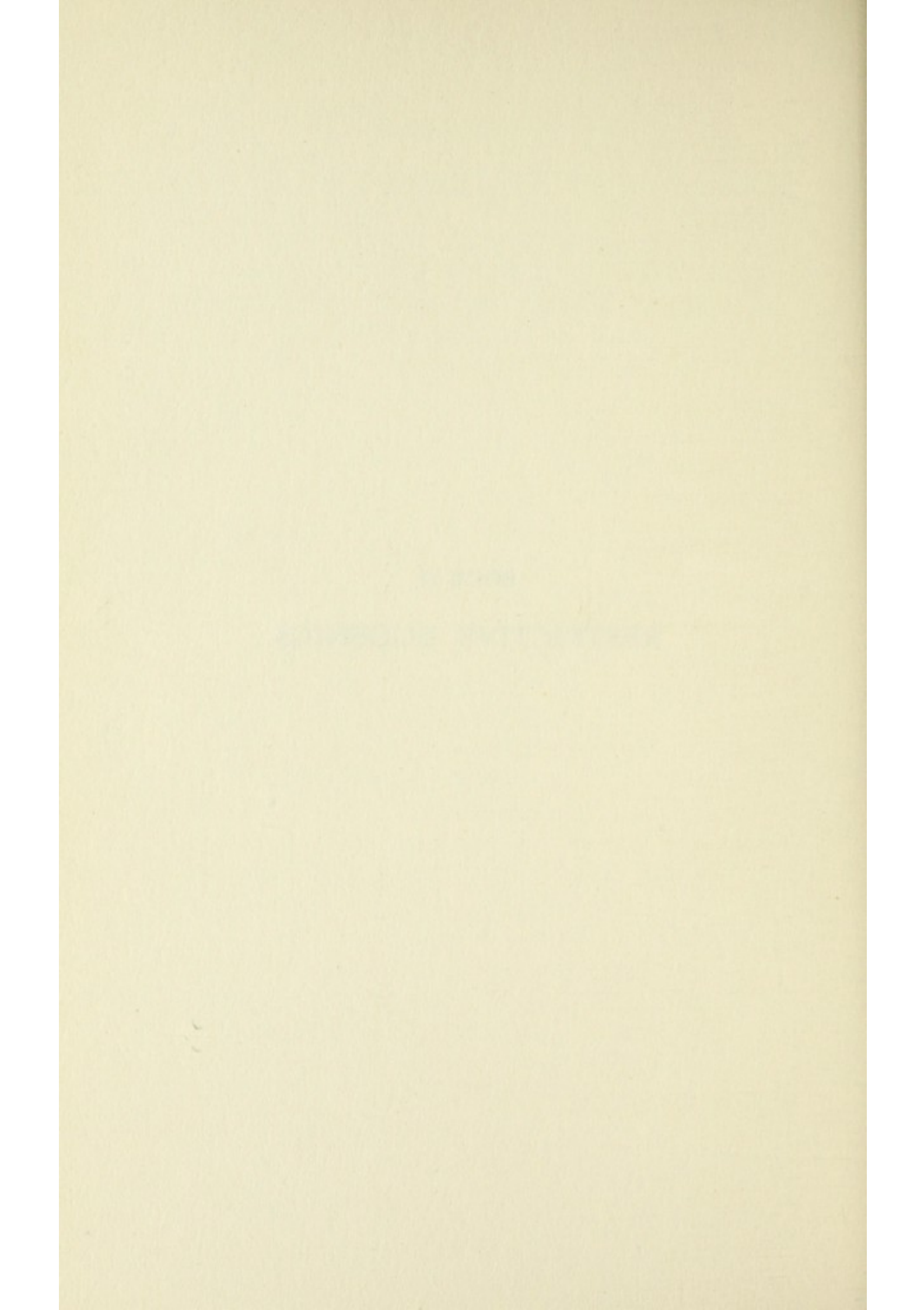
It is hardly conceivable that any intelligent and respectable girl will ever consent to marry a man (no matter how madly in love) who is suffering from an uncured venereal disease.

It may be entirely different in cases of eugenic defects. There will probably be many a loving couple who will disregard all warnings and marry in spite of the advice of experts to the contrary. But even when this happens, if the young people are intelligent and **enlightened**, when it is found that there exists an eugenic risk in the pedigree of one of the partners, they will either agree to have no children at all or will agree to limit considerably the size of the family.



BOOK II

RESTRICTIVE EUGENICS



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BOOK TWO

RESTRICTIVE EUGENICS

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MEMORANDUM

FOR THE RECORD

DATE: [illegible]

TO: [illegible]

FROM: [illegible]

SUBJECT: [illegible]

[illegible]

THE FEEBLE-MINDED

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CHAPTER I

THE FEEBLE-MINDED

The feeble-minded constitute one of the major groups of defectives. Feeble-mindedness is usually defined as the arrest of the mind, (for some reason or other) to develop fully to normal maturity. There are all degrees of variation from slight mental abnormality to serious idiotic defects. The degree of defect is usually determined by means of standard intelligence tests. The results are commonly expressed in the terms of Intelligence Quotient or I.Q. which means the ratio of the mental age to the actual age.

Thus when a child of eight is able to pass only a test that is intended for a child of six, the child is said to possess $6/8$ of normal intelligence or 75% or 75 I.Q. and has a mental age of six. If the child is able to pass a test that is intended for his age, we say that the child possesses a normal mentality or 100 I.Q. However, if a child of eight succeeds in passing a test that is designed for a child of ten, we say that he possesses a mentality of $10/8$ or 125 I.Q. or a mental age of 10. The mature mental age is taken by psychologists as the age of 16, beyond which it is thought there is no further development of innate capabilities of inborn intelligence.

Based on these tests, the feeble-minded are usually classified into:—

(1) Idiots, those whose mentality does not advance beyond the mental age of two years, I.Q. 12-15.

(2) Imbeciles, those whose mentality does not advance beyond the mental age of four to eight, I.Q. 15-50.

(3) Morons, those whose mental age reaches to about the mental age of twelve or 70 I.Q.

The classification is arbitrary for the sake of convenience, but it has no scientific or clinical significance. There are many forms and types of feeble-mindedness differing in etiology, pathological conditions and clinical manifestations, which, however, are grouped together because of having one common symptom, namely,—a low I.Q. For purpose of illustration let us take the cretins and the mongolian idiots. Both types show a very low I.Q., yet, clinically and etiologically, they show different manifestations. Cretinism is due to a deficiency of thyroid hormones, while mongolism is due to failure of foetal development owing probably to senile uterus. Clinically, these types are easily differentiated by any medical practitioner.

In our present state of knowledge, however, we are unable to recognize and differentiate between all the various types of feeble-mindedness. The I.Q. of 70 is taken by most psychologists as being the dividing line between the normal and pathological. It has been pointed out that a person with an intelligence below 70 I.Q. even though he may be of no actual

menace to society, is nevertheless, not fit for home-building, because he or she is lacking in intelligence that is required for the providing of a suitable environment for the young.

This view, however, is disputed by many authorities. The main arguments against this view are:—

(1) The intelligence tests are not as yet sufficiently reliable and lack in accuracy and therefore, cannot serve as a true criterion as to whether an individual is normal or not.

(2) Even if these tests are proven to be reliable, it does not necessarily follow that because a man fails to come up to a certain artificial standard that he should be considered unfit. There is another standard whereby to measure fitness, namely, the social value of man. There are many thousands who are "retarded" or "dull" who can never score above 70 I.Q., but, nevertheless, are healthy, industrious, happy, law-abiding and useful citizens. Many of these possess well-balanced temperamental personalities. They are loyal, pious and appreciate, sometimes to a very high degree, the values of affection and devotion. It is these qualities that count more when considering fitness for the task of home-building and the rearing of children, than high intelligence. True, in urban communities, the dull and retarded may fall prey to exploiters and crooks, but for this they stay blameless. The blame falls on the heads of the exploiters, who are the real menace, and it is the duty of society to protect these people against crooks and

criminals, rather than condemning the victims. The common labourer, the miner, the farmhand, each contributes his share of usefulness to society in full measure, "with the sweat of his brow" even though he may not be able to advance beyond the third or fourth grade in ordinary public school classes.

An argument is quite often advanced that many who are "dull" and "retarded" are not likely under present system of competition and efficiency to be able to support and maintain a family on a proper standard of living. Furthermore, so the argument goes, with the rapid advance of machinery and new inventions, the lot of the unskilled labourer is growing all the time harder and more difficult.

This argument does not carry much weight. Rather than make man fit the environment it is more logical to suggest to simplify the environment in such a manner that man may be able to cope with it. At present, we find that there are about 10% of the community who are unable to catch up with an already too-complicated environment. Allow the speed and complexity to go on for only a short period longer, and the environment may become so intricate that another 10% or 20% will fall behind, and may have to be considered a social menace.

(3) The standing of an individual on either side of the 70 I.Q. fence does not really signify fitness or abnormality. We actually meet people that score below 70 I.Q. who are normal in every respect. On the other hand, there is a recognized group of defectives, known as "**defective delinquents**" who are

able to score a high I.Q. and yet are defective in a social sense. These are quite often intellectually alert and yet show deficiency in the appreciation of moral sense or senses.

These arguments cannot be altogether ignored.

German scholars do recognize that there exists a difference between the "dull normal" and the "pathological feeble-minded." At the Zurich Eugenic Conference, July 18-21, 1934, Professor Rüdin endeavoured to outline the distinctions that exist between the psychopathic feeble-minded and normal stupidity.

In our present state of knoweldge, the safe view to follow is to take in consideration both the educational and social capacities of an individual before casting a deciding vote as to the fitness of an individual. Each case must be studied separately.

DEFECTIVE DELINQUENTS

Previously, I have made reference to "defective delinquents". These compose a large group of defectives. They are usually intellectually alert, but are abnormally selfish, unstable, shrewd, dishonest, typical liars. They appear to be lacking the power of inhibition or control over emotions. Many of them are sexual perverts. A good many prostitutes and habitual criminals are found in this group. They are not easily recognized or identified. Because of their shrewdness, they often succeed in hiding their defects, and occasionally, succeed in posing as good citizens. They are usually discovered during a

psychiatric examination, mostly when falling into the hands of the police. Experience has shown that these benefit very little from corrective training nor do they gain much from punitive measures. A great many show a familial concentration of these defects.

Some of these defectives appear to have perfect control over some emotions while in other respects they are extremely anti-social. We find some individuals that are generous, kind and honest in a financial sense, and yet in matters of sex they are very brutal, unfaithful and have no consideration for the tragedies that they cause because of their ill-behaviour. The males thus affected, entraps in his net many innocent girls and have no regard, even if their victims are disgraced, or have to care for illegitimate offspring, nor do they worry if good homes are broken up because of their lust and evil-doings. These defectives, very seldom, if ever, commit hideous crimes such as rape or sodomy. The females likewise are reckless and unfaithful in their domestic duties. Many of the intelligent, attractive and shrewd prostitutes belong to this group.

Others are quite respectable in matters of sex but are lacking in sense of honesty. They have no regard for property of others. Environment only modifies but principally has no effect on them. Thus the poorer ones become habitual criminals, petty thieves and burglars. The richer ones put over all kinds of fantastic schemes and crooked enterprises.

It is quite often difficult, in these cases, to draw the line between the normal and defective. It can

hardly be stated that the average normal possess perfect control over emotions, but there is a difference between the normal and pathological, even though this is relative in degree only. These defectives bear the same relationship to the normal immoral persons as do the manic depressive to the normal affective or super imaginative person.

There are some scholars who deny the existence of such an inborn group altogether. They claim that all these anti-social tendencies are due to faulty environment, such as bad living conditions or bad associates. However, those who come in close contact with habitual offenders and anti-socials, such as magistrates and social service workers, do recognize that environment is only partially responsible for these wicked tendencies.

On the whole this group has not been given the attention and study that it deserves. There is no reliable estimate of the prevalence of defective delinquents in any ^{collection} of the existing statistics.

PREVALENCE

There exists a wide divergency of opinion in regards to the incidence of feeble-mindedness. Dr. Paul Popenoe has estimated the number of feeble-minded in the United States to be in the neighbourhood of six millions. He based his findings on mental tests which were made on large groups of school children in various parts of the country, the results of which have shown that about 4.5% of them scored below 70 I.Q. These findings

correspond with the mental tests of the National Army, the results of which disclosed that about 6% fell below 70 I.Q.

However, other sociologists are of the opinion that these figures are by far too high. Stanley P. Davies estimates the number of feeble-minded in U.S.A. to be less than a million. Dr. Charles Bernstein estimates the number to be less than half a million. These wide discrepancies do not appear to be so much due to mistakes in the gathering of data but rather to the differences in the interpretation of the term, "feeble-minded."

In England, the Wood Committee in 1929, has estimated that the number of defectives in England and Wales was at that time in the neighbourhood of 300,000. The Brock Committee, in 1934, arrived at a similar estimate. The Brock Committee have based their evidence on the oral testimony of 60 British experts, in addition to most reliable statistics which they have gathered from many sources.

It is the opinion of many statisticians that throughout the world, the actual number of feeble-minded constitute about 1% to 2% of the population.

DEFECTIVES IN INSTITUTIONS

The number of feeble-minded and epileptics in institutions has been steadily on the increase. In January, 1922, the number of defective inmates in public institutions in the United States were 43,579; January, 1923, 46,580; January, 1927, 58,369; January, 1928, 60,412; January, 1929, 64,253. This

is not to be taken as an indication that the incidence of feeble-mindedness is rapidly increasing, but rather that the public is beginning to realize the advantages offered these unfortunates by institutional care. Indeed the number of defectives who are really in need of institutional care in the United States is still very great. It is the belief of many authorities that only one-tenth of those who are actually in need of such treatment are at present institutionalized. Exact figures are not available.

The Wood Committee, in 1929, has estimated that about 100,000 defectives in England and Wales ought to be treated in institutions, and have recommended that such accommodations be created.

FERTILITY

There is a widespread belief that defectives have unusually large families. In eugenic literature, it is not rare to find estimates that the fertility rate among defectives is 3 or 4 times as high as the normal. Careful check-up on data fails to substantiate this. It is true that the social worker often comes in contact with defectives or near-defectives who are exceedingly fertile, and by citing these cases, the impression is created that all defectives have large families. The fact, however, is that defectives with small or no families (mild cases) often escape the notice of the Welfare Worker because they manage to get along without assistance.

