

IMPROVED FOLDING MIRROR.

In the folding mirror shown in the annexed engraving four sets of mirrors are attached to a single support, which is adapted to revolve on the vertical standard. Each set of mirrors consists of a stationary mirror and three hinged mirrors, two of which are at the ends of the stationary one, the third being hinged to the top so as to swing in a vertical plane. This mirror is provided with a hook, by which it may be secured at an angle of about forty-five degrees.

A person standing before this mirror will not only see a front view of the face, but will see side views in the lateral mirrors, and the upper mirror will reflect the image of the person foreshortened. Thus four different views may be had simultaneously. This invention is well adapted for use in the dressing room, and is especially useful in clothing and millinery shops or in other places where clothing is inspected or fitted.

Further information in regard to this invention may be obtained by addressing Mrs. C. McEvoy, P. O. Box 184, Millbury, Mass.

Improved Plan for Street Sprinkling.

At a recent meeting of the St. Louis Engineer Club, Col. Henry Flad explained a new device for sprinkling streets direct from the waterworks mains in a very rapid and efficient manner. The apparatus consists of three sections of four-inch wrought iron pipe connected between and at the ends with a hose and couplings, the pipe section being mounted on wheels for convenient transport. In connection with each section of pipe is arranged an automatic sprinkling nozzle, so adjustable that it can be readily adapted to any width of street. Half a block is sprinkled at a time, and ten blocks can be sprinkled in an hour. The connection being made with the waterworks mains insures a full head of water and very rapid and thorough work.

This system is specially intended for sprinkling residence streets at night. It will not answer at all for day sprinkling or for streets devoted to traffic. The estimated cost of this method is about one-tenth that of the present mode.

The Human Manufactory.

A man may eat and drink heartily all day, says an unknown writer, and sit and lounge about, doing nothing, in one sense of the word; but his body must keep hard at work all the time, or it will die. Suppose the stomach refused to work within ten minutes after a hearty dinner, the man would die in convulsions in a few hours; or cholera or cramp—colic would rack and wreck him. Supposing the pores of the skin—meaning thereby the glandular apparatus with which they are connected—should go on a "strike," he would in an hour be burning up with fever; oppression would weigh upon the system, and soon become insupport-

able. Suppose the liver became mulish, the appetite would be annihilated, food would be loathed, torturing pains would invade the small of the back, and the head would ache to bursting. Suppose the kidneys shut up shop, and danger most imminent, sufferings unbearable, and death more certain, would be the speedy and unenviable result. If the little workshops of the eye should close, in an hour he could not shut nor open them without physical force, and in another hour he would be blind; or if those of the tongue should close, it would become dry as a bone and stiff as steel.

prospect of success before the experiments of Dr. Siemens, in Berlin, in 1879, and the present extended experiments of Mr. Edison. It is a subject fraught with difficulties, and while it has always offered a seemingly promising field for inventors, the expense attending experiments of this class has been a most effectual barrier to progress.

Mr. Edison, more fortunate in this respect than many of our experimenters, has not been hampered by monetary difficulties, and having had ample means for carrying out his ideas in practice, he has been enabled to develop his inventions more rapidly perhaps than any other man living.

His new electric railway at Menlo Park is built over natural ground, with little or no grading, and with no regard for curves or grades. It is at present something over half a mile long, and is soon to be extended to form a mile circle. The present rolling stock consists of one electric locomotive and one open car. The general appearance of the railway and its equipments will be seen in our engraving. The motor is precisely like one of Mr. Edison's electrical generators, figured and described in our columns some time since, and the motive power is supplied by his stationary engine, the power being converted into electrical energy by a single generator.

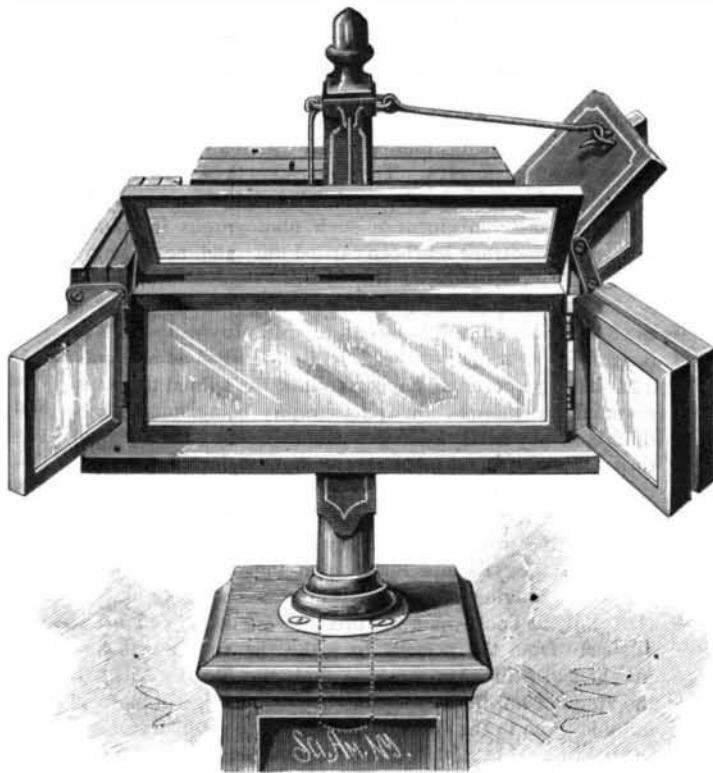
The current thus created is conveyed to the track by two copper wires, one wire being connected with each rail. The armature of the locomotive makes four revolutions to one of the drive wheels. The machine is managed about like a steam locomotive, and it pushes ahead with wonderful energy.

