

thirty-five cents per capita. In New York the taxes are as follows :—

United States tax.....	\$ 5.50
City tax (including state tax).....	19.92
Total.....	25.42

The citizen of New York pays nearly two and one half times as much as does the citizen of Berlin.

Mr. Atkinson estimates the per capita product of the United States at \$200, and that of Germany at \$100 ; thus, although no estimate on a question of this kind can make any pretensions to accuracy, on the basis adopted by Mr. Atkinson, not only a larger amount per capita but a larger percentage of the product is absorbed by taxation in New York than in Berlin. The reason is that in Germany the city and state together derive more than half of their revenue from the profits of productive undertakings, and by superior methods of administration have greatly reduced the cost of government.

In Berlin, out of a total revenue of \$13,754,593, only \$7,042,014 comes from ordinary taxes. The profit on public works, particularly the gas and water works, amounts to \$1,325,419 in excess of payments made for the amortization of and interest on the first capital. Payments of a percentage of gross receipts by such private monopolies as street-railways and gas-companies are other sources of revenue, as is also a charge of \$23.80 for scholars in the higher schools. Payments by monopolies and scholars are taxes, yet they do not bear upon the citizens in general in any thing like the same proportion as do ordinary taxes, and, in a question of the burden of taxation, distribution is a very important factor. The neglect of the local element must also cause us to question Mr. Atkinson's conclusions in regard to the comparative amounts of debt. For instance, he places the per capita debt in the United States, including state debts, at \$27, and in Germany, including kingdoms and duchies, at \$39 ; but the debt of New York on Dec. 31, 1884, was \$126,871,138, or \$94 per capita, while that of Berlin is \$36,965,767, or \$28 per capita ; and in addition to this it must be remembered that in Germany both states and cities own large amounts of productive property, the value of such property, in the case of Prussia at least, being more than equal to the state debt.

While it would not be fair to argue from the comparative condition of New York and Berlin to the comparative condition of the United States and Germany as a whole, still the city, as a centre of production, is an element of great and growing importance, and in estimating the comparative burdens upon producers in this and other coun-

tries more valuable results will be obtained by considering those who work, as near as may be, under the same conditions in the various countries, than by taking the average for whole populations.

The figures for other countries than Germany are not at hand, but the same considerations would modify Mr. Atkinson's results in all cases, though probably to a less degree than in Germany.

The neglect of these three points — local taxation, profits from public undertakings as a source of revenue, and administrative methods as an element in the cost of government — has in large measure destroyed the value of Mr. Atkinson's work as a comparative study.

HENRY B. GARDNER.

A DISCUSSION ON ARSENIC POISONING.

A VERY interesting and instructive discussion took place at a recent meeting of the Suffolk district medical society on the subject of poisonous arsenical wall-papers. Dr. J. R. Chadwick described an experience which he had in his own family, in which his two daughters suffered from dyspepsia, colicky pains, and headaches, which disappeared when they left the house for the summer, and re-appeared on their return. He found that the wall-paper in the nursery was very arsenical, although, having previously suffered from this same cause, he had made special effort to obtain paper free from arsenic, and had been assured by the dealer that a chemist had analyzed it and pronounced it free from arsenic. During the discussion which followed, many cases of sickness were reported as having been caused by arsenic in wall-paper. Professor Hill of Harvard university said that he was the examiner for two of the most prominent paper-houses in the state of Massachusetts. During the period from 1879 to 1883 the percentage of arsenical papers was from fifty-four to sixty-five of all papers examined. In 1884 it had fallen to forty-seven per cent, and in 1886 to thirty-three per cent. Only thirteen per cent contained any thing more than a trace of arsenic. In reference to the law which had failed of passage in the legislature, limiting the amount of arsenic to one-fifth of a grain in the square yard, he thought our knowledge of the limit which it is safe to establish was too indefinite. A law to prevent the sale of 'rough on rats' would save more lives than a law to prohibit the sale of wall-papers containing a trace of arsenic. Professor Wood of Harvard university thought the chief danger was from the dust which is constantly being given off from the paper, and which is contained in the air of the room, by which it comes in contact with the

eyes, nose, and throat. Professor Hill of Cambridge considered that the idea of establishing a limit to the degree to which arsenic may exist in wall-papers was faulty, from the fact that there is no reason for the use of arsenic at all in the manufacture of wall-papers. Colors can now be obtained which are free from arsenic as an impurity, and those colors should certainly be employed in all papers. Dr. Chadwick offered the following resolution, which was unanimously adopted: "*Resolved*, that it is the opinion of this meeting that the clinical evidence already adduced in this and other countries establishes beyond doubt the fact that arsenical wall-papers will, in many instances, produce symptoms of poisoning by arsenic in persons occupying the rooms whose walls are covered by such papers."