The Brock Committee has found that 3,733 defectives from various parts of England who were

parents, had only 6,840 surviving children, that gives an average of children of about 1.8 per defective parent. Take off from this the great number of defectives who never become parents, and at a glance it is realized that the net reproduction rate is not great.

Excessive fertility among defectives is offset by:—

(1) A lower marriage rate, as borne out by reliable data.

(2) A greater incidence of venereal diseases, as a result of which many patients turn sterile.

(3) Higher infant mortality rate, and higher general mortality rate.

(4) A great many are kept in institutions during a considerable part of their reproductive period.

MORTALITY

The infant and child mortality among defectives is exceedingly high. Indeed, the entire span of life of defectives on the average is considerably shorter than the normal. Those investigated by the Brock Committee have shown an infant mortality of about 22% of the total births. This finding is in conformity with earlier investigations in England and elsewhere. Neil A. Dayton, in a study of 8,976 cases on the "Mortality in Mental Deficiency over a Fourteen Year Period" states: "Data on the average expectation of life at certain ages for idiots, imbeciles and morons as compared with the Massachusetts population show the following results. The average expectation of life for a male infant of two years in the general population is 56.8 years. For idiots this

figure is reduced to an average expectation of 20.1 years, for imbeciles, 29.6 years; for morons, 52.2 years and for mentally defective males as a whole, 30.1 years. For a normal female infant of two years the average expectation of life is 59.3 years; for idiots, 21.3 years; imbeciles, 38.4 years; morons 46.8 years; and for all mentally defective females, 32.9 years . . .

The expectation of life in presence of idiocy or imbecility is markedly interfered with in each age period. The interference is less marked among the morons; the expectation of life in this group showing only a moderate departure from that of the general population."

ILLEGITIMACY

Illegitimate births among defective women is very high. The Brock Committee reports that out of 3,249 mentally defective women, who were known to have had children, 66% were unmarried. This is confirmed by similar data coming from various institutions throughout the world. It is on account of this and also because of the danger of the spreading of venereal diseases, that a defective woman is considered by far to be a greater social and eugenic menace than is the defective male.

ARE DEFECTIVES INCREASING RAPIDLY?

There are many sociologists who believe that defectives are increasing at a very rapid rate. These sociologists indeed paint a very gloomy picture of the near future. However, the data in support of this

view is quite conflicting and unsatisfactory. We do not know definitely the number of defectives living in any community. The figures are only based on estimates. Less so, do we know of the number who lived a generation or two ago. Under these circumstances, comparisons are almost impossible.

Much of this claimed increase is more apparent than real. Formerly, in a primitive form of society, an individual with low intelligence could be useful in some form of simple farm labour and go on unrecognized throughout the entire span of his life. Not so now in the present complex industrial system, efficient men are chiefly in demand. A man with limited intelligence may fit in well on a farm, but in urban centres he is likely to be lost. His condition is easily recognized.

Again, in recent years, the demand for the placing of defectives in institutions has been steadily on the increase. However, this is no criterion as to the actual incidence. It only means that instead of keeping defectives at home as formerly, people nowadays prefer to place them in institutions. Furthermore, of late, we have been giving more attention to the problem than ever before. By means of special tests, we are now able to detect the subnormal quite readily.

However, the Wood Committee has found that there is a real increase in the incidence of feeble-mindedness. This finding was confirmed by the Brock Committee, who came to the conclusion that there is a slow but steady increase in incidence of

mental defect, both in actual numbers and in proportion to the normal. They also found that there was a greater number of defectives born in England during the later years of the World War, the reason for this phenomenon they couldn't or wouldn't explain.

Many reasons were advanced in explanation of this increase in prevalence.

(1) Formerly, society paid very little attention to defectives and being unable to take care of themselves, many of them have died young, thus only a few had a chance to reach maturity and procreate. But nowadays, due to charitable and philanthropic agencies, these are getting the best of care, thus a greater number survive and propagate.

This does not appear to be a valid argument. It is true that at present, a greater number of defectives reach adolescence, but this improvement in the lowering of infant and child mortality worked all the way through, and even with greater force, among the normal population. Therefore, the ratio of subnormal to the normal could not have been considerably altered thereby, surely not to an extent of increasing proportionally the number of defectives. We find that the infant and child mortality in civilized communities is between 5 to 6%, whereas the infant mortality among the defectives as shown by the Brock Committee, is still over 20%. The general mortality of defectives, as shown by Dayton and others is considerably greater than that of the normal population.

(2) Formerly, the use of contraceptives has not been widespread. Normal and abnormal had large families. But of late years, contraceptive devices are being used extensively. Those with responsibility, foresight and intelligence have limited the sizes of their families. But the less intelligent and less careful members of the community are breeding as freely as ever. This brought about a reproductive ratio in favour of the subnormal.

There is a good deal of truth in this argument.

INHERITANCE OF FEEBLE-MINDEDNESS

What evidence is there that feeble-mindedness is hereditary? Investigations in this field have been carried on the world over. In the early part of the present century, Goddard, Dugdale, Eastabrock, Davenport and others have traced a number of families for generations and have shown the existence of an unusually high incidence of degeneracy among them. Such families as the Jukes, the Nams, the Hill Folks, and the Zeros and Kalikaks are well known to eugenic readers.

Recent and more accurate investigations were carried out by A. U. Dayton, A. Meyerson, H. U. Watkins and many others.

An enquiry was made by A. Meyerson on 983 subjects from Waverley, Mass. In 419 cases, nothing was known of either of the parents. Of the remaining 564 patients, 166 or 29.3 per cent. had one or both parents feeble-minded and 210 or 39.1 per cent. had one or both parents either feeble-minded, epileptic

or insane. Another study by Myerson and H. B. Elkind carried out at Wrentham State School on 1,004 patients showed male patients had apparently normal parents in 69 per cent. Both parents were normal in 54 per cent. of the female patients. In 10 per cent. of both groups, (male and female), one parent was feeble-minded and in 6 per cent. both parents were feeble-minded.

In England, the Colchester inquiry directed by Drs. Penrose and Douglas Turner have published recently their findings, a summary of which follows:—

Among 513 patients examined, 137 or 29% were considered to be due entirely to heredity; 47 or 9 per cent. were found to be due entirely to environment. The remaining 329 or 62 per cent. were attributed to be due to both, environment and heredity, the respective factors varying in every case in intensity, degree and manner.

The Brock Committee has made an extensive inquiry into the offspring of known defectives. They have issued a circular to all mental deficiency authorities asking them to send the returns of all known defectives in their area, giving information in regards to the mental and physical conditions of known offspring of defectives. The total number of cases reported on as a result of the inquiry was 3,733 parents. In these, the mothers were defective in 3,247, the fathers, in 486 cases. The total number of offspring was 8,841, of whom, 2,001, or 22.5%, have already died.

In the analysis of the figures, children under seven

were excluded, because it was deemed difficult to recognize mental defects in the very young. The older children were divided into two groups. One group comprised children between the ages of 7-13, the other, 13 and over.

The findings were as follows:

Of 1,802, between 7-13, there were 305 children or 16.9% who were classified as defectives; 423, or 23.5%, as retarded; and 21 or 1.2%, as superior.

In the group of 13 and over, out of a total of 1,848, 599 or 32.4% were defectives, 240 or 13% retarded, and 10 or 0.5% superior.

The salient points brought out in the inquiry are, (1) the alarmingly high death rate among the children of defectives. (2) The familial concentration of defective and retarded children among the offspring of defectives—unusually high, and (3) percentage of superior children, insignificantly small.

From these and various other reliable data, the Brock Committee arrived at the conclusion that from 9 to 20% of feeble-mindedness is due entirely to environmental causes. In the great majority of cases, (50% to 60%), both, bad heredity and bad environment, are the contributory causes of mental defect. Heredity, alone as a cause, is responsible in about 20% to 30% of mental defect.

Feeble-mindedness and dullness show greater familial concentration than the graver types, such as idiocy and imbecility.

It is quite common to find cases of severe amentia appearing in normal families. It is the belief of

many authorities that severe grades of defect are more often due to accidents than to heredity.

The chief environmental causes of feeble-mindedness are: (1) Head injuries in utero, at birth or in early life; (2) meningitis or encephalitis in early childhood. (3) Mental defect may also result from some serious illness of mother during pregnancy. (4) Syphilis is also responsible for a small proportion of mental defect.

MODE OF TRANSMISSION

While there appears to be a consensus of opinion that mental defect is hereditary in some cases, the mode of transmission, however, is still a controversial subject. Early investigators, like H. H. Goddard and others, considered it to be due to a "unit character," which is transmitted as a "recessive" to the normal. Biologists today do not take this view seriously.

A mind is composed of millions of cells capable of executing many and diverse functions. Feeble-mindedness is the result of incomplete development of these cells or centres which are responsible for the execution of all these various functions, which can hardly be conceived to be due to one or even a few genes. In the words of Jennings, "hundreds of genes are required to make a mind even a feeble-mind."

Lenz contends that some factors responsible for the production of feeble-mindedness are dominants.

Some biologists contend that feeble-mindedness and some mental disorders are due to the same

factors. Myerson points out that dementia praecox in an ancestor may be succeeded by mental defect in a descendant. He quotes Kraepelin who claims that some cases of feeble-mindedness are really early manifestations of dementia praecox.

J. C. Lidbetter points out "that a great number of mentally defective children are born in families where there is a record of certifiable insanity."

Tredgold is of the opinion that the theory of multiple character transmission is insufficient to explain the various types of defect and disorders that are commonly found in the members of the same family. He advances the theory that the transmission is due to a general germplasm vitiation. According to this theory, it is claimed that mental defect and some cases of mental disorders are caused by poisons, which weaken the potential power of the germplasm to develop normally, as a result of which, it gives rise to a great range of abnormal manifestations, running (depending on the degree of vitiation) from a neuropathic personality all the way through to mental defect and degeneration. The chief poisons, under this theory, are alcohol, syphilis, X-ray, radium, lead and some unknown toxins.

The controversy in question is not free from practical importance. The policy to be adopted in controlling the problem of mental defect depends to a large extent on the correctness of viewpoints of the causative factors.

For example, there is the question of a "carrier" who is intending to marry into sound stock.

According to the "gene" theory of transmission of mental defect, this is absolutely inadvisable, because recessive factors are likely to make an appearance in future generations in the Mendelian fashion. Sooner or later, the defect will show up in the stock, and sometimes even with greater intensity, by the chance mating of two "carriers". But on the theory of germplasmic vitiation, we should encourage a "carrier" to marry into sound stock, because thereby it will strengthen the weakened germplasm and in time, the vitiation may entirely disappear.

Again, under the "gene" theory, if we succeed in sterilizing a great number of hereditary defectives and "carriers" we may reasonably expect, in the near future, to see a great reduction in the incidence of hereditary degenerations. But on the theory of germ vitiation, sterilization does not get at the root of the trouble. It is just like trimming the branches that bear evil fruit, but not uprooting the tree of evil.

As yet, we have not advanced sufficiently in this particular branch of science, so as to be able to decide on either viewpoint.

This leads us to a brief discussion on racial poisons.

SYPHILIS

Syphilis is known to be a transmissible disease. When a parent is suffering from active syphilis, abortion and still-births are quite common, but this is not always the rule. Quite often children are born with congenital syphilis. Congenital syphilis may affect any organ in the body and it does not yield

readily to treatment. When affecting the central nervous system, it may give rise to all kinds of mental deteriorations and degenerations.

The Brock Committee came to the conclusion that syphilis is responsible for some (small percentage) cases of mental defect.

Among the feeble-minded, the incidence of syphilis is very high. Of course, this is no proof that syphilis is the cause of the defect, it rather suggests that the feeble-minded, owing to lack of responsibility and appreciation of the efficacy of prophylaxis, are more likely to contract the disease. However, clinical observations do at times suggest that syphilis may act as a cause.

Recently, I have been called in to see a patient forty years of age—female. She had three children, one was definitely feeble-minded. The other two were apparently normal. The family history appears to be normal as far as can be ascertained.

The patient developed a slurring type of speech. Began to suffer from mild hallucinations; muscular weakness; inco-ordination; Argyle Robertson pupillary reaction. The case was diagnosed and confirmed as General Paralysis of the Insane. The salient point in this case is the fact that although this patient has never taken any anti-syphilitic treatment, she gave a negative blood Wasserman reaction, but the spinal fluid was positive. This suggests strongly that the patient was suffering from congenital and not from acquired syphilis. This suspicion is still further confirmed by the fact that the patient's mother has

shown typical Hutchinson-teeth. Two nieces of the patient have also Hutchinson-teeth.

Personally, I am convinced that the G.P.I. in this patient and the mental defect in her offspring are due to congenital syphilis.

ALCOHOL

It is a common observation that among the offspring of habitual drinkers there are many cases of unhealthy, insane, defective and criminal types. Among the inebriate women there is a great prevalence of abortions, still-births, and infant mortality. Some observers claim that alcoholism is only a symptom and not a cause of mental deterioration. Thus Goddard claims, "that it (alcoholism) occurs mostly in families where there is some form of neurotic taint, especially feeble-mindedness." This claim is, however, not substantiated by clinical data. We do find alcoholics appearing in the finest and best families. Horatio M. Pollock states, "the drink habit in the great majority of cases is not due to constitutional inferiority or to abnormal mental state." The American Psychiatric Association recognized alcoholism as being a direct cause of alcoholic psychosis. Of 2,693 patients who were admitted to hospitals in the United States (first admissions in 1922) there were 5% who were suffering from this type of psychosis, H. M. Pollock states that, "Alcohol is a direct and principal cause of several types of mental diseases." Also that "it is recognized that alcohol is frequently a contributing

factor in the causation of other forms of mental disease such as general paralysis or manic depressive psychosis."

There is no direct proof that alcohol has a deleterious effect on germplasm outside of the fact that among the families of alcoholics there appears to be a greater prevalence of mental defect and mental disorder than among non-alcoholic families. Combermale stresses that the danger of injuring germplasm to the extent of producing mental defectives is very great when the parents are intoxicated at the time of conception. He cites clinical cases in support of this view. Sebatier has arrived at similar conclusions.

A great amount of experimental work has been done in this field by such noted scientists as O. R. Stockard, R. Pearl, Hansen Heys MacDowel and others. Professor Stockard exposed guinea pigs to the fumes of alcohol, and had them intoxicated six days out of seven for long periods. After extensive studies he came to the conclusion that alcohol does affect the germplasm of the guinea pig in the way of showing in the offspring a greater prenatal and postnatal mortality; lower fertility rate, and smaller size of young at birth. When the offspring of the treated animals were fed on a normal diet the same weakness was apparent to exist in stock up to the third generation. After this, the phenomenon was reversed. The animal whose great grandparents were treated with alcohol have proven to be stronger and more virile, showing less mortality than the normal

control group. Stockard came to the conclusion that "the alcohol seems to have acted to eliminate the weakest in the stock, but did not lower the quality of the good and most robust stock."

