STREET CLEANING AND HEALTH.

AT the convention of the Society of Street Cleaning and Refuse Disposal of the United States and Canada, held in New York City, October 9th to 13th, 1916, a paper, entitled "Health and Sanitation," dealt in interesting manner with the effect that scientific street cleaning has upon public health. The author was Mr. G. H. Hanna, of the Tiffin Wagon Co., Tiffin, Ohio, who is first vice-president of the society. Mr. Hanna was for sixteen years superintendent of streets of Cleveland, Ohio, and is well qualified to discuss street cleaning methods. Following is a brief abstract of some portions of Mr. Hanna's paper:—

Street cleaning and the disposal of city wastes have represented stumbling-blocks in the path of municipal progress for a majority of cities, and great credit attaches to the few on this continent who, through their fortunate or unfortunate contact with these problems, have been able to bring about the degree of progress which the past few years have witnessed.

I need not cite any dry statistics to convince this audience that city budget makers have too frequently designated the street cleaning department as a near relative of Kelly's goat, and have pruned its appropriation to the verge of criminality. I say criminality, because to impair the health of a city is criminal.

The cleanliness of a community is a pretty accurate barometer of its health. I am not a physician, and am not capable of adding anything to the controversy about the extent to which disease germs are transmitted by dust. I understand, in a general way, that there is less tendency to-day than there was a few years ago to attribute infection to dust-borne germs, although I think no one has gone so far as to deny that germ diseases in some instances are transmitted in dust. Further than this, I never heard of anyone claiming that dust was a benefit to health, or cleanliness a menace; and, leaving health out of the question, nobody wants filthy streets or dusty premises. Call it a mere sentiment if you will, but it is a sentiment that distinguishes the civilized man from his cave-dwelling ancestors.

And in relation to street cleaning cost, I want to point out that the most economical place in which to perform the street cleaning function is in the street. The same filth must be combatted somewhere, perhaps where it originates, perhaps where it is blown after lying neglected on the pavement. I recall a rhyme which appeared some years ago in an Ohio paper:—

"We have a cheap and novel way
To clean a city street.
The summer sun beats down all day;
The breezes fan it as they play
And blow the dust off neat.
The refuse of two thoroughfares
Is on our bric-a-brac and chairs
And in the food we eat."

Some plead for street cleaning funds as a justifiable luxury. I contend for them as a means of saving money in the performance of what must be performed by some means in any event.

I will not undertake a complete review of the various methods of street cleaning, most of which have their place in relation to the kind of pavement, traffic conditions, cost of labor, etc., which vary with the locality. My own experience as commissioner of street cleaning in Cleveland led emphatically to the conclusion that flushing, under favorable conditions, was the cheapest and most effectual method of cleaning that could be

devised. I collected statistics for some time as to the cost of cleaning various pavements by this method, and made some interesting discoveries, both as to the variation of cost on different surfaces and the relation of this variation in cost to the other charges that are customarily considered in choosing paving material.

The use of the flusher on a given street may vary from twice a week to a daily flushing, proportioned to the traffic. I would supplement flushing with a whitewing patrol system, in which the city is divided into sections with a suitable force of men assigned to each section. Every street should receive at least a daily visit from a man with a hand-sweeper and a pushcart. Flushing saves the time and energies of the sweeper, permitting him to work chiefly in the gutters. Where the traffic is light, the entire accumulation of refuse can be removed in his handcart, but for medium and heavily travelled streets, his function will be merely to sweep the accumulated refuse into piles along the curb, which a dump-wagon will collect. The administrative test of a good street cleaning superintendent lies in routing his flushers, his sweepers and his wagons to get the maximum result with the minimum effort and to avoid delays between the collection and removal of the wastes.

The handling of street wastes, garbage and other refuse materials is the ensuing problem. My own strong preference is for the early incineration of all such materials. A city with ideal equipment and organization should incinerate its wastes daily. To be sure, certain exponents of thrift tell us that there are valuable substances contained in these wastes which can be extracted to the profit of the community. I have not yet been convinced that the pittance which communities realize from the sale of wastes afford a sufficient offset to the dangers entailed in handling these wastes for profit. Reduction means delay and much handling. Admitting that men can be hired to do this kind of work, I still think it is a kind of work which they should not be encouraged to do. The continual exposure to infection on the part of a few men means the continual exposure of the entire community to the danger of an epidemic. The plagues of Europe are not such distant history that we can afford to ignore the possibility of just such disasters in America.

We all remember a few years ago, when garbage contracts in smaller municipalities were customarily taken by hog-raisers, who undertook to convert municipal garbage, collected at a profit, into pork, which could be sold for another profit. It was only when state veterinarians were compelled to kill thousands of diseased hogs and condemn other thousands of carcasses that the unprofitableness of this kind of profit became apparent. I think it is a fair type of the risks run by any community which fails to recognize in these substances just what they are: dangerous poisons, which are to be handled as little, and destroyed as quickly, as possible.

It appears that the London press is favorable to the English Channel tunnel project and that Premier Asquith, who recently received a deputation regarding it, is also in sympathy with the idea. Late in August it was announced in Paris that France had taken all the necessary steps to enter into negotiations with England for the joint construction of the tunnel. Plans were outlined by M. Sartiaux, chief engineer of the Nord Railway Company, who stated that the tunnel would cost £16,000,000. It is stated that the English Tunnel Company controls the right to construct tubes, and that the capital is subscribed and the initial boring well under way.