TUBERCULOSIS IN IMMIGRANTS.

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The remarkable migration of European peoples to this continent during the past century, and most of all during the past decade, has created many problems,—economic, social, moral, and physical,—which give much food for thought, and in many urgent instances demand governmental, municipal, or social action for their solution. This Association at one time was supposed to concern itself chiefly with the question of dealing with those results of this immigration which affect directly the physical condition of the countries represented in our organization, but so interwoven are the subtle threads which make up the life of man, that it is quite impossible to study so seemingly simple a problem as that taken for the title of this paper, without dealing with the political, economic, social, and moral phases of the immigration question.

Several years ago the National Canadian Association for the Prevention of Tuberculosis discussed the question of tuberculosis in immigrants, and I was asked to prepare a paper on the subject. I did so, with the result that in 1908, after collecting all the data available from boards of health, hospitals, and public institutions in Canada, I obtained the following results:

That year the number of tuberculosis immigrants deported was only 39, while for the year ending 1909-10, the total number deported was 30. An examination of hospital returns for the past year from the three provinces, Manitoba, Saskatchewan, and Alberta, gave only 9 tuberculosis cases in 319 cases of various diseases for which the Department paid, as they had been in Canada under one year. So it will be apparent that in a year during which 208,794 immigrants came to Canada, the available records show that very few immigrants became patients in hospitals, or becoming public charges, were deported. It will be proper to add to this list the number detained at seaports on account of suspected tuberculosis who were

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finally either debarred or admitted to Canada. The paucity of the tuberculized immigrants thus illustrated by Canadian statistics is further illustrated by the figures supplied from the port of New York during the year ending June 30, 1910, by my friend, Dr. G. Stoner, Chief of the Marine Hospital Staff at Ellis Island. They are as follows:

Thirty-two cases of tuberculosis were certified to at the port of entry; but of similar affections, such as lupus, inflammation of the lymph glands of the neck, inflammation of knees, and joints, there were nearly 400, and the majority of these were deported by the immigration officials.

The result will not surprise those who understand what the organized methods of immigrant inspection include. For instance, a Russian immigrant undergoes inspection on arrival at the German border by both Russian and German medical officers. Last year (1909) 7,020, for various causes, were refused admission to Germany. Arriving through 14 border stations, those admitted to Germany are assembled at Ruhtchen, near Berlin, and are again medically inspected and forwarded to some one of a half dozen seaports, where they are carefully housed and inspected daily prior to embarkation. Indeed, on the day of embarkation each emigrant is inspected by three separate medical officers of the emigration barracks, the medical officer of the Board of Trade, and the medical officer of the ship. For at least seven days these emigrants are under observation on shipboard, and, finally, are individually inspected by one or more medical officers at a Canadian or United States port. A procedure similar to that carried out at German seaports is carried out at British and at Italian seaports.

It is apparent, therefore, from what has been stated, both as regards statistics and methods of inspection, that remarkably few tuberculized immigrants have entered either country for a number of years past. This season a double line of inspection at Quebec has pushed the investigation further, and suspicious persons are detained and specially examined with results as set forth in the following table:

	Age and Sex	Nationality	Deported or Admitted	Bacilli in Sputum, or Cough	Tuberculin Test	Able to Work	Occupation
1. F. Fincham.....	18F	English	Deported	B. in sputum	.....	No	Cotton factory operative
2. E. J. Forbes.....	16F	English	Died in hospital	B. in sputum	.....	No	.....
3. M. Reece.....	17F	English	Admitted on bond	Cough	Positive	.....	No occupation
4. Fannie Kahler...	25F	English	Deported	B. in sputum	.....	No	Domestic
5. Jas. Hands.....	38F	English	Deported	Cough	Positive	.....	Laborer
6. Jas. Smedling....	28M	English	Admitted Condit'n'ly	.....	.....	.....	Clerk
7. Albert E. Skeet.	25M	English	Deported	Advanced Consumption	.....	.....	Bank clerk
8. A. Turnbull.....	36M	Scotch	Deported	B. in sputum	.....	.....	Coal heaver
9. T. W. Gray.....	28M	English	Deported	B. in sputum	.....	.....	Nickel polisher
10. W. O. Pilson....	26M	English	Deported	B. in sputum	.....	Sick 1 yr.	Missionary
11. M. A. Kinkaid..	17F	Scotch	Admitted	Cough	Positive	.....	No occupation
12. Sam Black.....	37M	Irish	Deported	Very emaciated; no cough	Positive	.....	Overseer in flax mill
13. Wm. Moseley....	24M	English	Deported	.....	.....	.....	.....
14. Harry I. Earl....	26M	English	Deported	Looked sick; cough	Positive	Poor physique	Laborer
15. Wm. Wilson.....	24M	English	Died in hospital	Pneumonia on ship; B. present	.....	.....	Plumber
16. Jas. Beire.....	22M	English	Deported	.....	Positive	.....	Pitter
17. W. Andrews.....	26M	Irish	In hospital	B. present	.....	.....	Commerc'l tr'v'r
18. M. Peplow.....	40F	English	Deported	B. present 3d stage	.....	Sick over a year	Housekeeper
19. Alb. H. Cook....	21M	English	Deported	B. present	.....	.....	Miner
20. Thos. Smith.....	17M	English	Still in hospital	Cough	Positive	.....	Laborer
21. Wm. Cameron...	22M	English	Deported	Had hemorrhage on ship	.....	.....	Bank clerk
22. Jas. McCabe.....	24M	Scotch	Still in hospital	Emaciated with cough	Positive	.....	.....
23. S. McGimpsey..	19M	Irish	Still in hospital	.....	.....	.....	House painter