"Should one desire to apply these experimental results to the human alcohol problem, it might be claimed that some such elimination of unfit individuals had benefited the races of Europe, since all the dominant races have a definitely alcoholic history . . . Any such claims are recognized to be on a wholly theoretical basis."

Other observers experimenting with fowl, rats and mice, questioned the results obtained by Stockards. MacDowel, who experimented with mice, came to the conclusion that alcohol treatment has no effect, whatsoever, on germplasm.

As a result of these experiments, scientists are inclined to draw the conclusion that alcohol plays a minor or no direct role in the production of mental defect. These conclusions are, however, unjustified on the following grounds:—

(1) We cannot compare results obtained in animals with man. The human germplasm may be more vulnerable to the effects of alcohol than those of the animals experimented with.

(2) The animals in the experiment have a short span of life—too short perhaps for the alcohol to show its full effects. In man, the average duration of the drink habit previous to the admission into a mental hospital for alcoholic psychosis is about 22 years. It is the slow and cumulative effects of over

twenty years that shows grave somatic damage. It may take just as long to damage seriously the germplasm.

(3) These experiments have demonstrated that **physically** the offspring of treated animals have shown no inferiority. This does not prove that they were mentally as alert as the offspring of untreated animals. MacDowel had made an attempt to study behaviour, as well as physical characteristics in his experiments, and concluded that the offspring of treated rats have shown some inferiority in behaviour.

X-RAYS AND RADIUM

There is a considerable amount of evidence to show that excessive doses of X-ray and radium do injure the germplasm. Women, when exposed to effects of excessive exposures to X-ray or radium, cease menstruating and become sterile, similarly, men become impotent.

The germ cells are exceedingly susceptible to the effects of X-ray as is shown by the fact that symptoms of X-ray poisoning manifest themselves in the organs of reproduction long before any other symptoms appear.

Little and Bagg have found that offspring of mice which have been exposed to **light exposures** of X-rays have shown leg and foot deformities and eye defects. They have proven that these are real mutations. The deformities thus formed have been shown to be transmitted to future descendants.

Similar results were obtained by Hertwig and

Müller. Müller experimenting on the fruit fly *Drosophila*, has produced many mutations through X-ray exposures. These mutations, he proved, were transmitted in true Mendelian fashion.

There is no danger in the use of X-ray for diagnostic purposes or light treatments, but one must think of the danger (damaging germplasm) when administering deep X-ray therapy to young people. However, the danger is not so great, when one considers that patients in need of deep X-ray therapy are, in most cases, also otherwise undesirable for parenthood.

There is, however, a danger when radium or X-rays are used in industry. Many concerns employ women of child-bearing age where radium is carelessly handled. A number of young girls met with a tragic death a few years ago from the effects of radium acquired while working on illuminating dials in a watch factory. The number of those who did not die but whose germplasm was seriously damaged, thereby starting a line of mental defectives, will never be known. Unless sufficient safeguards are taken, the employment of young people in industries where radium is used, should be prohibited.

LEAD

Lead poisoning in either father or mother shows disastrous effects on offspring. Women working in lead have frequent abortions and still-births. There is a great frequency of feeble-mindedness and stunted growths among the children of workers in lead. This

condition has become worse since the introduction of spraying (especially indoors) instead of the use of the brush. Precautionary measures against this industrial hazard should be enforced with utmost strictness.

MONGOLIAN IDIOCY

Mongolian idiocy is a well-defined type and is fairly common. It is more common in females than in males. The mongolian is easily recognized by characteristic oblique eyes, round face, flat forehead, lack of occipital prominence, lack of facial expression, short, stubby fingers, broad, thick and furrowed tongue, and a dry, rough skin. Growth is more or less stunted. They resemble greatly the Asiatics—hence the name.

Mongolism does not appear to be hereditary. This type of defect appears quite often in good and normal families. Goddard considers it to be due to some physiological disturbance in the mother during pregnancy. This view appears to be supported by the fact that a mongolian child is usually the last in the family—close to the approach of menopause.

Some claim that it is attributable to some deficiency in internal secretions, but this view has not been substantiated.

The Mongolian rarely attains a mental age of over five or six years. Mongolians as a rule do not marry, and as far as is known, are usually sterile.

The normal members of a family containing a Mongol are to be considered normal from an eugenic viewpoint. They are not "carriers" of any defect.

CRETINISM

Cretinism is a type of idiocy, the etiology and symptomology of which is well understood. It is due to failure of mental development as a result of improper development of the thyroid gland.

The mental state of the patient depends on the severity of the case. In some cases, the patient fails to recognize his own parents. He is apathetic, neither weeps nor laughs. May occasionally show signs of hunger. In milder cases, they may learn to speak a few words, and are able to recognize familiar faces.

Two types are recognized, (1) the endemic type, and (2) the sporadic type. The endemic type appears mostly in families that show a prevalence of endemic goitre. It is hereditary to the same extent as is endemic goitre, (a disputed question).

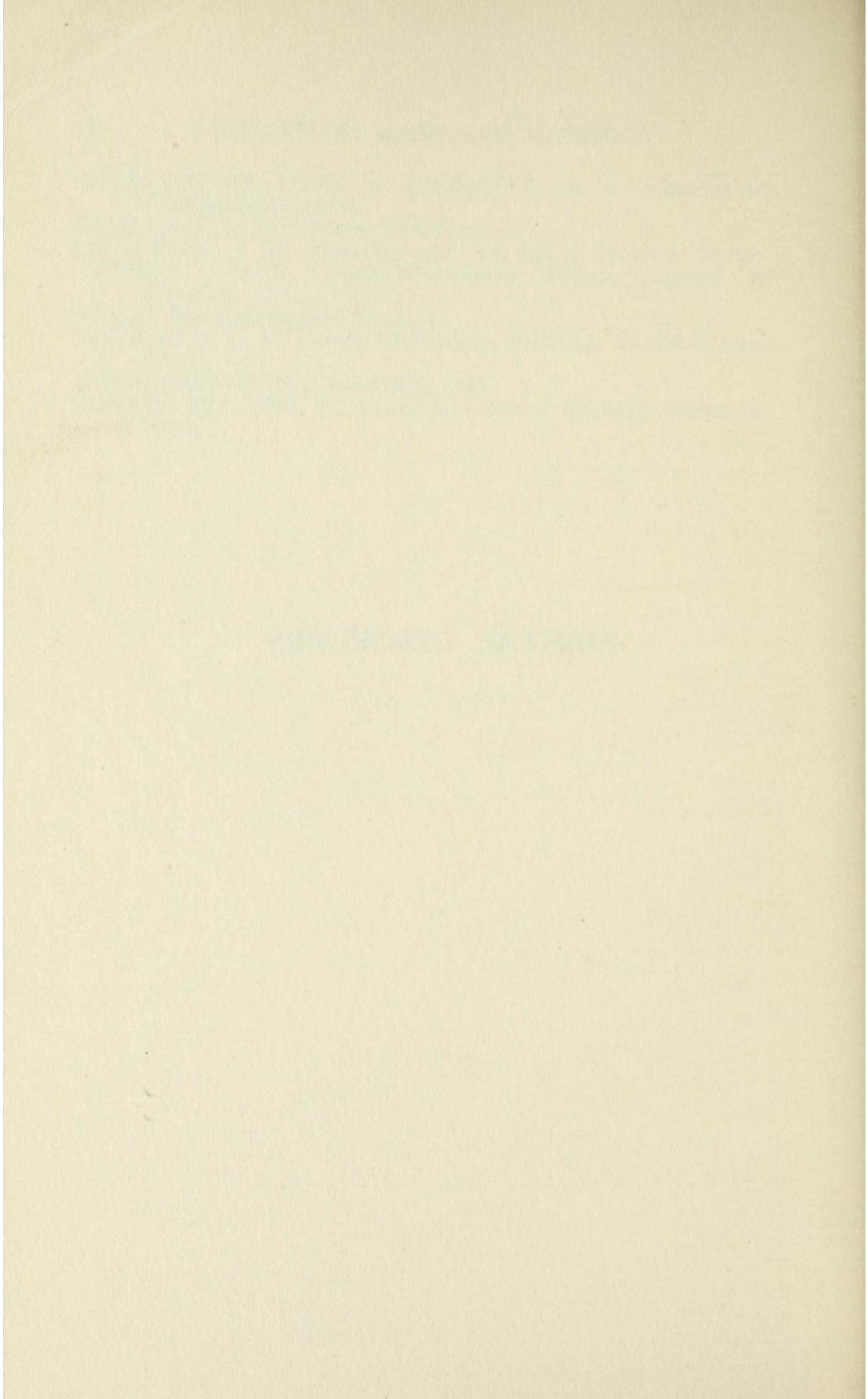
Sporadic cretinism appears quite often in normal, healthy families, and in regions that are quite free from endemic goitre. It is thought to arise from atrophy of the foetal thyroid gland, as a sequel to some infective disease in the mother during pregnancy. It may also be due to hypothyroidism in the mother.

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MENTAL DISORDERS



CHAPTER II

MENTAL DISORDERS

Mental diseases form a large number of groups which differ considerably in their clinical manifestations and causative factors.

The incidence of mental disorders has not been fully ascertained. This is due partially to lack of reliable data; partially to uncertainty in diagnosis and also to discrepancies in terminology. For example, what one considers to be a mild case of manic depressive psychosis, is considered by some as "cyclothymia", by others, as normal eccentric. In border-line cases, it is often impossible to draw the line where the normal ends, and pathological begins.

It has been estimated by H. M. Pollock and co-workers that approximately 4.4% of all male population and 4.9% of all female population (urban?) are expected to be committed to a mental institution for some period during their lifetime (if present frequency be unaltered).

It was found by Luxenburger and Schulz that average incidence of the main mental disorders among urban population was:—Dementia praecox, 0.8%; manic depressive psychosis, 0.4%; epilepsy, 0.29%; general paralysis of insane, 1.73%; severe hysteria, 0.28%.

The incidence of mental disorders appears to be greater in urban than in rural population. Pollock and Furbush state that 71.4% of the commitments to mental institutions in the U.S. come from urban districts and 27.1% from rural districts. The statistics of the Massachusetts State Hospitals show a rate of 79 per 100,000 from urban commitments and 25 per 100,000 from rural districts. Villages and large cities give a high rate, small towns and cities furnish the least number of patients per 100,000 in that state (Massachusetts).

Most psychiatrists are of the opinion that mental disorders are on the increase.

Inmates in asylums and mental hospitals have been steadily on the increase. This, of course, is no indication that the incidence is increasing in the same proportion. It only indicates that the trend of the people is to send mental patients to hospitals instead of taking care of them at home. This is especially true in places where there is ample hospital accommodation, and where such hospitals are properly equipped and adequately staffed. Thus we see that in the States of Massachusetts and New York with ample hospital facilities the rate of admission is about 375 per 100,000 while in New Mexico, Arkansas and Alabama the rate is only 150 per 100,000. "People will readily send a patient to a hospital that is located only a few miles away from their home but would hesitate to send him to one that is more than 100 miles away." (Metropolitan Life Insurance Co. Statistical Bulletin, 1935.)

The census bureau of the United States shows that patients resident in state institutions have increased from 31,973 in 1880, to 159,096 in 1910, to 222,406 in 1922, to 264,511 in 1928 and to 272,527 in 1929.

Ratio per 100,000 to general population have increased from 63.7 in 1880 to 173 in 1910; 204 in 1922; 222.3 in 1928 and 225.9 in 1929.

These figures do not include patients who are residents in private institutions.

In Canada, the census shows that thirty years ago, there were 11,000 mentally diseased in institutions; ten years later, the number rose to 21,000 and in the last census, it was 30,000. In 1934, the inmates in mental institutions in Canada rose to 32,290.

These figures cannot be taken as the true rate of increase in the incidence of mental diseases. An increased rate of about 300% in thirty years is too rapid to be explained on either a truly biologic or faulty environmental basis. Many of these patients spend many years in institutions, and there is therefore an ever-growing accumulation. The growth of accumulation corresponds fairly well with the growth of hospital facilities.

We may get a clearer conception as to whether mental diseases are on the increase or not from a study of first admissions to hospitals.

The Committee of the American Neurological Association for the Investigation of Eugenic Sterilization (1936) have made a careful study of first admissions in the State of Massachusetts and New York in the last 25 years. They found "that

the rise of population is about parallel by the rise of admissions of cases of manic depressive psychosis in the State of Massachusetts. It is at least safe to say that there is no increase in the admissions of this disease. Of New York, the same can be stated . . ."

"Dementia praecox shows in the case of Massachusetts, a decrease in the admission rate; in the case of New York, slight rise, whereas for the previous years the rate is fairly constant, although with some ups and downs."

Winston Churchill, in a paper, "The Assumed Increase of Mental Diseases," has shown by careful statistics and charts that the first admission rates in various countries throughout the world to mental institutions in the last twenty-five years has not shown any marked increase anywhere.

Horatio M. Pollock in a paper, "The Depression and Mental Diseases in New York State," has concluded that, (1) "Patient population in New York State increased more rapidly from 1929 to 1934 than from 1924 to 1929. The increase was greatest in 1933.

(2) The trend in the rate of first admissions has been rising since 1924."

AGE AT ONSET

Mental disorders are diseases characteristic of middle life. In institutions we find only 0.2% under 15 years of age and 1.5% under twenty. The percentage mounts up to the age of 40-44, then onwards the incidence begins to decline.

MARRIAGE, FERTILITY AND MORTALITY

Almost all investigators agree that the marriage rate among the insane is much smaller than the normal.

Paul Popenoe states that the marriage rate of the psychotic of both sexes is markedly below that of the general population of all ages. Pollock and Furbush state that according to the United States statistics 60.9% of the schizophrenics, 59.3% of the epileptic psychotic and 76.4% of the mentally deficient are unmarried.

The fertility among the insane is considerably smaller than the normal.

Dahlberg found in a large group of women who had been in the insane asylum of Upsala that their fertility was only a little more than half of the normal.

Popenoe states "that no large group of institutional insane in California will produce enough children wholly to reproduce itself, even if it were not sterilized."