THE MEDICO-LEGAL ASPECTS OF HYPNOTISM.

A. BINET, one of the leading French authorities on hypnotism, has written an appreciative but critical notice of the work of Campili that gives an excellent view of the French and Italian standpoints regarding this subject that is assuming so much importance there. Dr. Campili has had the advantage of numerous memoirs in France and elsewhere. M. Legeois has shown the possibility of making the hypnotic suggestion serve a criminal purpose, but has not discussed the subject. MM. Binet and Féré set themselves to determine the conditions under which the reality of the hypnotic suggestion may be admitted by a tribunal—the judicial proof, in other words. Dr. Campili presents the problem from the point of view of the two schools of criminologists in Italy, the classical or spiritualistic school, and the anthropological school, which differ not only in their theoretical conceptions but also in their practical conclusions upon the application of punishment. Upon the question of hypnotism, however, the two schools admit the same conclusion. Dr. Campili examines what the civil and penal responsibility of the hypnotized subject is when criminal acts have been committed or obligations have been assumed under the influence of a hypnotic suggestion. According to the classical legal school, the hypnotized subject is not responsible, since he has not committed a voluntary and conscious offence: there can be no punishment where there has been no fault. The anthropological school, which does not assume this subjective point of view, but considers that the judicial institutions have the simple function of social preservation and

defence, arrives at the same conclusion, but by a different way. In a very detailed discussion the author arrives at the conclusion that the needs of social defence only demand the repression of criminal acts when these are the expression of the personality of the agent, and since in the hypnotic subject the individual reaction is abolished, the acts that he does under the influence of a hypnotic suggestion are simply those of an automaton. These conclusions are at least debatable, says Binet, and rest on premises that contain an error of fact. The belief is too common to-day that it is possible to characterize the psychical state of hypnotism in a single word and say it is a condition of automatism. In a vast number of cases the subject preserves his intellectual and moral identity: when he receives a suggestion to act, he may resist if the act is in contradiction with his character, and he may examine the order and even absolutely refuse to obey. Campili seems to have seen this difficulty, for he recalls that in an ingenious article M. Bouillier has admitted a moral responsibility in dreams, but he meets this objection with an argument of little weight, that the hypnotized subject does not preserve his personality in the same way that a sleeping person does.

Binet holds, on the contrary, that the closest connection exists between the effects produced by suggestion and the state of dreaming. The hypnotic suggestion is nothing else than a dream produced and directed by assistants. In fact, the somnambulist is not an automaton, he is an *individual*, and, from the purely theoretical and moral point of view, he may be held partially responsible for his acts. These conclusions are in direct accord with those of M. Bouillier.

But what is the practical point of view? Has or has not society the right to defend itself against the crimes of hypnotism? Will it suffice for the assassin to show that he was under the influence of a suggestion for the judges to grant him his liberty and allow him to begin his work again? Clearly a uniform toleration is out of the question. Until recently hypnotism figured only accidentally in judicial proceedings, but now all this is changed, and hypnotic suggestion may readily enter into criminal proceedings. This is exactly what has happened in Turin, where, says Lombroso (*Revue scientifique*, June 19, 1886), there is a veritable epidemic of hypnotism. Society must protect itself against such a danger. Garfalo, in his remarkable work on *criminologie*, argues that we must apply to the criminal who has committed a punishable act in a state of hallucination or of somnambulism the same treatment that we give to those who have committed a crime in an epileptic or hysteric attack or from

Il grande ipnotismo e la suggestione ipnotica, nei rapporti col diritto penale et civile. By G. CAMPILI. *Revue philosophique*, October, 1886.