

means — by small steam jets or by the evaporation of water. It is sometimes covered with cloths during this stage to prevent drying too rapidly. The rest is a retarding process, and is intended to prevent the surface of the macaroni from drying too fast, and to allow the interior to harden. If the macaroni is not allowed to rest at this stage, it is liable to crumble or split. From the resting rooms it is carried to large spacious rooms that have thorough ventilation, either natural or artificial. It is estimated that for each man employed in the steam factories, about 170 to 200 pounds are produced per day.

#### REMARKS ON AN ACT FOR THE PREVENTION OF BLINDNESS.<sup>1</sup>

"SECTION 1. Should one or both eyes of an infant become reddened or inflamed at any time within four weeks after its birth, it shall be the duty of the midwife, nurse, or person having charge of said infant, to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town, or district in which the parents of the child reside.

"Section 2. Any failure to comply with the provision of this act shall be punishable by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both.

"Section 3. This act shall take effect on the first day of June, eighteen hundred and ninety-one."

This act for the prevention of blindness was passed by the last legislature [of Maine], and was signed by the Governor, March 28. The legislature of New York passed an act similar to this one last year, and was the first State to have a law of this nature upon its statute books. Maine follows the lead and has the honor of being the second State in the Union to have such a law.

It is intended to draw attention more forcibly to purulent inflammation of the eyes, known also as ophthalmia neonatorum or purulent inflammation of the new-born. This disease is always caused by contagion or infection. It will be seen at once that it can be placed among the preventable diseases, and therefore the prophylactic treatment is one of the most important and satisfactory problems in hygiene, because in a large majority of cases the disease can be prevented from spreading. If, however, the disease does spread, and is recognized upon its first appearance, we possess remedies that can be applied by any physician and the disease can be cured at once. It would seem, therefore, that we need some law to call attention to the importance of the early treatment of the infant's eyes that blindness may be prevented, for every blind person represents a certain loss of productiveness to the State, and many are throughout their lives dependent upon relatives or the public for support.

If from twenty to thirty per cent of blindness in the State is due to neglect of proper treatment of this disease, all will agree that it is time something was done to place the neglect of such treatment upon some responsible person. This act for the prevention of blindness will do another good thing by calling attention to the prophylaxis of this disease. Proper treatment will be instituted before and after the birth of the infant in order that the eyes may not become infected, and thus the sight of many will be saved. To indicate how efficient this treatment is, it might be mentioned that after Credé had devised his method of prophylaxis for this disease, he had only two cases in 1,600 infants, whereas, before he practiced his method he had 10.8 per cent of the infants affected with it, which in this instance would be equal to 160 infants, some of whom would become blind in spite of the best treatment then known. By Credé's method of prophylaxis and treatment for this disease no infant need become blind. This means the prevention of an enormous amount of misery and the saving of an enormous amount of productive energy in the United States, estimated at not less than \$7,500,000 each year. This enormous loss of wealth to the United States is due to the ravages of a disease as surely preventable as any in medicine. Dr. Burnett of Washington estimates that the disease costs the country more in ten years than all the epidemics of yellow-fever and cholera for the past hundred years.

Dr. E.E. Holt of Portland, Me., in The Sanitary Inspector.

To itemize this account, we find that the cost of keeping a single blind person in our best managed institutions is \$132 a year. This makes the cost of sustenance of our blind from this one disease alone about \$2,000,000. If we add to this sum what these blind persons would produce if they were not dependents, and reckon their productive wealth at \$1.00 per day on an average, we have the enormous sum of \$7,500,000. Maine having about one-fiftieth of the blind of the United States shares about one-fiftieth of the misery and loss of productive energy from this disease, which equals \$150,000, according to this estimate.

It is our duty to do something to prevent this misery and loss to the State. At the clinic of the Maine Eye and Ear Infirmary many of the bad results of this disease are seen, persons crippled for life, and these defects of the eye are classified under various names giving little or no idea of their origin. These clinics remind one, like those of similar institutions, that not one-half of the misery or loss of productiveness is represented by those who have lost their sight from this disease, for where one has been made blind by it many have been more or less seriously affected in one or both eyes, so that the course of their lives has been changed from one of probable comfort and usefulness to a miserable existence. The statistics do not include this numerous class of persons. But they, as well as those who have been made blind from this disease, appeal to our better nature to do something for them. It will need but a short time to cure the affection if the infant is brought, on the first appearance of the disease. We are backward in this country as compared with some European countries.

In London there is a society for the prevention of blindness which does good work by directing attention more forcibly to the causes which produce this unfortunate disease.

The Ophthalmological Society of the United Kingdom, which is composed of the ablest men from all parts of England, Ireland, and Scotland, took up this subject in 1884, and appointed a committee of the leading men of the society, who unanimously reported that it was a subject for governmental interference.

In Germany, France, and Switzerland stringent regulations have been adopted, which demand of the nurse or person having charge of an infant to report any reddened or inflamed condition of the eyes at once. Three years ago the American Ophthalmological Society appointed a committee to investigate this subject and make a report, which they did last year. They recommended that each member of the society do all he could to have laws enacted that would call the attention of the public, and particularly of those having charge of infants, to the great importance of early treatment of the eyes, should any inflammatory symptoms arise.

#### EXPERIMENTAL RESEARCHES ON MECHANICAL FLIGHT.

THE following is a translation of a communication made by Professor S. P. Langley to the Paris Academy of Sciences on July 13, and published in *Nature* of July 23:—

I have been carrying out some researches intimately connected with the subject of mechanical flight, the results of which appear to me to be worthy of attention. They will be published shortly in detail in a memoir. Meanwhile I wish to state the principal conclusions arrived at.

In this memoir I do not pretend to develop an art of mechanical flight; but I demonstrate that, with motors having the same weights as those actually constructed, we possess at present the necessary force for sustaining, with very rapid motion, heavy bodies in the air; for example, inclined planes more than a thousand times denser than the medium in which they move.

Further, from the point of view of these experiments and also of the theory underlying them, it appears to be demonstrated that if, in an aerial movement, we have a plane of determined dimensions and weight, inclined at such angles and moving with such velocities that it is always exactly sustained in horizontal flight, the more the velocity is augmented the greater is the force necessary to diminish the sustaining power. It follows that there will be increasing economy of force for each augmentation of velocity,