Dayton's statistics show that the marriage rate among the insane is decidedly lower than the general population. Also that the sterility rate in the married patients was considerably higher than the general population. The general sterility rate in the normal married couples in the U.S. has been estimated by Lotka to be approximately 17%. In the groups studied by Dayton, 20% of the marriages were childless.

The mortality rate among the insane is exceedingly high. We find in the statistics of the Metropolitan

Life Insurance Co. based on a study of death rate of insane in the New York State Hospital from 1914-1923, "It is certain that the expectation of life of the insane is greatly curtailed, possibly by as much as one-half."

Rüdin found that the mortality of schizophrenics as a whole is three and a half times higher than that of the mortality of their own brothers and sisters.

Meyers has found that the mortality of schizophrenics in the age group from 15 to 50 averages 5.4 times that of the average population; that of manic depressive, 15 times; that of epileptics, 12 times, and that of feeble-minded twice the mortality of the general population.

CLASSIFICATIONS AND ETIOLOGY

There is no universally uniform classification of mental diseases.

It has been established that most types are acquired. The most common forms of acquired insanity are (1) Traumatic, or those caused by injury to brain. (2) Senile, those types that come with old age along with general degeneration of organs. Mental disorders due to arterio sclerosis is the best example of this type; (3) those resulting from brain tumors; (4) involuntional, a type common at climaterics; (5) alcoholic, those types resulting from excessive and prolonged use of alcohol; (6) psychosis with psychopatic personality usually resulting from a variety of causes and (7) general paralysis of the

insane and cerebral syphilis—late manifestations of syphilis.

The chief types where heredity is supposed to play a major role are (1) dementia praecox or schizophrenia, (2) manic depressive, (3) paronia, *paran* and (4) epileptic psychosis.

MANIC DEPRESSIVE

This type constitutes about 10% of all admissions to mental hospitals. It is more common in females than males; in the ratio of three to two. Age of onset is about 40.

Hoffman found that 31% of children, when only one parent was affected, have shown affective disturbances, although only one-half of those were bad enough to require hospitalization.

Rüdin found that whenever one parent is a manic depressive, one-third of the children show the same disorders, and one-sixth show milder disturbances. When both parents were affected, he found two-thirds of the children to be similarly affected, the remaining third, showing milder disturbances. Kraepelin found evidence of an inherited taint in 80% of all manic depressive cases. Manic depressive does **not** show a tendency to skip a generation.

In 1928, a study in this field was undertaken by the New York State Department of Mental Hygiene and the State Charities Aid Association. The work was conducted by Horatio M. Pollock, B. Malzberg and R. G. Fuller. They gave a tentative report of their

findings at the Third International Congress of Eugenics in New York, 1932.

They have reported that "taking all types of mental diseases in consideration, we may conclude that the frequency of affected individuals in the families of the 60 male and 95 female patients with manic depressive psychosis does not seem to point to a hereditary explanation of the origin of mental disease in this stock. When we select those cases in which the father of the patient was affected, we again find inconclusive results. But when, the **mother** was affected, we find reasons for believing that the frequency of affected children was greater than expected."

"We have shown that the frequency of mental disorders among the siblings, especially of the manic depressive psychosis, is significantly in excess of the total expected in populations selected at random. This was shown to be especially significant in connection with the siblings of female probands with manic depressive psychosis. There appears to be therefore, a familial basis for the development of mental disorders in many cases, although the underlying laws of their manner of transmission are not yet understood."

The investigation is still proceeding. At no time have they found the percentage of affected children to approach anything like the figures obtained by the German investigators.

Luxenberger has found that 32% of the children of parents suffering from manic depressive psychosis

are likely to develop the disease. He also points out that many children are only slightly affected, and these usually possess greater social and even eugenic values than the average normal. Luxenberger points out that manic depressives, as a group, are socially productive and successful. He shows by careful statistics that there are about four times as many members among the manic depressive of the higher social strata than in the average population. (23.3%; 8.7%.)

From an eugenic standpoint in recommending sterilization, Luxenberger advises to exercise careful individual consideration in every case.

The American Neurological Association Committee states, "It is safe to say that manic depressive psychosis is inheritable; that whether in mild or severe form, it manifests itself in a considerable number of descendants or collaterals of those who have this disease."

DEMENTIA PRAECOX

This type constitutes about 40-43% of all psychosis. Onset in 70% of all cases is before the age of 30. Males are more commonly affected than females. Kraepelin, in his investigation of over one thousand cases of dementia praecox, found evidence of hereditary abnormalities in 53.8% of his cases.

Drs. Mapother⁹² and A. J. Lewis state that about 8-10% of the children of dementia praecox patients are expected to be suffering from the same disorder, about 40% are expected to show schizoid personality

and only about one-half of the children are expected to be normal.

Luxenberger and Schulz have found, on careful investigation, that the expectancy of psychosis among the children of manic depressive to be about 25 times as great as among the average population; of dementia praecox, about 6 times; and of epilepsy, 9 times as great.

According to Aubrey Lewis, there appears to exist a correlation between dementia praecox and tuberculosis. He states, "this coincidence has been carefully studied. The non-psychotic siblings of schizophrenics die of some form of tuberculosis with four times the frequency shown by siblings of the same age in the average population."

A careful study on a large number of patients with dementia praecox was made by Pollock, Mallzberg and Fuller. They state, "It must be concluded that there is a greater possibility of mental disease among the relatives of patients with dementia praecox than exists in the general population of the State of New York. Unless there may be discovered other specific factors capable of explaining the appearance of mental disease in these families, it must be assumed that family predisposition is an important etiological factor."

The Committee of the American Association for the Investigation of Eugenical Sterilization stated, "It is probable that dementia praecox occurs in certain families in a higher incidence than in the general population. This, we believe, is about the only

definite statement which can be made at the present time."

MODE OF TRANSMISSION

The mode of transmission of either manic depressive or dementia praecox is not understood. According to Rüdin, manic depressive shows dominant characteristics, as well as recessive.

Pollock, Mallsberg and Fuller state, "It is clear, therefore, that though there is probably a familial basis for the origin of many cases of mental disorders in the family stocks of probands with dementia praecox, the observed frequency cannot be described in Mendelian terminology."

Forel, Mott and others maintain that blastophtoria, (weakening of germplasm by means of various agents such as alcohol or syphilis) appears to be the most likely explanation of transmission of mental diseases. It is often pointed out that the children of syphilitics often show a high incidence of mental defect and psychopathic personalities of various kinds, even though we cannot demonstrate syphilis in the offspring.

HUNTINGTON'S CHOREA

This disease was first described by Dr. Huntington in 1872. It is characterized by (1) persistent tremors of head, limbs and trunk. (2) There is progressive mental deterioration ending usually in dementia with suicidal tendencies.

The onset is usually about middle life.

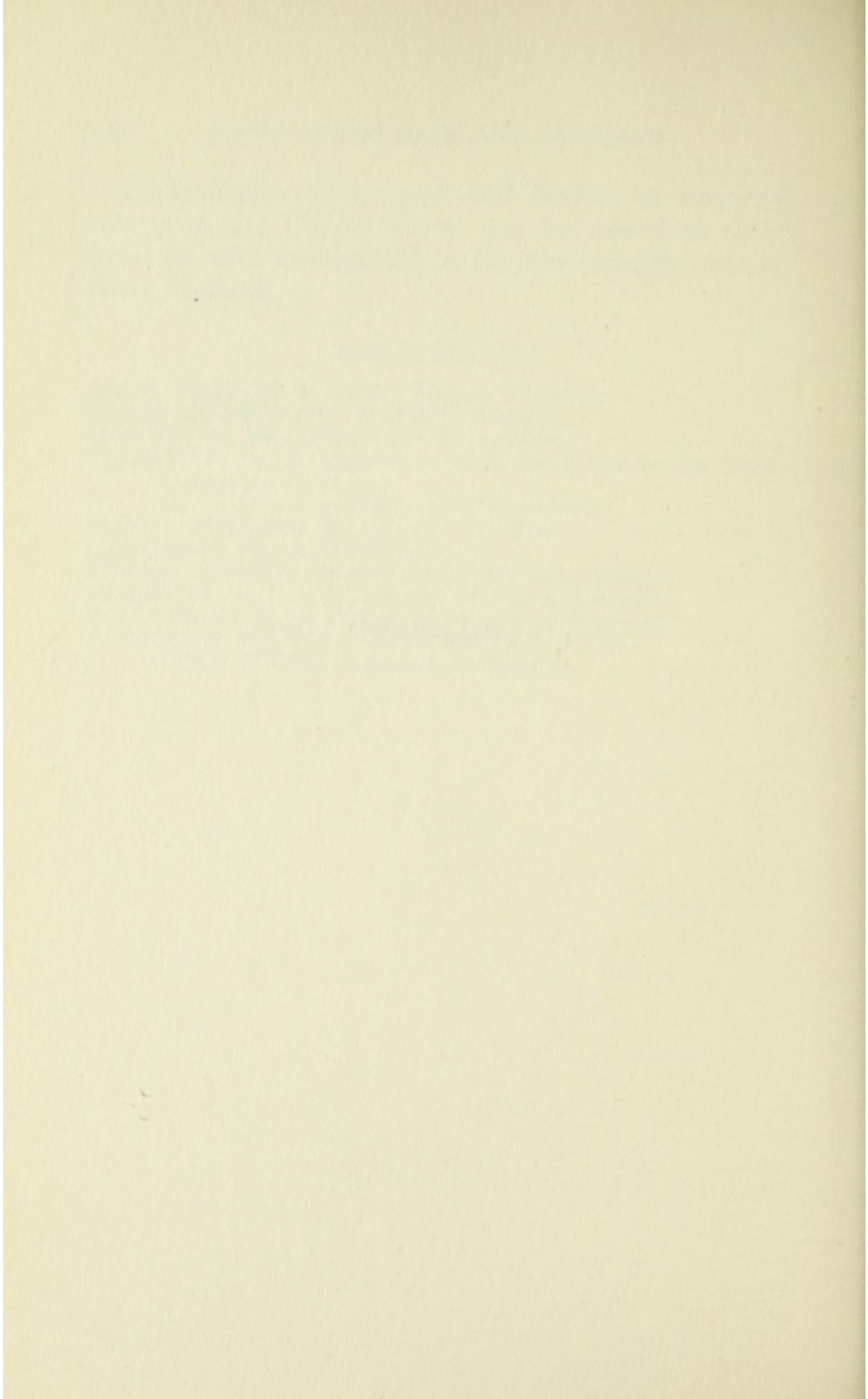
The disorder is transmitted as a Mendelian dominant.

2 } According to Davenport and Entres, its ancestral source in the United States can be traced to three brothers who immigrated in the seventeenth century from Holland.

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EPILEPSY



CHAPTER III

EPILEPSY

Epilepsy is a symptom complex characterized by a tendency to recurrence of epileptic fits or seizures. Major attacks are accompanied by loss of consciousness. Epileptic subjects often show some mental peculiarities, such as nervous irritability or defective memory, although this is not always the rule. A great number of epileptics in later life show evidence of progressive mental deterioration, terminating in dementia.

The onset of epilepsy is usually before the age of twenty. The incidence is greatest in the first-born.

The disease exists in many forms and degrees of severity.

It has a varied etiology. Birth injuries, injury of brain in early childhood, encephalitis in childhood, are the chief causes of epilepsy. In many cases, however, it is traced to heredity. It is often impossible to differentiate between hereditary and acquired epilepsy.

A. Myerson claims that heredity as a factor in the production of epilepsy has not been proven. However, other investigators have found sufficient evidence of heredity as a factor in this disorder. W. Russell Brain, in a series of 200 epileptics, found evidence of heredity in 28%. Similar figures were found by Turner, (37%), Gower, (27%), and

Bennett, (26%). Gower points out that the figures are probably too low, because some milder cases are not recognized, and again information by relatives is sometimes purposely held back. Russell Brain estimates the proportion of hereditary cases to be approximately 50%.

Gower claims that whenever a family taint exists, more females are affected than males.

Brain's series have shown that 23.8% of epileptic males and 31.2% of epileptic females gave a family history of epilepsy.

According to Rüdin, 10% of the children of epileptics are expected to be sufferers from the same disorder.

MYOCLONIC EPILEPSY

Myoclonic epilepsy was first described by Unverricht, in 1891. The disease commences in childhood between the ages of 5 and 10. It is characterized by epileptic fits, muscular spasms and progressive mental impairment. The fits are not attended by loss of consciousness. It is generally accepted that the disease is transmitted as a simple Mendelian recessive.

DEAF MUTISM

A great percentage of deaf mutism is due to inheritance. It is estimated by most scholars that about 25% of deaf mutism is due to heredity.

Acquired deaf mutism may be caused by scarlet fever or meningitis, labyrinthitis in early childhood, also by congenital syphilis.

There are about 100,00 deaf mutes in the United States. In Germany there are about 50,000 deaf mutes. In England, about 24,000. Throughout the world the percentage is estimated to be about 1/15 to 1/20 of 1%.

Government statistics in the United States show that this condition is more frequent in Negroes than in any other race.

The condition is frequently associated with feeble-mindedness, congenital blindness, or cretinism.

It is generally agreed that hereditary deaf mutism is transmitted as a simple recessive.