It might be thought that with such a showing, I, as a medical officer of the Immigration Service of Canada, should be satisfied, and thus leave the matter; but the problem of tuberculosis in immigrants has today advanced to a further stage, and become a state and municipal health question which enters into all economic, social, and charitable questions, and demands much further consideration.

At the Congress on Tuberculosis in Washington in 1908, two somewhat remarkable papers were read, one by Dr. Maurice Fishberg, physician to the United Hebrew Charities of New York, on "Tuberculosis among the Jews," and one by Dr. Antonio Stella, of New York, on "Tuberculosis among Italians in the United States." These valuable papers are so well known that I shall refer only to such data in them as are pertinent to my subject.

Dr. Fishberg refers to the long-observed fact of the relatively small amount of tuberculosis amongst the Jewish race and discusses race immunity, inbreeding, the Kosher meat theory, and freedom from alcoholism; statistics prove that all of them enter but little, if at all, into the problem. He afterwards stated what to me is a very important scientific conclusion, containing as it does a sanitary lesson of the greatest possible meaning and value to all sanitary workers. He says: "Be that as it may, we know that on the whole tuberculosis displays no racial preferences. Within certain limits, depending on social conditions, the white, black, yellow, and red divisions of mankind are attacked by this disease in the same manner; and the variations observed in the frequency, type, and course of the disease in different groups of people are alike traceable to the same causes, irrespective of racial affinities. We know that the variations displayed by the various social groups of white humanity, such as the difference in the incidence of the disease between city and country dwellers, rich and poor, those engaged in indoor or outdoor occupations, those active in a dusty atmosphere as compared with such as are working in clean, airy shops, and the like, are just as great and often greater than the difference observed in the white, black, red, or yellow races.

"As I will show, these differences are due to social conditions and not to racial causes. * * * * * the incidence of tuberculosis among Jews depends more on their economic and social environment than on racial or natural affinities." Speaking of its prevalence in the Jews in New York, Dr. Fishberg says: "The Jews in the lower East Side are more orthodox, more strictly adhering to their faith and traditions, and still have a proportionately higher rate of mortality from tuberculosis than their co-religionists in Harlem, who as is characteristic of Jews all over, with their prosperity have more or less discarded many of their religious practices, the first of which consists in consuming meat not prepared according to the dietary laws."

In the paper of Dr. Stella it is pointed out that in 1890 the United States had only 182,500 Italians, while in 1908 the City of New York alone had 500,000, or 75% of the total population in that state, of whom nine-tenths were of the agricultural peasant class. Stella first points out that in Italy the deaths from tuberculosis were 1.64 per 1,000, but in Calabria, whence come most of the immigrants, the rate was only 0.9 per 1,000; but in New York the rate was 2.76 per 1,000 in 1906, compared with 1.49 for the whole city in the 1900 census. But as Stella says, "if this rate in New York should not appear so very excessive, I would direct you to the fact that only a certain portion of the Italian tuberculosis popula-

tion die in the district in which they have contracted the disease. Men and women in very destitute circumstances will sell all their belongings and without second thought start to their native towns."

Since the Medical Department of the Italian Commission d'Imigratione began to keep records in 1903, it has been found that "the proportion of tuberculous immigrants returning to Italy from North America has been increasing steadily every year."

