



MISS MARY HEUSSMAN, THE BRIDE.
From a Photo. by Holler, San Francisco.



MR. FELIX DRAPINSKI, THE FIRST MAN ON RECORD TO
BE MARRIED BY HIS MOTHER-IN-LAW.
From a Photo. by Goden's Art Studio, San Francisco.

"Who is nearer to a daughter than her own mother? Who is more concerned in her future happiness, and who therefore could more appropriately give her to her husband?"

"Of course the marriage is as valid and as binding in the sight of the law as if solemnized by a male preacher or a Justice of the Peace.

"It was a beautiful wedding, and everyone

was satisfied and happy; I, because I had been able to be with my daughter and to have part in the greatest event in her life; she, because she preferred me of all people to unite her in marriage; and Felix, because he felt that the fact that I officiated in the ceremony which made my own flesh and blood his wife was proof of my confidence in him and his ability to make her happy."

II.—AN ELECTRIC MAN.

By W. B. NORTHROP.

AMERICAN ingenuity is ever striving for startling effects. It is never satisfied. Ordinary achievements seem beneath its attention. It looks beyond, even if the object of its aim be more or less fantastic.

One of the latest freaks of mechanical skill is the construction, by Louis Philip Perew, of Tonawanda, New York—a small town near Niagara Falls—of a gigantic man. Perew, with all the ardour of a modern Frankenstein, has endeavoured to make his man as life-like in appearance as possible. Not only is its outward form a close model of a human being, but within it have been secreted mechanical devices which endow the automaton with weird properties, making it even more nearly resemble an intelligent being.

Nikola Tesla recently constructed a machine called the Telaumaton. It did everything but think. Perew has out-Teslaed Tesla. The great electrician's device bore no resemblance to a human being. It was devoid of the human body as a medium through which to operate.

The Frankenstein of Tonawanda has brought into existence a thing of wood, rubber, and metal, which walks, talks, runs, jumps, rolls its eyes—imitating to a nicety almost every action of the original on which it is founded. All that is lacking is the essential spirit—the Promethean fire, as it were—which would enable one to say to the automatic creature, "Thou art a man."

For several years Mr. Perew has been engaged in inventing various appliances. He is more or less skilled in all branches of mechanical work, and his mind teems with ideas which are often as astonishing as they are original.

As far back as 1891 the inventor of the present automatic man constructed a small working model embodying his ideas. It was a little figure of wood. It was 2½ ft. in height, and attached to a small cart. The little figure drew the waggon about, and many persons wondered at the ingenuity of the man who could invent so novel a machine. Then the inventor conceived the idea of building a still more remarkable

figure. If the small model could be made to work, there was no reason why a life-sized figure would not do equally as well as, or even better than, the smaller machine.

Capitalists in Mr. Perew's own town became convinced that money could be made out of the automatic figure, if it were constructed on an enlarged scale.

At first imagination rather ran riot as to the possible uses to which the machine-man could be put. It could be made to carry loads in places inaccessible to ordinary vehicles with wheels; it could ascend heights impossible to men; it could walk distances which would weary the most skilful pedestrian; it could be made to do a thousand and one things which men of flesh and blood would shrink from.

Perhaps, in time, imagination suggested, it could become a fighting appliance, carrying death and destruction in its machinery. Guided by electrical wires, why should not a man of this kind be sent out as a carriage for a species of rapid-fire gun? Protected by bullet-proof clothing, it would prove a fearless and dangerous foe. If the body could be made to move at certain angles the aim of the automaton could be directed by an operator concealed and protected from harm. Why not?

In cogitating over all these possibilities Mr. Perew saw for his automaton a brilliant future. The difficulty now was to convince others that his ideas could be made to work.

With his wooden model he applied to one capitalist after another, endeavouring to raise sufficient money to carry out his ideas in a practical manner. At length he succeeded

in interesting Mr. Charles A. Thomas, a moneyed man who resided in Cleveland, Ohio. Mr. Thomas purchased an interest in the patent rights which had been secured by Perew, and, before long, a regular company was formed. It was known as the United States Automaton Company, the main offices of which were situated in Buffalo, New York State.