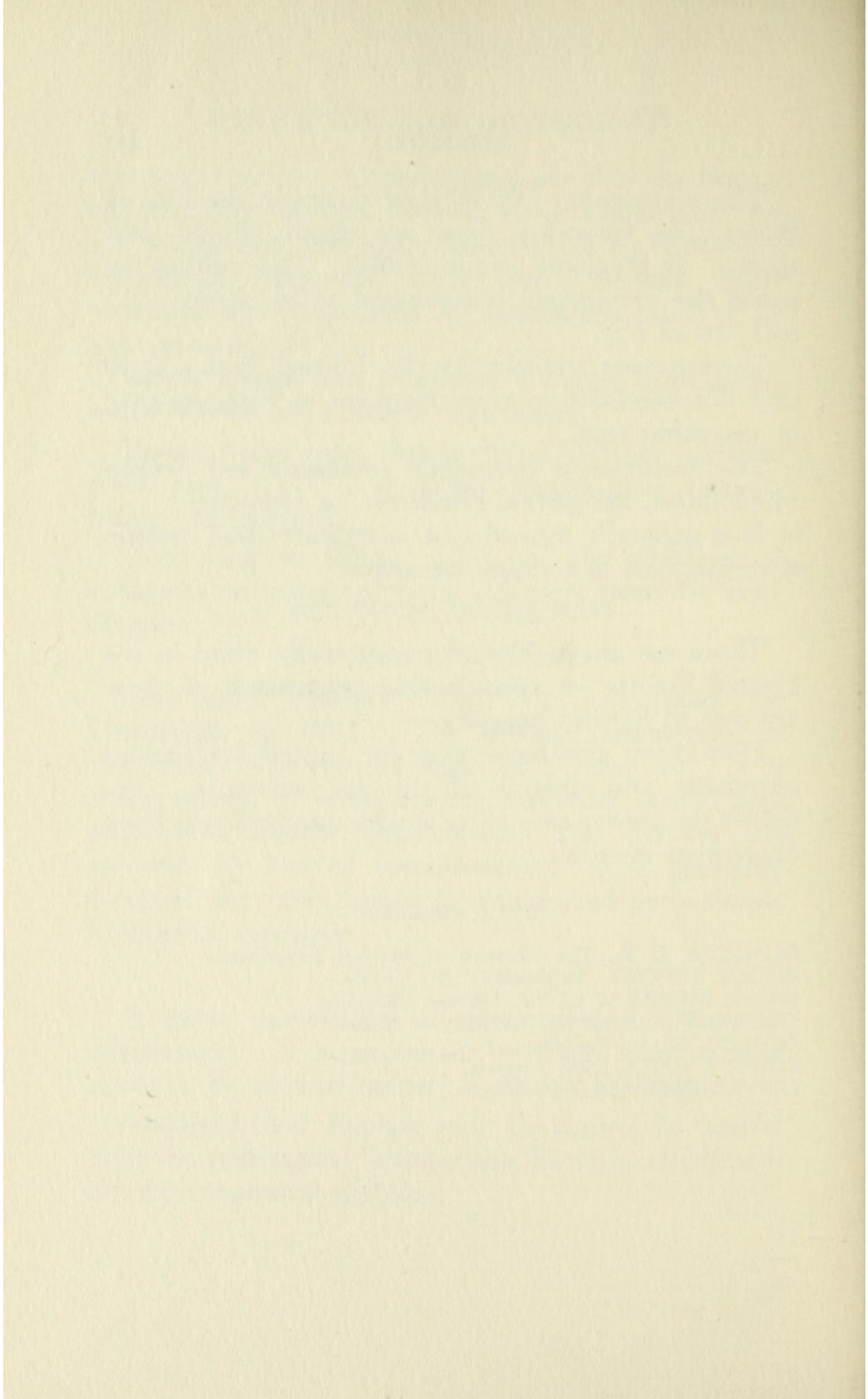
CONGENITAL BLINDNESS

There are about 75,000 congenitally blind in the United States. A considerable percentage of these are due to morbid heredity.

Hereditary blindness may be caused by various anomalies and defects of the eye structure. For details the reader may refer to any standard text book on human heredity.

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RESTRICTIVE MEASURES

THE UNIVERSITY OF CHICAGO

CHAPTER IV

RESTRICTIVE MEASURES

Four main restrictive measures have been proposed:—(1) Education; (2) Restrictive marriage laws; (3) Segregation, and (4) Sterilization.

(1) Education:

It has been pointed out that education is of little value, because as a rule the defective is incapable of learning. This is, however, only partially correct. The feeble-minded cannot be taught, but an epileptic or one who has recovered from a mental disorder, could be made to understand the seriousness of his or her having children. A great deal can be accomplished by teaching the public that the relative of a **defective** may be the "**carrier**" of the same defect and that previous to marriage, in all such cases, a competent genetician be consulted. By means of education it is possible to spread authentic information in regards to the serious menace that exists in the very midst of society and create a public sentiment in favour of eugenical measures. It is, however, recognized that education **alone** is not sufficiently adequate a **measure** to cope completely with the situation.

(2) Restrictive Marriage Laws:

Laws forbidding marriage of defectives have been enacted in many parts of the world. Minnesota has a law providing that "within the bounds of the state, no marriage shall be performed, either party to which is epileptic, imbecile, feeble-minded or afflicted with insanity, unless the woman be over forty-five." This measure is considered to be of little value. Forbidding defectives to marry may have a tendency to increase an already high illegitimate birth rate.

(3) Segregation:

Segregation for eugenic purposes, is understood to mean the placing in institutions of all hereditary mental defectives and mentally disordered, segregating the sexes during their entire period of reproduction. Of course, at present, there are many defectives who are inmates in institutions. These, however, are kept there for their own protection and for the protection of society. The helpless imbecile has to be kept, and usually is, in an institution or under supervision at home for his own sake. Not so the moron. He or she is usually free. Most of them manage to get along at simple work such as farm-hands or helping in domestic work. Similarly, the insane. While ill, they are cared for in mental hospitals, but as soon as they recover permanently or temporarily, they are released on parole.

These, (mostly the moron and the recovered groups of insane), constitute a eugenic menace. The advocates of segregation maintain, that, in the interest of race progress, these groups should not be allowed

to be free or out on parole, (if the defects or disorders are shown to be hereditary) but should be kept in institutions during their entire period of reproduction.

This is claimed by the advocates of this measure to be a humane method in the dealing with these unfortunates. It has been pointed out that while at times the inmates may be dissatisfied with institutional life, as a rule, they are more happy while in the institution than when at large. In the midst of a normal society, they usually drift along, are often misunderstood, oftentimes, ruthlessly punished and ridiculed, and usually fail when they meet with obstacles.

Theoretically, this may sound well, but nevertheless, it is hard to conceive that this is a humane method. It is hardly humane to shut up robust and partially useful people for the greater part of their lives, depriving them of their freedom and of the companionship of the opposite sex. It would be cruel to keep in an institution an epileptic patient or one who has recovered from a mental illness.

Again the question of expense is no small item. The housing and maintaining of a great number of hereditary sufferers for years would involve a colossal expenditure. It is hardly conceivable that any government would agree to finance such an expensive and unproductive project.

Most eugenists consider that, on a wide scale, segregation, as an eugenic method, is neither practical nor humane.

(4) Sterilization:

Eugenic sterilization as a positive means of checking and restricting the birth of the unfit has been endorsed and advocated by many scholars throughout the world. Public sentiment is steadily growing in favour of this measure. *exper*

HISTORY

Eugenic sterilization has had its longest and most stormy history in the United States.

In 1899, Dr. Harry Sharp began systematic sterilizations at the Indiana State Reformatory of boys who were inmates in the institution. He was the first one, so far as is known, to use vasectomy in the United States for that purpose. At that time, he had no legal sanction to back his practice. The first state sterilization law was passed in Pennsylvania, in 1905, but was vetoed by the Governor. In 1907, Indiana passed a sterilization law which was not vetoed. Indiana thus holds the double distinction of being the first in the United States, where vasectomy was done for eugenic reasons, and then of being the first state in the Union to put a sterilization law on its statute books. In 1909, Governor Thomas R. Marshall of Indiana gave notice that he will withdraw grants from any institution wherein sterilization was practised. As a consequence, sterilizations in Indiana were practically given up. The law was declared unconstitutional in 1920.

Since 1907, many states have passed sterilization laws, most of which have been repealed. In 1927,

the advocates of sterilization scored a victory when the United States Supreme Court gave a decision in favour of sterilization, in the State of Virginia. Other states soon followed suit, enacting laws after the model of the Virginia Sterilization Law. Up to 1934, there were 27 states in the United States where sterilization was legalized.

The States of Washington and California have a continuous record of sterilization acts since 1909. The Washington law, however, was hardly ever put into operation. On the other hand, the State of California is leading in the number of operations performed. Up to January, 1933, sterilizations in the State of California alone numbered 8,504. For the whole of the United States the number was only 16,066. The total of sterilizations now is in the neighbourhood of 20,000.

In Canada, public opinion appears to be gaining in favour of sterilization. Recently, Alberta has adopted a law providing for the voluntary sterilization of certain inmates in provincial institutions.

In England, as early as 1905, there was appointed a Royal Commission to carry on an investigation and recommendations for the Care and Control of the Feeble-minded. The report of this Commission was published in 1909. No reference to sterilization was made in the report. In 1924, a second Royal Commission was appointed for the same purpose. This Commission is known as the Wood Committee. In 1929, the Wood Committee published its report.

Among the many very important recommendations

5 year
10 year

made by this committee, it is stated:—"Roughly speaking, out of 300,000 mental defectives in England and Wales, one-third will require institutional provision and two-thirds, some form of community care, that is, care outside an institution. It is in the case of the latter that the risk of procreation arises, and the case for sterilization, if such a case exists at all, is strongest. It can hardly be denied that the 200,000 defectives who must remain in the community, are wholly unfitted for parenthood."

As a result of this, the Eugenic Society of England proposed in 1930, that sterilization be legalized. Public opinion became more or less, sympathetic.

On July 21, 1931, Major A. G. Church introduced in the House of Commons a Bill for legalization of voluntary sterilization for mental defectives. The Bill was defeated.

On November 12th, 1930, the Council of the British Medical Association appointed a committee to investigate and to report on the various phases of the problem of mental deficiency. A report of the findings appeared in the British Medical Journal of June 25th, 1932. In regards to sterilization, their opinion was:—

"That sterilization, even if widely applied to mental defectives would not cause any appreciable differences in the number of mental defectives in the country for many generations. Also the measure may prove to be of use to a small number of mental defectives, if done under proper safeguards. Too,

this method may be applied successfully to a small number of sufferers from certain other hereditary ailments."

The most momentous step in this direction was made on June, the 9th, 1932, when a Third Royal Commission was appointed "to examine and report on the information already available regarding the hereditary transmission and other causes of mental disorder and deficiency; to consider the value of sterilization as a preventive measure having regard to its physical, psychological and social effects, and to the experience of legislation in other countries permitting it . . ."

This committee is known, hence, as the Brock Committee.

On January 18th, 1934, the report of the Brock Committee was fully published. It recommended among others that **voluntary** sterilization be legalized for mental defectives and for persons who suffer from mental disorders, and also for "carriers".

This committee has aroused considerable interest and provoked intelligent discussion on the subject of sterilization.

As yet, sterilization has not been legalized in England.

In continental Europe, Denmark, the Canton of Vaud, Switzerland, and the Free City of Danzig, have recently legalized sterilization. In Germany, a compulsory sterilization law was passed on July 26, 1933, and came into effect on January 1st, 1934. It has been practised ever since, in a most sweeping

manner. Well over 50,000 sterilizations were ordered or performed during the first year of its existence.

OPERATIONS

(1) In the Male:—

The organs that are chiefly concerned in reproduction are:—(a) the testes:—these are two organs the chief function of which is to produce the spermatozoa or semen or male germ-cells. The testes, in addition, produce some internal secretions which are necessary for the maintenance of youth and vigour, and which are also essential for the development of characteristics that are known as secondary sexual characters.

(b) Vas deferentia:—These are two narrow ducts or tubules connected with each testis. These ducts run in upward directions terminating in little sacs which are known as—

(c) Seminal Vesicles:—These little sacs are situated on either side of the base of the urinary bladder.

The spermatozoa which are produced in the testes travel along the cavities of the Vas deferentia towards the seminal vesicles and are stored there. During normal coitus, the spermatozoa are pushed out from the seminal sacs and are deposited in the vagina around the mouth of the womb. Thence, the spermatozoa find their way into the interior of the womb (or they pass into the Fallopian tubes) and unite with the ovum or female germ-cell and a new organism commences to be formed.

It is evident from this brief description, that an individual may be sterilized either by (1) the removal of the testes, thus cutting off the supply of the semen or (2) by cutting and tying off the vas deferentia thus preventing the escape of the semen to the exterior.

The operation whereby the testes are removed is called **Castration**.

The operation of cutting and tying off the vas deferentia is called **Vasectomy**.

Castration is now rarely practised. It should not be legalized (for eugenic or penal reasons) unless it be for the saving of life or suffering, such as malignant growth or tuberculosis of the testes and alike. Why not?

Castration is accompanied by unfavourable symptoms. If an individual is castrated before attaining puberty, secondary sexual characters fail to develop. The voice remains loud and childish. Hair on face and underarms do not grow. Regardless of age, when one is castrated he loses all sexual power and appetite. In addition, there are also pronounced personality changes. The individual who has been castrated, shows no ambition, is usually lacking in vigor and in nervous stability.

None of these changes follow vasectomy, because, in vasectomy, **no organ** is removed. It is attended by no untowards effects of any kind, either physical, physiological or psychological. The patient, after vasectomy, retains his full vigour, sexual power and

desire, with the only exception, that he cannot become a parent.

(2) In the Female:—

The organs that are indispensable to reproduction are:—

(a) The Ovaries:—These are two small organs situated on either side in the pelvic cavity. The main function of the ovaries is to produce the human ova or female germ-cells. The ovaries also produce internal secretions which are necessary for the development and maintenance of secondary sexual characters.

(b) The uterus or womb is situated in the centre of the pelvis. The main function of the uterus is to house, so to speak, the foetus in development. The cavity of the uterus opens up below into the vagina. In its upper end the uterine cavity has two openings, each connecting with a duct. These ducts have openings into the abdominal cavity. The ducts are known as **Fallopian-Tubes**.

Once each month, the ovary produces and matures an ovum. When the ovum is fully ripe, it is extruded from the ovary and is lying loose in the pelvis. It is then picked up by the open end of the Fallopian tube. If fertilized, it is carried into the cavity of the womb, implanting itself within the walls of the uterus, remaining there through the entire course of pregnancy.

It is evident that a woman may be sterilized either (1) by removing the ovaries thus cutting off the supply of ova, or (2) by cutting the tubes near the

junction with the uterus and stitching over the openings thus preventing the mature ovum from meeting and uniting with the spermatozoa.

The operation, when the ovaries are removed, is called **Castration**.

The operation of cutting and tying off the tubes is called **Salpingectomy**.

With castration, there are profound systemic and psychological changes. We are getting all the symptoms that usually accompany menopause or change of life. Menstruation ceases. There are always symptoms of nervous instability in varying degrees. This operation should never be legalized unless it be for therapeutic reasons.

Salpingectomy is the operation of choice. Outside of preventing parenthood, it does not alter in any way the life and habits of the patient, either physically, sexually or psychologically.

Salpingectomy and vasectomy are the only operations advocated by students of eugenics.

In the male, the operation is easily performed. In skilled hands, it takes only from 5-10 minutes. It is usually done under a local anaesthetic. There is usually no pain either during or after the operation. The patient is usually able to return to work in a day or two after the operation.