By invitation of Mr. Edison, representatives of this journal were present at a recent trial of this novel motor, and had the pleasure of riding, with some twelve or fourteen other passengers, at a break-neck rate up and down the grades, around sharp curves, over humps and bumps, at the rate of twenty five to thirty miles an hour. Our experiences were sufficient to enable us to see the desirableness of a little smoother road, and to convince us that there

was no lack of power in the machine. Mr. Edison says that he realizes in the locomotive seventy per cent of the power applied to the generator. He will soon add four more cars, and apply improvements which he has in contemplation.

This grand experiment is designed to test the applicability of the electric current to this purpose, and to develop a railway system suitable for plantations, large farms, and for mining districts, and perhaps it is not entirely visionary to expect that our street and elevated railways may at no very distant day be successfully operated by electricity.

When the motor is complete and the road thoroughly equipped, we hope to be able to present our readers with further details.

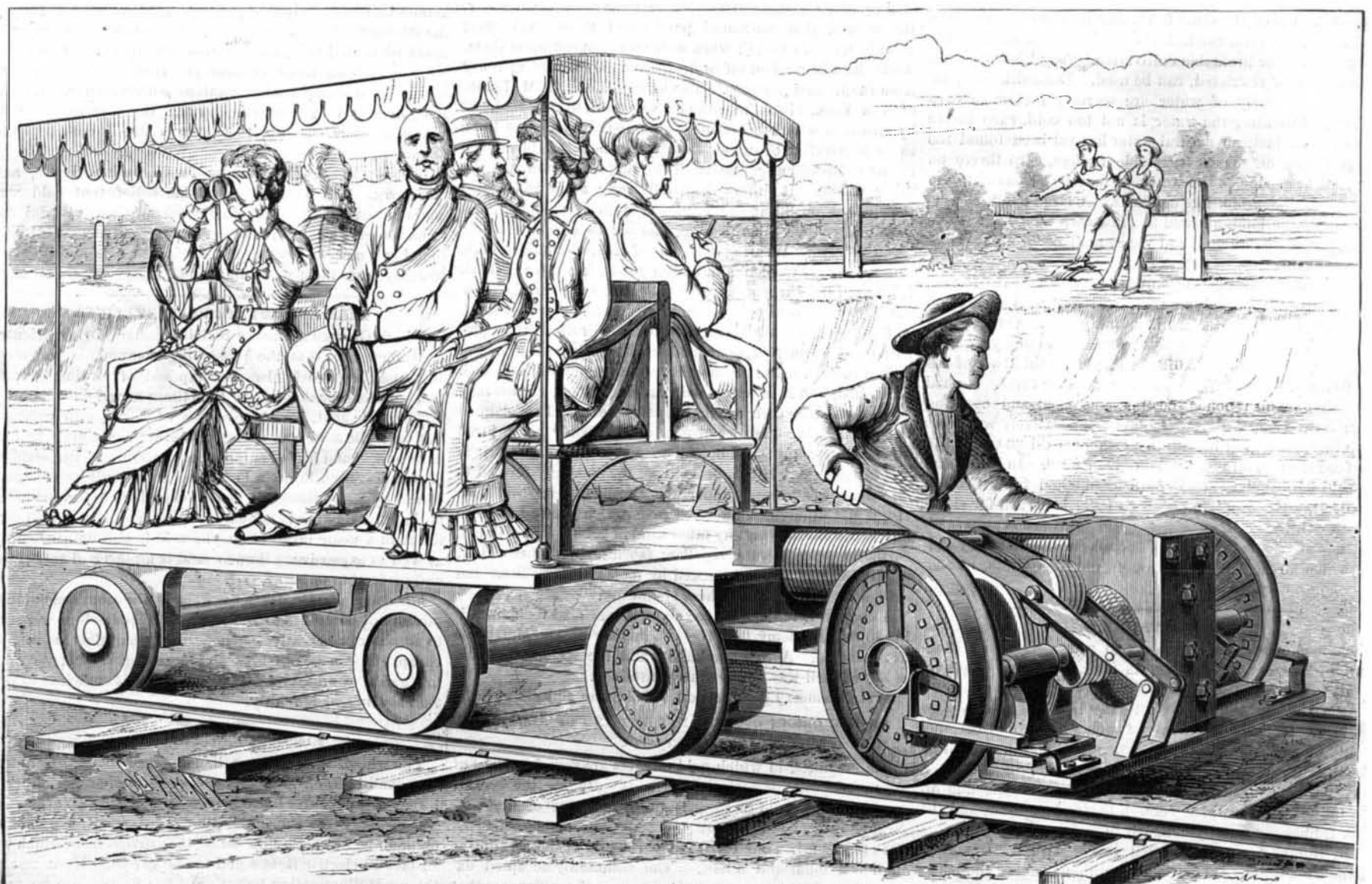


NOVEL FOLDING MIRROR.

To keep such a complication of machinery in working order for a lifetime is a miracle of wisdom; but to work them by the pleasures of eating and drinking is a miracle of beneficence.

EDISON'S NEW ELECTRICAL RAILWAY.

But for the chronic aptitude of this generation never to wonder at anything, we might expect to witness expressions of surprise as it becomes known that we are to be whisked through the country at the rate of thirty, forty, or fifty miles an hour by an agent invisible and unknown save by its effects; but the moment electricity is suggested as a motive power for railways, the never-to-be-surprised public say "Why not?" Nevertheless the practical application of the electric current to this purpose seems never to have had a



EDISON'S ELECTRICAL RAILWAY.