In 1903 the proportion was 2.92 per 1,000
In 1904 the proportion was 2.75 per 1,000
In 1905 the proportion was 5.66 per 1,000
In 1906 the proportion was 5.61 per 1,000

"But this average only takes into account the advanced bedridden steerage passengers,"—so many return second and even first class to avoid supervision, and for social reasons, that Dr. Stella ventures the statement that 50% of the returning second-class passengers are suffering from tuberculosis. In 1906 the Italian reports showed 81,412 immigrants to have returned home, of whom 2,477 were sick, and of whom 441 had tuberculosis. Compare this with the fact that of 309,503 emigrants who left Italy for the United States in 1903 and 1904, there were only two cases of tuberculosis treated in the soip's hospiital, while amongs, 169,729 homeward bound from the United States during the same two years, there were 457 in hospital on ship, besides 17 who died at sea. Yet more exact in their bearing upon the problem we are considering are the details of a series of 800 cases specially studied by Dr. Stella on the basis of the number of years in America before the cases came to his notice. They were as follows:

Average from Arrival	From 1 to 3 Years	From 5 to 6 Years	From 6 to 10 Years	Total
Women	95	340	140	481
Men	74	87	155	319

Allowing for the usual anomalies in the sex and age of patients coming under the medical care of a single physician, the figures are valuable, since, as Dr. Stella says, "the shorter period (from one to three years) applies chiefly to young girls employed in tobacco factories, to seamstresses at home, and to young dressmakers or tailors. Two or three years of this existence in the workshops or tenement houses of New York are enough to render this human material a fertile soil for the growth of the tubercle bacillus."

"From the study of the 800 cases it results that about one-half (162 men, 230 women) had come to America when between fourteen and twenty-five years of age, being perfectly healthy at the time of their arrival * * * * * * but the changed and execrable surroundings, the unwholesome and crowded dwellings, the long hours spent in the factories, and the thousand privations imposed by poverty and the insane desire to save money,—all of this coupled with the overwork which is kept up until utter exhaustion, without the resistance obtained from food, proportionate to the demands of the exaggerated tissue waste and rapid growth of this period of life, shows only too clearly why so many youthful lives in America fall an easy prey to tuberculosis."

I find nowhere a more exact description of the conditions under which European immigrants who settle in the industrial centres of this continent are allowed to live; a more accurate statement of their living conditions would necessitate the study of the problem from the view-point of the immigrant. Everywhere we find America being held up to the people of Europe as the land of opportunity, where labor is abundant and its remuneration adequate. Dr. Fishberg estimates that 35% of all immigrant Jews in the United States are garment workers, and he points out the physical type of the sweatshop worker. Here in Canada we are rapidly coming to know the type, since in Montreal alone it is estimated that there are over 40,000 Jews, most of whom are engaged in this same class of work of which the Jewish manufacturers there proudly claim to have a monopoly. They have brought the practice with them from Europe and are not likely to change.

But though this be true, it does not alter the fact that it is ourselves, who through "*laissez faire*" permit Ghettos to grow up, and allow the competition of such cheap labor to make rapid and certain, the physical and moral degeneration not only of the immigrant, who comes asking only to be allowed to labor, but also of the whole class with whom he comes into competition.

We, in Canada, have at any rate recognized that it is to the land we wish our immigrants to go, and we have succeeded in a large degree in directing the newcomer to our agricultural lands, both in the old Provinces and in the newer territories. But this work of preventing urban degeneration, whether in the United States or Canada, must be taken up and dealt with on as systematic and business-like a scale as is the emigration propaganda in the cities and countries of the Old World. We see organizations being developed in Chicago and elsewhere for promoting the settlement of town dwellers on western irrigated lands and southern rice-fields; but my observation during the last twenty years has taught me that this

most vital of all social and sanitary questions will not be solved until the large civic centers of this continent shall have evolved a higher sense of municipal responsibility. While making municipal building regulations and town-planning schemes so practical and effective that overcrowding may be prevented by tenements, erected both by municipal and local philanthropic agencies, which if small and cheap are yet sanitary, they should further realize that organized civic schemes for settling the surplus population in the neighboring agricultural lands of their district will prove equally a social benefit, with many elements of financial success. What are now called "garden cities" in Europe are being established, as the beginning of a system which will begin to meet the demands of modern industrial conditions such as are found in England. If, on the one hand, steam and electricity have created the modern city and its problem, on the other, it is to the same agencies of rapid transportation that we must look for the solution of the civic problem of overcrowding; and we owe it to ourselves and yet more to the helpless foreigner who comes to us that we shall make life for him not more intolerable than in those eastern lands which we are inclined to believe effete.