Salpingectomy is a major operation. The patient has to remain in bed from ten days to two weeks. It is considered a safe operation.

In the State of California, where by the end of 1929, they had performed over 2,500 salpingec-

tomies, there occurred only 3 deaths, two from anaesthetics and one from infection. When universally done, the death rate will probably be a little higher.

The results of these operations are almost always positive, although occasionally there may be a failure.

In California there were only four known pregnancies in 2,500 salpingectomies. The actual failures are probably a little higher. Some patients had no occasion to put the success of the operation to test. Some were not married, others did not live with their husbands, and still others had only a short period of parole.

Vasectomy may occasionally also be unsuccessful. Of 3,500 vasectomies in California, there are three known failures.

It is however, easy to determine by special methods as to whether the operation was successful or not.

X-RAY AND RADIUM

It has been proposed by some to use X-ray or radium for purpose of sterilization. It has long been recognized that prolonged exposures to X-ray or radium will cause sterility. At present, however, its use is not advisable for the following reasons:—

(1) It is really a castration. X-ray and radium destroy the organs of reproduction.

(2) It is very difficult to measure the required dose accurately. In case of an overdose, the adjacent tissues may be seriously damaged. In case of an underdose, the sterilization may be only temporary or partial.

The resulting offspring may be injured.

LEGAL STATUS

(a) United States:—

The United States is leading in the respect of being the first in the world to place Eugenic Sterilization Laws on the Statute Books. Being pioneers, it is only natural that the early laws were improperly drafted. These, being state laws, have quite often conflicted with the Federal Constitution. In most cases, the legislators themselves failed to grasp the meaning of and purpose for the creation of such laws. The public was entirely unprepared. To the great majority of people, it appeared that sterilization is a sort of brutal treatment, and a strange experiment designed at the expense of the poor defectives. The very newness of the idea called forth strenuous opposition. It is, therefore, no wonder that almost all of the early laws have been challenged and declared unconstitutional. The period that has elapsed between 1907 and 1927 is very fittingly called by H. H. Laughlin as the experimental years in the American Sterilization Laws. During this period an honest attempt has been made by students of heredity and legislators to set up laws which were humane and at the same time, aimed to protect society and posterity. Errors were inevitable. Litigations followed. Laws have been either repealed or defeated. However, the arguments and testimony that was brought out in the various court proceedings helped to bring out clearly the aims, purposes, limitations and safeguards that must be embodied in the drafting of a successful and constitutional Human Sterilization Law.

The chief grounds upon which the laws have been contested, were:—

(1) Violation of Due Process of Law.

Many states have framed laws to the effect that a defective may be sterilized upon the recommendation of the superintendent of an institution, if such a recommendation be approved by a board of experts. The Supreme Court of Indiana declared such a procedure to be unconstitutional on the ground that it failed to provide for regular court proceedings as guaranteed by the Federal Constitution. By regular court proceedings, is understood, that a patient or his attorney or representative has the right to examine and cross-examine witnesses, and also has the right of appeal to a higher court.

(2) Class Legislation:

Almost all the laws have provided for sterilization to be applied only to defectives **residing** in state institutions instead of being applied to **all** defectives irrespective as to whether they are at large or in institutions. The New Jersey Supreme Court, in 1913, ruled that this constitutes a "denial of equal protection of laws."

The same court expressed doubt as to whether the enforcement of sterilization comes within the right of **Police Power**. For, the court verdict states, that in the formulation of laws of that nature, there is a fear "lest it may prepare the way to further legislation, even to the extent of bringing the philosophic theory of Malthus to bear upon the police power, to the end that the tendency of

population to outgrow its means of subsistence should be counteracted by surgical interference."

(3) Cruel or Unusual Punishment:

Many states have enacted sterilization laws which were purely of a punitive nature.

Washington in 1909 provided that "whenever any person shall be adjudged guilty of carnal abuse of a female person under the age of ten years, or of rape or shall be adjudged to be an habitual criminal, the court may, in addition to such other punishment as may be imposed, direct an operation to be performed upon such person for the prevention of procreation." Laws similar in nature were passed in Iowa and Nevada in 1911. The District Court of Nevada declared the law unconstitutional on the ground that it constituted a "cruel and unusual punishment."

The advocates of sterilization have scored a great victory, when on May 2nd, 1927, the Supreme Court of the United States upheld the constitutionality of the Virginia Sterilization Act.

The decision was given in the now famous case of Buck & Bell.

Carrie Buck was an epileptic and feeble-minded inmate in the State Colony for Epileptics and Feeble-minded. She was committed to be sterilized on January 23, 1924. She appealed to the circuit court and then to the Supreme Court of Appeals, both of which have affirmed the commitment. The case was then taken to the Supreme Court of the United States.

The history was as follows: Carrie Buck, according to evidence, was 18 years old in 1924. She had a mental age of 9 years, and was of social and economic inadequacy; had a record of immorality, prostitution and untruthfulness; has never been self-sustaining; has had one illegitimate child, which was then about 6 months old, who was also thought (?) to be feeble-minded.

The mother of Carrie was fifty-two years old with a mental age of seven years and eleven months, and was of social and economic inadequacy. Has had a record of immorality, prostitution and untruthfulness; has never been self-sustaining, was maritally unworthy; divorced from her husband on account of infidelity; has had a record of prostitution and syphilis; has had one illegitimate child and probably two others, inclusive of Carrie Buck. The mother was also an inmate in the same State Colony.

The family history is otherwise obscure, not altogether impressive. According to the case history: "These people belong to the shiftless, ignorant and worthless class of anti-social whites of the South."

On May 2nd, 1927, the Supreme Court of the United States rendered a decision upholding the Act, and confirming the decision of the lower courts.

That the **Act** comes within the **Bill of Rights** and that the **Police Power** has not been exceeded the verdict says . . . "We have seen more than once that the public welfare may call upon the best citizens for their lives. It would be strange if it could not call upon those who already sap the strength of the state

for these lesser sacrifices, often not to be felt as such by those concerned, in order to prevent our being swamped with incompetence. It is better for all the world if instead of waiting to execute degenerated offspring for crime or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind . . . Three generations of imbeciles are enough."

The same court also ruled that although the law provides for sterilization of only those that are residents in institutions, this does not constitute class legislation and is not discriminatory.

The Virginia Act specifies Vasectomy and Salpingectomy as the only operations to be performed.

The Act also states that the purposes of the law to be either eugenic or therapeutic.

The Act also provides for ample notice of recommendation for sterilization to be given the defective or his guardian, and in case of a **minor**, such notice to be given to his parents or guardians.

Another significant decision was rendered by the Supreme Court of Utah on April 9, 1929, in the case of Davis Warden vs. Walton.

Esau Walton was an inmate in the Utah prison. He was a Negro born in Georgia. His father deserted his mother while Esau was still an infant. The mother died when he was seventeen. He had little schooling. When a youngster, Esau served a

term in a reform school for shop-lifting. When coming North, he was accused of many crimes but was never convicted. In 1925, at the age of 19, he was convicted for robbery and sentenced to serve a term at the Utah State Prison. Four years later, he was discovered practising sodomy with another inmate. The warden, R. E. Davis, petitioned the State Board of Corrections to be permitted to have Esau Walton sterilized. The Board granted the order. Esau appealed to the District Court which affirmed the order. The case was then taken to the Supreme Court of Utah. The court reversed the order.

Among others, the verdict reads: "The records before us do not support the findings that by law of heredity, Esau Walton is the probable potential parent of socially inadequate offspring, likewise afflicted."

The Utah decision adds nothing to the verdict in the case of *Buck vs. Bell*, but it defines that the Act is only constitutional when applied for eugenic purposes only. It is the first court decision which has reversed an order for sterilization on the grounds that the eugenic reasons have not been sufficiently proven.

In the words of H. H. Laughlin, "the decision of the Supreme Court of the United States marked the termination of the basic experimental period in American Sterilization Laws . . . It is now known definitely that any state can, if it desires to do so, enact an eugenical sterilization statute which will be held constitutional by both the State and Federal

Courts . . . it is no longer a wild or radical proposition.”

From this brief survey, it is evident that the American Eugenic Sterilization Laws went through a long and stormy process of evolution. Yet much is still to be done.

(1) There are still existing too many discrepancies between the interstate legislations. The classes that come under these laws differ widely in the different states. The types of operations are not the same in various states. There are still states like Oregon and Delaware where castrations are still legal and are often performed.

(2) In some states the laws are eugenic only, while in others, they are both eugenic and punitive. In this respect, it may be mentioned, that even the State of California . . . that state which has the longest and most active record of sterilization in the United States . . . has on its statute a punitive clause. The State of California provides for sterilization as an **additional punishment** of any person adjudged guilty of carnal abuse of a female under the age of ten, also of any person who has been committed twice for rape, seduction or three times for any other crime, when such a person shows that he is a moral or sexual degenerate or pervert.

At least seven persons are known to have been sterilized in California on penal grounds.

(3) In some states, the laws are voluntarily, i.e., they can only be performed with the consent of the

patient or guardian, while in others, the laws provide for compulsory sterilization.

(4) Almost all the laws in the United States aim at sterilization of inmates in public institutions who are about to be paroled. Defectives at large are usually exempt. In the eyes of the court this does not constitute class legislation, nevertheless, the ends of eugenics are, thereby, only partially reached. In the first place, defectives in institutions constitute only a fraction of the entire defective population, (about 10-15%). Secondly, defectives at large, (who have never been institutionalized) are a greater menace to posterity than those on parole, because the latter are supervised and to some extent, guided by parole officials, while the former are under no supervision whatsoever.

It is hardly conceivable that complete uniformity is possible unless these laws be substituted by Federal legislation.

GERMAN LEGISLATION

The German Eugenic Sterilization Act went into effect on January 1, 1934. The law is quite rigorously being enforced. It applies to all who suffer from:—

- (1) Congenital Feeble-mindedness.
- (2) Schizophrenia (Dementia Praecox).
- (3) Manic Depressive Insanity.
- (4) Inherited Epilepsy.
- (5) Huntington's Chorea.
- (6) Hereditary Blindness.

(7) Hereditary Deafness.

(8) Severe Hereditary Malformations.

Anyone with severe alcoholism may be sterilized.

"The application for sterilization is not to be made if great age or other causes render procreation impossible, also if the operation would endanger life, or whenever the patient would have to be **permanently** detained in a "closed institution . . ."

Sterilization is not to be undertaken before the completion of the tenth year.

In case of a conscientious objector to sterilization, such as a Roman Catholic or any other religious body, the defective may be placed for life or during the entire reproductive period in a "closed institution," the cost of maintenance to be paid by the patient or his family or the parish.

If a doctor or anyone who has to do with treating patients, (mid-wife, nurse, etc.) learns of a patient who comes within the meaning of the law, he must immediately report the case to the **official** doctor. The official doctor is appointed by the government.

Sterilization is ordered upon the decision of a District Eugenic Court. The patient has the right of appeal to the Higher Eugenic Court.

If the patient, so ordered, refuses to submit to the operation, force may be used.

Force must not be used before the age of 14.

The types of operations are stipulated to be Salpingectomy or Vasectomy.

The operation must be done in an "approved hospital **only**."

On November 24, 1933, a law was enacted providing for castration of moral defectives.

DENMARK LEGISLATION

According to H. O. Wildenskov, (superintendent Keller Institute for Mental Defectives, Brejning), "It is the duty of an institution to propose immediate sterilization of a mental defective if the interest of society require it—for instance—on the ground that the person concerned is obviously unable to give his children a proper training or to earn a living for them; or when sterilization would benefit the patient by enabling him to avoid institutional life or live under freer conditions providing there were no fear of his having children who would be a burden to society. The mental defective need not give his consent for sterilization but a guardian must give his opinion in the case mentioned above. No age limit is laid down. Sterilization is defined as Vasectomy or Salpingectomy."

From the above it is evident that the Denmark sterilization legislation is not eugenic, it is primarily enacted for social and economic reasons. The hereditary etiology of the defect or disorder appears to be of no significance.

EXTENT AND LIMITATIONS

Almost all students of eugenics agree that sterilization should be limited **only** to eugenic purposes, (Therapeutic sterilization does not enter this discussion. It stands on the same ground as any other surgical operation.)

It should not be used as a punitive agent, for if salpingectomy or vasectomy be used, it has no penal value; if castration be resorted to, it is indeed "an unusual and cruel punishment." It is not in keeping with the trend of progress. }?

Sterilization should not be used for economic or social reasons. Once we start with such radical measures, we shall not know where to draw the line.

(1) Sterilization is only of value if the defective is fit and safe to be at large. If the defective has to be kept in an institution, he doesn't need to be sterilized, because therein he has no chance to procreate. The German Law is quite clear on this point. "No one to be sterilized as long as he is kept in a 'closed institution'."

(2) Female patients after menopause, (change of life), need not be sterilized.

(3) The German Law stipulates that minors under the age of ten must not be sterilized. Force must not be used under the age of 14.

The Brock Committee is of the opinion that although vasectomy is supposed to have no effect on health, growth and development, there is not enough reliable data present to prove it. For the time being, the Committee advises that no vasectomy be performed until patient has reached full maturity. They express no opinion in regards to salpingectomy before adolescence.

The American legislations stipulate no age limit.

(4) For the time being, "probable carriers" should not be sterilized. Provisions should be made for

voluntary sterilization in cases of "definite carriers."
(See chapter on General Conclusions.)

(5) Owing to the fact that some defects are due to environment, utmost study must be given to diagnose each case correctly. Each case should be given individual study.

ADVANTAGES

(1) Many patients after a stay in an institution, are adjusted or have recovered to such an extent that they are safe to be at liberty under supervision, providing they do not procreate. It is most humane to give back these unfortunate patients the freedom which every individual is entitled to, providing they do not procreate.

(2) Families may be re-united and kept intact. When sterilized, patients may go home and enjoy the happy associations of kin and relative.

(3) For years, the governments have kept on building and maintaining new institutions. The cost of maintaining large and efficient staffs is staggering and yet there is accommodation only for a small fraction of those who seek and are in need of admission. This cannot go on indefinitely. By sterilizing and releasing some, on parole, there is a chance of overcoming **partially** the existing overcrowding, and making room for new admissions, and also, in the long run, it is hoped to relieve to some extent the taxpayers from an excessive and ever-growing burden.

