are increasing. But we know that 77 per

are increasing. But we know that 77 per cent of our population now lives in cities, whereas 51 per cent was the figure 50 years ago. The wretched physique of the poor-i.e., of the majority among aity dwellera-whother due to discase or to merely devitalising canditions, is a product of the present canditions of city life.

life. The cry, "Back to the land," well mean-ing as it is, must be criticised in the light of sociological science. Not only is the transition from agriculture to manufacture a natural evolution, but

manuacture a natural evolution, but there is a great distinction as to the demand for the two. A given popula-tion needs only a finite quantity of food; but its demand for products of manu-facture is obviously indefinite. The city, therefore—the maker of poverty—is an inevitable fact

The Mystery of a Lightning

Calculator.

The skill of certain rapid calculation has been a subject of wonder even for

mechanism do such extraordinary persons succeed in repeating from those

armics of figures and make in a few

seconds by some mysterious power calcu-lations which would take any other per-son a great deal of time and serious attention?

attention? One lightning calculator is now in Paris. She is a young Greek, Mile, Urenie Diamanti, and she has been ex-amined carefully in selentific circles. M. Manuurier, the eminent professor at the School of Anthropology, has tried to

what mental

inevitable fact.

scientists. Through

Why a Poor Man or Child Hasn't a Fair Chance

By C, W. SALEEBY, M.D.

BEGIN with the physique of the poor, for reasons which, as I see them, are abundantly adequate. There is no overseening human in-

terest in fine animals as such. They are to be seen any day is the big cat house of the Gardens of the Zoological Society. Anyone inclined to read more than a vaguely symbolic meaning in the giant thildren of Mr. Weils' "Beomfood " may be recommended to contempiate the ex-

be recommended to contempists the ar-ploits of Japan. Our interest in the physique of the power depends upon the fact that the physical qualities are the root qualities in which all others, mental and moral, inhere, and without which all othery must necessarily—oven if they arist—run an abharviated and erippled career. Even if it be possible, on accasion, to find the mene same without the corpus anum, the output of that mind must inevitably be advorsely affected in quantity, if not in quality.

adversely affected in quantity. Let us, then, consider the initial fact, which there is certainly no need to lab-our, that the poor of our great cities are very far from being even line ani-mals, and let us first observe an obvious fallacy, which may visiable the interpreta-tion of this, as of so many other statis-tical facts. Before we inquire into tha fion of this, as of 36 many other slatter lical facts. Before we inquire into that tonditions which determine the fact that the poor are physically inferior, let us fully recognise that a certain, and, prob-mbly by no means small percentage are poor because they were not fine animals

and precisions that any provide the point of the provide the providence of the provi

spiration with which they expire, many of them never breathe a cubic inch of unpolluted air. Solid Impurities in airpolluted air. Solid imporities in air-storile dust-are bad enough; far worse are the living bactoria, every known con-litions for the full vitality of which is tigorously complied with in the dwellings of the poor; far worse, also, are the gase-ous impurities exhaled from the longs and skin of all animals, supusan or other. The reader knows all this as well as I do

ito. What I ask is this: Are the elementary What I ask as this: Are the elementary facts as to the significance of air ham-mered daily, or even annually, into the head of every child that attends a public School? If not, in the name of comman sense, common decency, and our common humanity, why not?

If there is any antidote to fithy air it is the light of day, the sunlight which is vital to man, lather to his most deadly It is the light or (asy, are summary that is vital to man, listhal to his most deady form. The reader needs no telling that in the slums dirty air doas its dirty work in darkness. But of what use is it to breach about this in a city where men that for formal breach about sum

Link for funny? In saming, first, bad, and second, lack of sunight, I have indicated the essen-tial causes of which everywording is only a proximate arpression. The reader Knaym, of course, that, in general, curves of death rate and of averyawding soincide. But overcrowding is not an evil

as such; man's society, indeed, is easen tial to man's health; overcrowding is an evil because it entails had air and hack of gunlight.

The poor are destroyed and maimed directly by foul air and darkness; but these also destroy and main indirectly by the microbes which they breed. With the curves of general death-rate and of The curves of general death-rate and of overcrowding, the curve of tuberculosis colosely corresponds. The influence of the tubercule bacilius upon the physique of the poor would be hard to ever-esti-mate. It is not merely that this micro-acopic plant kills some one in serven of all who die upon the earth, nor that ita ravages are far greater among the poorer than the more fortunate classes.