OBJECTIONS

(1) Religious:

Many religious bodies, especially the Roman Catholic Church, are against sterilization on the ground that it is anti-religious. This opposition cannot be treated too lightly. The Pope expressed himself wholly in opposition to sterilization. The Brock Committee recognizes the rights of the Roman Catholics in regards to sterilization and therefore, (as one of the reasons) has recommended voluntary instead of compulsory sterilization. Even in Germany, where the law is being enforced under the iron rule of a dictatorship, concessions were made in this respect.

Provisions are made in Germany to keep objectors in "closed institutions" at their own expense.

Further, Roman Catholics are exempt in Germany from the duties of acting as judges in any eugenic court. Also, Roman Catholic surgeons must not be compelled to perform any eugenic sterilizations.

For the purpose of harmony and smoothness in the enforcement of such an important reform, a "clause" should be included in a model sterilization law providing for protection of objectors on account of religious conscience.

(2) Danger of Legislation of this Character:

It is felt by some that since the science of heredity is still largely theoretical and rudimental in nature, it is too premature, nay, even dangerous to enact legislation that is based on theoretic grounds. The

New Jersey Court, in 1913, felt quite alarmed "lest a law of that nature may prepare the way for further theoretic legislation," etc.

In the case of *Buck vs. Bell*, the defence expressed similar fears in the following:—"If the Virginia Law under consideration is held to be a valid enactment, then the limits of the power of the state to rid itself of those citizens deemed undesirable according to its standards, by means of surgical sterilization, have not been set . . . A reign of doctors will be inaugurated and in the name of 'science' new classes will be added, even races may be brought within the scope of such a regulation and the worst forms of tyranny practised . . ."

When these arguments were brought forth it appeared that they were remote and far-fetched, however, watching closely the political and social changes that took place throughout the world in recent years, one feels that the fears expressed above are well-founded. On the basis of perverted anthropological hypothesis (without the slightest scientific merits thereof), large ethnic groups are being persecuted in Germany even to a point of being threatened with complete annihilation.

This danger must be eliminated, otherwise, it is to be feared that the reform which primarily is intended to be of benefit to mankind, may turn out to be a dangerous weapon in the hands of some fanatics threatening the very existence of society. It behooves that legislation in regards to sterilization be well defined, limiting its powers to eugenic purposes **only**,

and **only when** the eugenic aim is proven scientifically beyond doubt.

(3) Eugenic Benefits of Sterilization Exaggerated:

It is agreed that even though mental defects and mental disorders are to some extent of genetic origin, only from 5-10% of defectives are the direct offspring of defectives, the remaining (hereditary) are born to apparently normal parents who are carriers of the defect. Therefore, it has been argued, that even if all defectives be sterilized, (which is not likely) the reduction in the number of defectives in the next generation will be only about 5%. A small reduction, indeed.

Such was indeed the opinion of the British Medical Association Committee "that sterilization even if widely applied to mental defectives would not cause any appreciable difference in the number of mental defectives in the country, for many generations."

This argument, however, lacks force, for if it is impossible to eliminate the defectives entirely, there is no reason why an attempt should not be made to reduce the incidence as much as possible. Furthermore, sterilization of defectives prevents not only the birth of possible defective offspring but also the birth of possible "carriers".

(4) It may increase Immorality:

An argument has been advanced that a sterilized person may turn into a social menace, especially a female defective, through increased promiscuity, because after sterilization there is no fear of

pregnancy. Evidence, as gathered from reports in California and other states, show that this has not occurred. The Brock Committee, however, expressed concern over the possibility that this is likely to occur with all its deleterious consequences, and sounded a warning that utmost precautions be taken to avoid this from happening. The Brock Committee states, ". . . and we desire to record with all possible emphasis that the discharge of sterilized defectives, particularly of women, may have most unfortunate results unless the greatest care is taken to ensure that they receive the constant and vigilant supervision which their mental condition requires. It would be in the highest degree unwise, indeed it might be disastrous, to assume that sterilization will in any way lessen, still less obviate, the need for supervision and after-care."

(5) Genius may be Cut Off:

An objection to sterilization has been raised on the ground that since sometimes a genius is born to defective parents, sterilization may be a factor in the prevention of the birth of genius. This objection has often been answered by eugenists quite lightly. To offset this, it has been often asked, what about the practice of contraception among the normal population? Isn't such a practice likely to prevent many a genius from being born? And what about the many gifted men and women who never marry?

These, however, are besides the question. It is altogether different when an individual on his own

accord, for some reasons, refuses to have children, and when the state enacts legislation to prevent some from procreation. The state must move cautiously. The social gain derived from one real genius may pay many times over again, the amount society has to pay for the upkeep of all the unfit in the community.

The danger, however, is very remote if due care be exercised in the practice of sterilization.

Among the children of the feeble-minded, it is very rare (if ever) to find a genius. It is, however, different when dealing with the insane, epileptics or some groups that show anti-social tendencies. In this connection, it may be pointed out, that Elizabeth Tuttle, (from the loins of whom have sprung the finest of American stock), has exhibited serious anti-social qualities and her family history has shown, in addition, a serious taint of insanity. The loss to the United States would have been incalculable had E. Tuttle been sterilized. History is abundant with incidents where the relatives of many great men were suffering from manic depressive insanity or epilepsy. Some of the greatest men in history have themselves been afflicted with insanity. Men like Sir Isaac Newton, Tolstoi, Turgeniev, Edgar Allan Poe, Tasso and many others have been tainted with insanity. The only recommendation that one feels safe to advise in this respect, is, that the family pedigree and personal history of every defective be carefully studied. If we find signs of good quality, great attribute or ability, running side by side, either in the defective himself or his kin, such an individual should

not be sterilized. Extreme care must especially be exercised in cases of manic depressive insanity.

The German Law does not consider this claim as a justification for exemption from sterilization.

The commentary (to the German Sterilization Law) of Gütt, Rüdin, and Rutka states, (according to A. Lewis, Eugenic Review)

"No support is given to the view that the valuable qualities, even genius, which may accompany manic depressive psychosis shall be set off against the disease, when the decision as to sterilization must be taken in an individual case; an application should be lodged in all manic depressive cases, irrespective of the completeness of recovery, duration of good health subsequently, or other endowments in good qualities."

(6) Probability of Abuse:

There is a danger that once sterilization is legalized for one purpose, it may be used for non-eugenic reasons as well. This is not only a possibility, but is indeed a fact.

The Human Betterment Foundation of Pasadena reports that they "have found one California doctor who has sterilized nearly 150 men, merely to prevent procreation, and that this practice is definitely extending." Again, "most of the state hospitals have also received a few people as voluntary patients, merely for sterilization, sending them home as soon as they have recovered from the operation. They were all persons who were mentally below par or who came of unsound ancestry."

"Social service workers quite often have sent

delinquent girls into state hospitals for sterilization in spite of the fact that some of them were of sound mind. At other times, women were sent in for sterilization because they had had already too many children." (Sterilization for Human Betterment by Gosney & Popeneo.)

On December 23, 1935, there has appeared a report in the press as follows:—"More than 150 convicts in San Quentin prison have voluntarily submitted to sterilization operations, Dr. Leo Stanley, prison physician, has reported to the board of prison directors.

"The convicts began to volunteer for the operation," Dr. Stanley said, "soon after Attorney-General U. S. Webb ruled last September that such operations were legal if desired by the prisoner. Most of these operated upon," Dr. Stanley continued, "explained their desire to avoid fatherhood was due to an aversion to bringing their children into a world with the stigma upon them that their father was an ex-convict. Only 3% of those sterilized were convicted of sex crimes. The majority, 62%, were men convicted of crimes against property, such as robbery and theft."

It is entirely beside the question as to whether these operations were performed in the interest of society or otherwise. One fact is certain, that all these operations were not done for eugenic reasons, and furthermore, most of them have been done without supervision.

Even if society incurred no actual loss through

these operations, it is nevertheless, wrong in principle. Once we break through the boundaries of "eugenic" sterilization, we shall not know where to stop. Let this "reform" run amock and it may undermine the very existence of society.

(7) There is a possibility that heads of institutions being eager to make room for new admissions may become a little careless in the choice of those whom they recommend for sterilization. They may recommend patients who are entirely unfit for community life. These naturally constitute needless operations.

The Brock Committee, in discussing the results of sterilization in California, points out . . . "There is one feature which we cannot but regard as profoundly unsatisfactory. A test enquiry carried out in 1927, showed that of the sterilized inmates, 47% of the men and 29% of the women were still in institutional care; the corresponding figures in the case of defectives were, 34% of the men, and 28% of the women. This suggests that the choice of defectives to be sterilized was not determined by their fitness for community care. In our view, there is no justification for sterilizing defectives who are unfit for community life, and we think that the greatest care ought to be taken to test the patients' conditions before sterilization is sanctioned."

CONCLUSIONS

(1) Sterilization is applicable only to a small portion of defectives. No material saving in the cost of maintaining defectives could be expected as a result

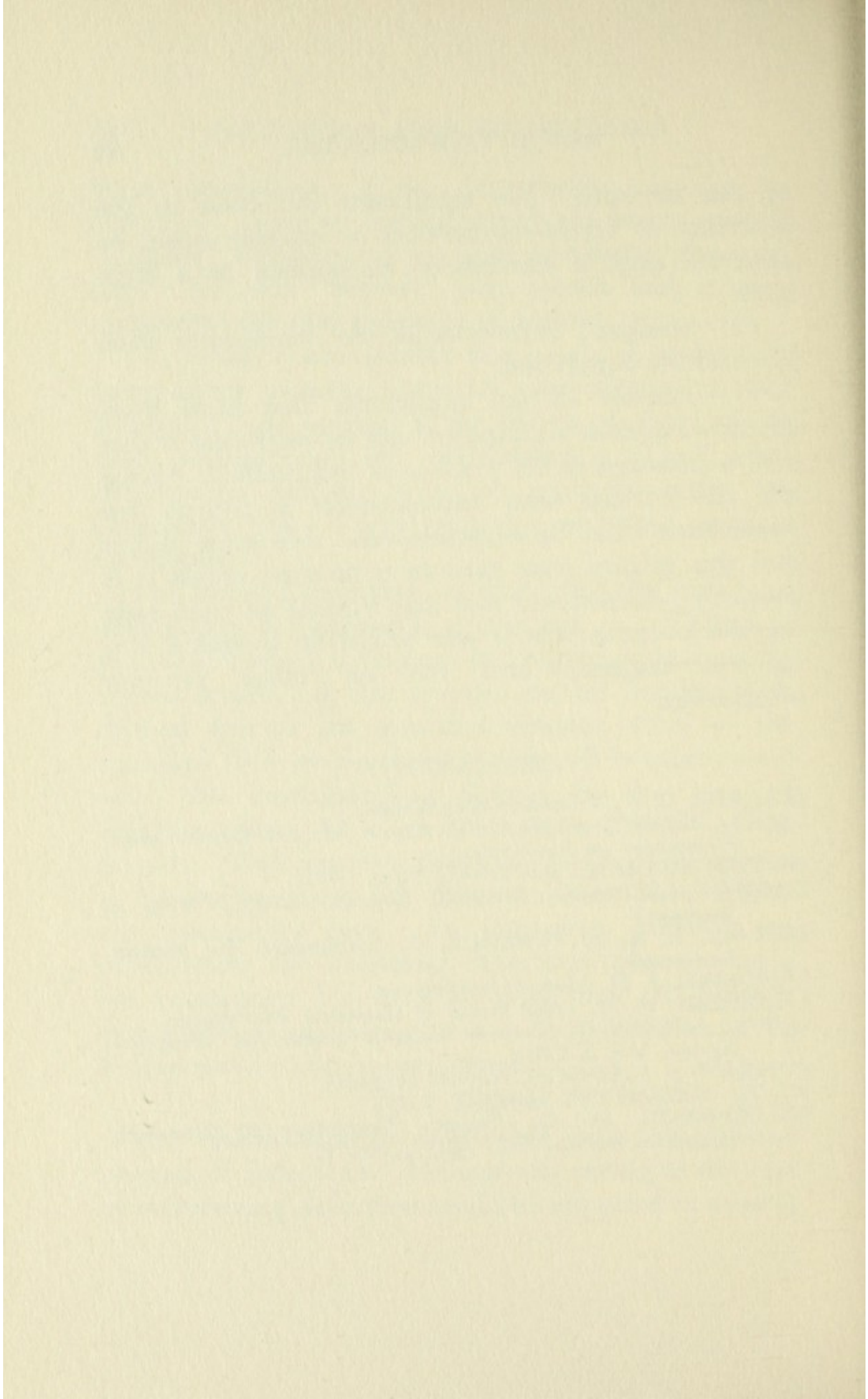
of this measure. No significant reduction in the incidence of feeble-mindedness or insanity could be expected even if sterilization be applied on a large scale.

(2) Sterilized defectives in the community must be carefully supervised.