Type of a protean disease, tuberculosia often disables where it does not kill. In the form of lugars it disfigures a girl's face and makes it impossible for her to get work; as chronic disease of the hip or elbow or knee, it incapacitates thou-aanda; yet these and many other forms of tuberculosis are as nothing compared with its rawages in the form of consumption, from which one person dies in London alone every three quarters of an hour, day and night, year in, year out-



"The poor are destroyed and maimed directly by foul air and darkness."

each such death terminating a period of, on the average, some four years' in-

on the average, some four years' in-capacity. Yet the public has still to learn that the chief function of sanatoria in a modern state is not the cure of con-sumption, but the prevention of it, by the segregation of patients in the most infectious stages of the disease. For all these evils—and be it remem-

bered that the possession of a very small income is not an evil in itself-there are

bered that the possession of a very small income is not an evil in itself-there are known and adequate remedies. The tu-beroulosis death rate has been steadily fulling for many years past. Typhus fever, once familiar, and always to be seen in Whitechapel, has been banished therefrom by improved sanitation. A former medical officer of health for that district toil me, on my last visit, that he had not seen a case for some years, whereas a quarter of a century ago he could at any time have shown me two or three cases within five minutes' walk of his house. Of tuberculosis, His Majesty the King, when presiding over a nuceing of the National Association for its prevention, has said: "If pre-ventable, why not prevented?" Tuber-culosis, one of the fruits of overcrowding, is being prevented; but with 12,000 deaths a year in London alona, ean we say that His Majesty's question as to the prevention of the discase has yet been creditably answered? No one can produce any satisfateory

No one can produce any satisfactory evidence to show that the national pey-sique is decining, save in so far as overcrowding and the other evils of cities

solve the mystery. With Mille, Diaman-ti's help has succeeded, it is waid. It was when she was seven years old that Mile. Diamanti noticed her calculating powers. She is the sister of a famous calculator. The success of her brother incited her to cultivate her gift.

Increase are to cultivate her gift. M. Manouvrier has discovered that the power of visualisation of the young wo-man only exercises itself on figures, and that those figures appear to her with partial software. certain colours.

Here, below, we give the name of the colours, with which she associates the figures:--0, white; 1, black; 2, brilliant yellow; 3, vermillion; 4, dark browa; 5, bright blue; 6, dark yellow; 7, navy blue; 8, grey, 9, chestant,

Sills, Diamanti declares that she re-members better the figures which con-tain bright colours between darker ones. She believes that in that case the as-sociation of the colours with the figures helps memory.

belps memory. For instance, 104 (black, white, dark brown) is easy to learn and memorise because 0, which is white, is placed be-tween two dark colours. In a similar way, 129 (black, bright yellow and chest-nut) is also easy to remember because of the contrasta.

of the contrasta. The process mentally used by Mile, Diamant is the following:--Five rows of five figures being written or a blackboard also boks at the square of 25 figures for a minute, turns her back to the blackboard, and resites the square in any possible way-horizontally, ver-

tically, diagonally, backwards, upwards, otc. She adds the five rows together, makes substractions, multiplications, squares any of the figures, etc. M. Manouvrier, after long observa-tions, has found that the series of figures are learned by beart. But here we come to the peculiarities which charac-terise the "risual" type of memory. As above any

come to the peculiarities which charac-terise the "ranal" type of memory. As soon as they are learnt the figures ap-pear to this young hady sa written on a kind of imaginary tableam. That tableau is made with the help of As unvarying scheme, and consists in the yisual representation of the series of figures, forming a frame round an open space in which are projected all the figures of immediate interest, and in which as a immediate interest, and in which are made.

Mile, Diamanti "naw" this tableau for the first time when she was fifteen, has never altered since.

has never altered since. "Someone tells me a figure, or when I think one," she declared to M Manou-vrier, "I see it in the frame of the tableau. But as soon as I have to use it, it detaches itself and places itself in the centre.

centre." She sees that tableau two or three Steps before her, and it is of the size of the average blackboard. M. Manourrier considers that this phenomenon, which has an often puzzled science, is derived from a great intensity of visualisation, helped by a retentive memory.

of visualisation, helped by a retentive memory. "Any intelligent person, endowed with a good memory of the eye," mays M. Manouvrier, "could become, after a few months of training, a virtueee of mental calculation."

One of the leading comedians of the Frankfurt Theatre in Germany weut to the director and asked for an advance on his week's salary. The books show-ed that the whole amount had already been drawn, and the director said "Na." "Yory goed," said the actor; "then I shall refuse to go on to-night." The direc-tor saw that it was dangerously near curtain time, and reluctantly gave the actor the mnount asked for, but said: "Ecomember, sir, this is nothing short the "Tortion, and a cowardly one as that." "Not at all, Herr Director," said the actor, stuffing the money in his pock-et, "my name is not on the bill for to-night, anyway."