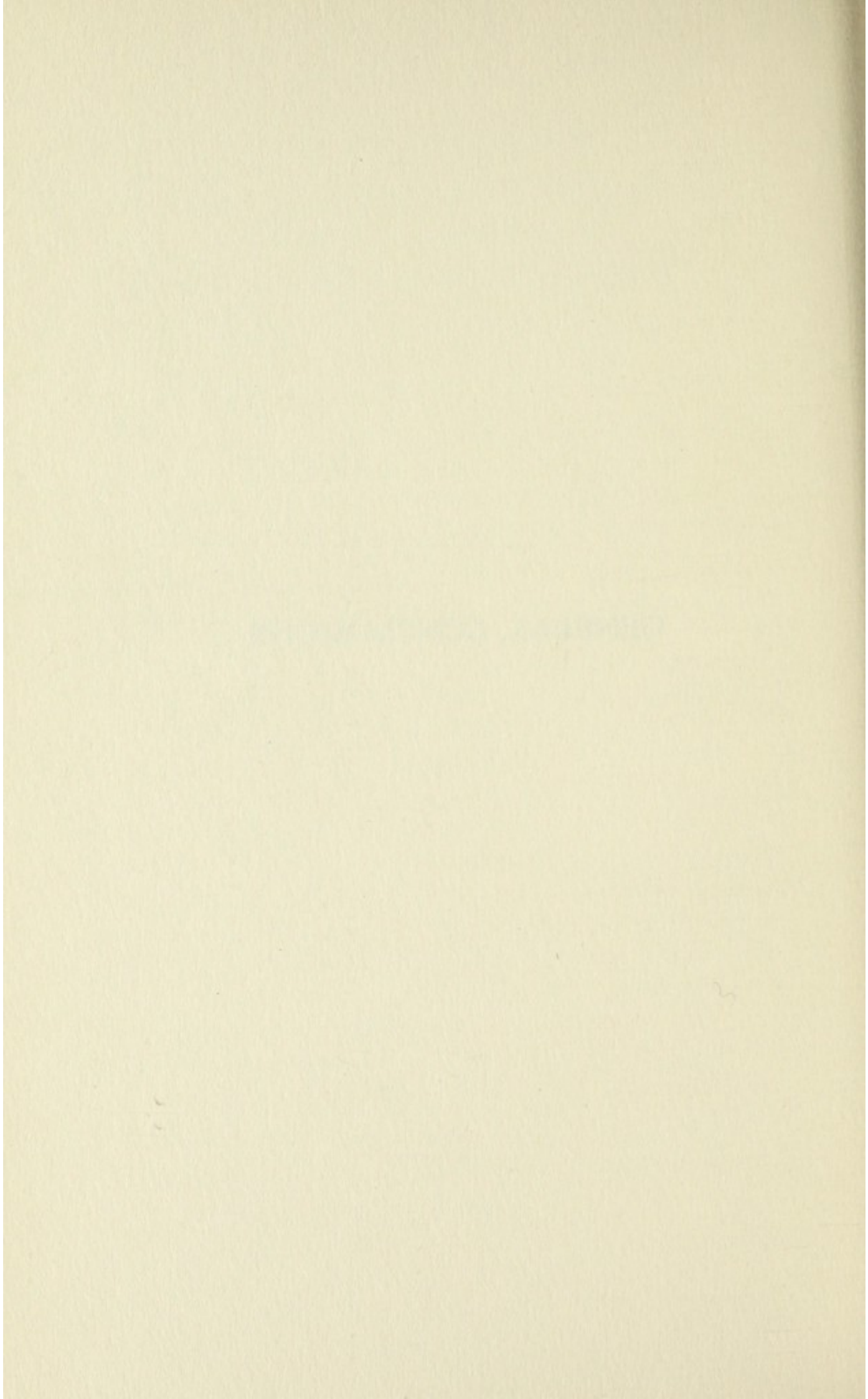
(3) Almost all the arguments that have been advanced against sterilization can be overcome if due care is exercised in the practice of this method. Above all, the official who recommends a patient for sterilization must be conscientious. He must realize that this reform may turn to a menace unless it is properly administered and that it must be used **only** for the purpose that it was originally intended for, namely, **eugenic**, and for no other purpose whatsoever.

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GENERAL CONCLUSIONS



CHAPTER V

GENERAL CONCLUSIONS

Viewing the problems of mental defect, degeneracy and disorders in its full scope, one can recognize at a glance that, in order to cope with the situation, many agencies and methods of treatment will have to be employed depending on type and causation of each.

In the case of the feeble-minded, it has been found by careful research, that about 20% owe their defects solely to heredity. The treatment in these cases is obvious. About one-half of these are so seriously affected that they are not fit for community life. These must be kept in institutions for their own safety. They need not be sterilized, because, when in institutions, they are virtually infertile. The remainder of this group who are fit to be at large should be given their freedom, providing they do not procreate. Sterilization in these cases offers not only eugenic protection, but is also of decisive benefit to patients. These patients, while fit for community life, are nevertheless, handicapped, and when protected against excessive burden and care that children require, they have a better chance of leading a happy life.

From 10-20% of the feeble-minded are due solely to environment.

? { From the eugenic viewpoint, these need not be sterilized.

About 60% of the feeble-minded owe their defects both to heredity and environment in varying degrees of intensity. Those in that group who are safe for community life, may or may not be sterilized, depending on the judgment and advice of experts. No general rules can be laid down, each case must be studied individually and decided on its own merits. No one ought to harbour any fear lest experts make a mistake and sterilize someone unnecessarily. In all matters of health, we depend on specialists. We trust the surgeon in risks to health and life. We must also trust the judgment of the specialist in this regard.

Since environment is either partially or wholly responsible for mental defect in the great majority of cases, (about 75%), it stands to reason that particular attention must be given to correct the environmental causes leading to defects, if at all possible.

Some environmental causes are, to a great extent, beyond our control, such as mental defect, following meningitis, or encephalitis. To eliminate these as causes, beyond palliative measures, we must wait until discoveries are made for the specific prevention and cure of the diseases in question. In other cases, however, a good deal could be accomplished.

It has been established that sometimes mental defect may result from serious illness in an expectant mother.

We cannot help but laud the work of the modern obstetricians in advocating emphatically the need of

pre-natal care. It is urgent that an expectant mother be not exposed unnecessarily to the dangers of infections. All foci of infection require early and immediate attention. As far as possible, a pregnant woman should not act as nurse in infectious diseases.

It has been established that some mental defect is the result of congenital syphilis. It is, therefore, the duty of the doctor who is entrusted with the care of an expectant mother to examine her in regards to syphilis by serological (Wasserman or Kahn precipitation) tests. It is imperative that these tests be taken early in pregnancy.

If the patient's blood has been found to be positive for syphilis, active treatment must be given at once and carried out through the entire course of pregnancy.

It is my opinion that if a doctor (in his pre-natal care) has neglected to take a blood test and as a result of which, a child is born with congenital syphilis, he should be held liable for mal-practice.

The pelvic measurements that are now done as a routine in every case of pregnancy are also of extreme value in the reduction of mental defect. Brain injuries at birth are quite often the results of a disproportion between the size of the foetal head and the pelvic outlet. Should the doctor notice, even only a slight abnormality, in the pelvis of the mother, he must plan the procedure at confinement beforehand with an aim of not only saving the life of the mother and baby, but also with the view of protecting the new-born from possible injury, mental or physical.

It is well to keep in mind that a prolonged and difficult second stage of labour with a great amount of head-moulding, is a frequent cause of feeble-mindedness. Also, applying forceps on a floating head or when the foetal head is in a posterior position, always carries with it the danger of producing permanent mental injury in the new-born. In all such cases, labour must be mapped out ahead of time. In some cases it may be necessary to induce a premature birth; in others it may be necessary to resort to a Caesarian section.

A great many of the gynaecological operations that have to be done as sequaelae to difficult labour (more than 60%) may be avoided if proper judgment is used in the planning of labour. A good deal of brain injuries may be avoided by proper obstetrical procedure and good judgment.

These statements are not based on mere speculations, they are backed by clinical experience. The duties of the obstetrician do not end with seeing the mother safely through labour, and the delivery of a live baby. He must also see that the baby escapes injuries at birth that may hamper him later in life, either physically or mentally. I shall cite a few cases from my own file for purposes of illustration.

Case 1

In 1925, I had attended a patient at confinement. This was her fifth labour. Previous labours were all difficult lasting on the average, forty-eight hours, but have always terminated without interference. In

all previous labours, the perineum had to be repaired. In spite of all repairs the patient had a large cystocele and deep cervical erosions. When I was first called in, she had already been in labour for six hours, and had hard bearing-down pains, but had made very little progress. Her condition otherwise appeared to be good. The foetal heart beats were normal and the foetus didn't appear to be in any distress. Taking in consideration the patient's history of previous labours, I allowed her to go on (alleviating pains somewhat with sedatives) for about twelve hours. She finally gave birth to a baby girl weighing eight pounds, two ounces, and apparently normal. There was a considerable amount of moulding of the head.

When the child was about two months old, it became apparent that the body of the baby was not growing in the same proportion as the head. As time went on, the head appeared to be heavy and wobbly. Teething was considerably delayed. The child started walking at the age of 18 months. The child is a midget. She is now 11 years old and 30 inches tall. The mentality is not greatly impaired.

The family history is negative in relation to physical or mental defect.

It is my opinion that the child acquired cranial injury at birth resulting in dwarfism.

Case 2

In 1918, I was called in to treat a baby 3 months old for a minor illness. I noticed that the child had a deep furrow on the extreme left side of the forehead, the skull being considerably caved in. I

was told that this was caused by forceps at delivery. The baby developed normally. Began walking at 14 months. Teething was normal. At the age of 3 years he showed considerable promise of musical talent. In the first two years of school life the child appeared to be normal. After that, progress became greatly retarded. He was especially unable to do either spelling or arithmetic. His mood gradually changed and for a while was considered a "problem" child on account of behaviour. He made little headway in music.

When the child was ten years old, I advised the parents that he was in need of a trophining operation. However, the advice was not considered seriously. Now, at the age of 20, the young man is retarded physically and mentally. His I.Q. is only 65.

There is no history of mental defect in this family.

I may add that the mother has never felt well after this confinement, and recently has died from carcinoma of cervix.

I am sure that every doctor has had similar experiences in his practice. The aggregate amount of feeble-mindedness due to this factor alone, must be tremendous and public and doctor alike must be made fully aware of this. The public must be taught not to fear Caesarian sections when indicated; the doctors, that permanent mental damage to the child may and quite often does follow difficult labour.

The co-operation of the doctor may also help in the reduction of the incidence of Mongolian Idiocy. It is a well-established fact that the Mongolian idiot,

in most cases, is the last child in the family, at a time when the mother is approaching the period of menopause. It is the duty of the doctor to warn his elderly female patients against this danger, and, if necessary, prescribe suitable contraceptives. Incidentally there are also other reasons for advising elderly patients against pregnancy. It has been shown that maternal mortality as a result of pregnancy and labour is rising sharply after the age of thirty-five.

There is no available data, to my knowledge, as to the frequency of Mongolian Idiocy, but it is by no means a rare condition. In my practice, (21 years' general practice) I have come across thirteen cases, all of whom have been born to mothers of about or over the age of forty.

ALCOHOL

There appears to be no agreement between scholars as to the effects of alcohol as a racial poison, *expert* but there is no doubt that it is an anti-eugenic agent. In the case of chronic alcoholism, it is quite often a question whether alcoholism is the cause of feeble-mindedness, or mental defect is the cause alcoholism. One fact is certain, that chronic drinkers are poor home-builders. They are creating unsuitable environment for the young. Also, we should bear in mind that there are some scholars (Combermale and others) who claim that even among normal people there is a danger of begetting feeble-minded offspring if the parents (or parent) are drunk at the time of a productive coitus. Until this is disproved,

we must warn people against this possibility as a cause of feeble-mindedness among the normal.

DRUGS

The use of drugs in toxic doses by pregnant women should be emphatically condemned. In recent years, it has been quite customary to employ drugs in toxic doses for the purpose of inducing abortions. In most cases, these drugs fail in purpose, but they may produce deleterious effects on foetal development.

The drugs most commonly used are quinine, ergot, cotton root bark and oil of savin. The effects of these drugs on embryonic development have not been as yet sufficiently studied. Clinically, however, it is known that they produce violent uterine contractions and at times, some uterine bleeding. Until otherwise proven, the public must be warned against the risks of possible foetal mal-development as a result of this, (altogether too common), practice.

It is really surprising that so much experimental work has been done on the effects of alcohol on the embryo, and yet nothing has been done (as far as I know) in regards to the effect of prolonged use of ergot in pregnancy. It is well established that ergot does cause contractions of uterine muscles to such an extent that it constricts the blood vessels within the uterus. This prolonged interference with the uterine circulation may interfere with the nutrition and have deleterious effects on embryonic development. I have known of hundreds of women who have been using

ergot for weeks at a time, in the early months of pregnancy.

In the case of mental disorders, it is evident that no single method of treatment is promising of spectacular result. To properly control these ailments and bring about an appreciable reduction in their frequencies, all agencies must co-ordinate and work in harmony.

More than 50% of all mental disorders are the result of environment, pure and simple. Of the remaining 40 or 50%, where there exists some evidence of faulty heredity, we also find environment to be a contributory factor. It is quite often difficult to assess the part played by each in the production of the disorder. Sterilization is indicated in many cases, and it should be done, but we must not expect to reduce the incidence of insanity to any great extent by this method because:—

(1) More than half of them are not fit to live in the community, and have to be in institutions for their own safety. When in a "closed" institution, they need not be sterilized.

(2) The average onset of insanity is about the age of forty, at a time when the reproductive period, especially in women, is almost at an end.

Environmental factors which are responsible for the production of mental disorders require careful attention. It has been shown that mental disorders are more common in urban than in rural centres. Why? Is it because of greater mental strain in cities?

Is it due to greater prevalence of syphilis? Is it due to a greater absorption of alcoholic beverages or to any other unknown causes? All these agents require careful study. Sooner, or later, it will be found necessary to draw the attention of the public to the fact that the stress and strain of daily life in the large cities, the constancy of worry, the lust for luxury and fast-living are factors which undermine health, mentally and physically. Life will have to become more simplified or else more will fall by the roadside.

Promise of great success in this field appears to lie in the efforts of social hygiene agencies and mental hygiene clinics. Child psychology should be made a compulsory subject on the curriculum of all schools engaged in the training of teachers. Also, all young adults, parents and prospective parents, ought to receive an adequate knowledge of child psychology.

CARRIERS

Carriers is the name given to the normal members of a family in whom there exists a greater prevalence of mental defect or disorder than is expected in the general population.

There is no definite policy to be adopted in dealing with carriers. There appears to be unanimity of opinion that in the present rudimentary stage of knowledge about the mechanism of heredity in men, carriers ought not to be sterilized. However, there are exceptions to this rule in many instances, as follows:

- (1) Healthy members of a family which are tainted with **Myoclonic Epilepsy** should be sterilized.

It has been shown definitely that this disease is inherited as a single recessive.

(2) Children of a parent suffering from Huntington's Chorea should be sterilized on reaching adolescence. It should be made clear that there are no true "carriers" of Huntington's Chorea. The disease is inherited as a simple dominant. The healthy members of the family are really free from the disease. However, Huntington's Chorea makes its appearance usually late in life. It is impossible to differentiate between the healthy and tainted members of the same family until manifestations of the disease make their appearances. Therefore, to rid society of this terrible disease, all the children of an affected parent should be sterilized.

(3) There are many families which are very badly tainted with mental defects or disorders. I have known a few families where about 50% of the members were affected with mental disease of various types, ranging all the way from severe cases to mild affections. It is my opinion, that the apparently healthy members in such families should be permitted to be sterilized if they so desire.

(4) Probable carriers contemplating marriage should be strongly advised to consult an expert genetician.

(5) Carriers must be strictly advised against consanguineous marriages. Recessive characters make their appearance most frequently through inter-

marriage between relatives who carry similar defective taints.

(6) Generally speaking, carriers should be advised against having large families. Should a defective child be born to a parent who is an apparent carrier, it is best for all concerned to advise such a parent against having any more children. Voluntary sterilization should be recommended in such a case.

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