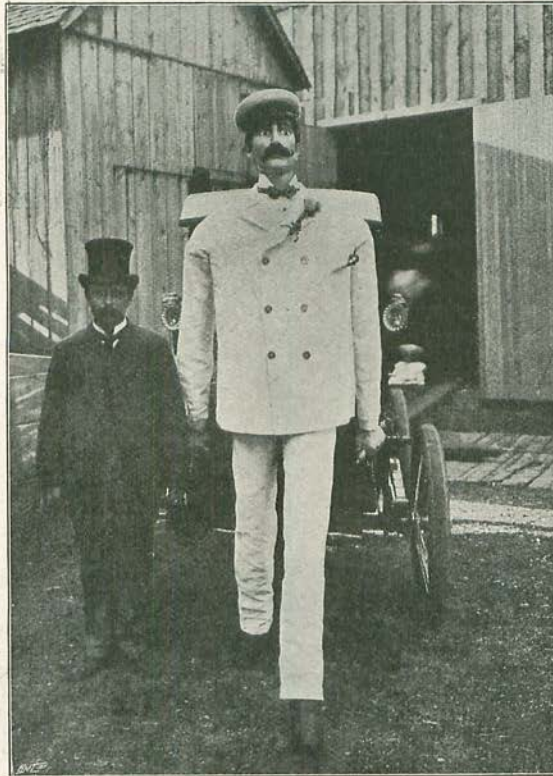
It is understood that a great deal more money is behind the enterprise. It is even said that the company will soon be manufacturing automatons for shipment to all parts of the world.

The first shipment outside the United States will be made to England. Perhaps, before many months have passed, Londoners may awaken some fine morning to see a man of Titan build hurrying through the streets drawing an omnibus. It might not be even amiss to suggest, in advance, a title for the 'bus line—how would the "Frankenstein Express" answer?

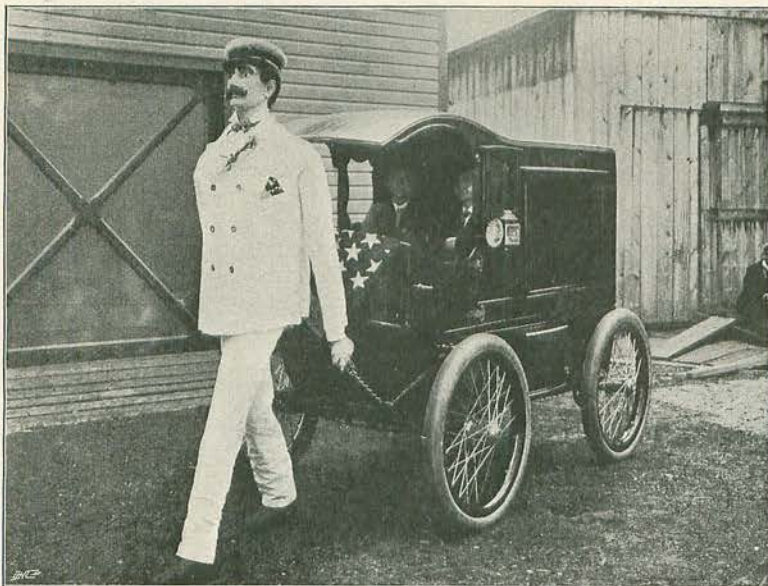
Can such a motive-power be operated cheaper than an ordinary automobile? Is it better than horse-flesh?

Would it be allowed on the city streets? Would it not endanger life from causing horses to run away? Would it not prove too great a shock to children and nervous women? These are questions which can only be answered after actual experimentation.

The building of the great automaton has been done in much secrecy. Mr. Perew did not wish his work to be talked about before it was well nigh completion. He thought people might conclude that he was a crank without practical aim. Now, however, that



THE AUTOMATON AND ITS INVENTOR, M. LOUIS PHILIP PEREW.
From a Photo. by Oscar A. Simon & Bro., Buffalo, N. Y.



THE AUTOMATON DRAWING THE VAN, WITH MESSRS. MICHAELS AND DESCHINGER INSIDE.
From a Photo. by Oscar A. Simon & Bro., Buffalo, N.Y.

the automaton is a finished work—satisfactory in every way to the inventor and to those associated with him—he has permitted inspection.

On first sight of the automaton one is impressed with the exceedingly life-like appearance of the novel object. Were it not for the abnormal height—7ft. 5in.—one would almost mistake the figure for that of an actual man. It is true there is a sort of woodenness about the face which betrays its nature; but, for that matter, many human faces are “wooden” in expression. The figure is clothed in a huge suit of white duck, and in its coat—a rather fantastic decoration, to my judgment—is a pretty *bouttonnière*. On the man’s enormous head is a cap of Brobdingnagian proportions. Never before was so large a hat turned out by any manufac-

turer. It is made of white duck, like the suit.

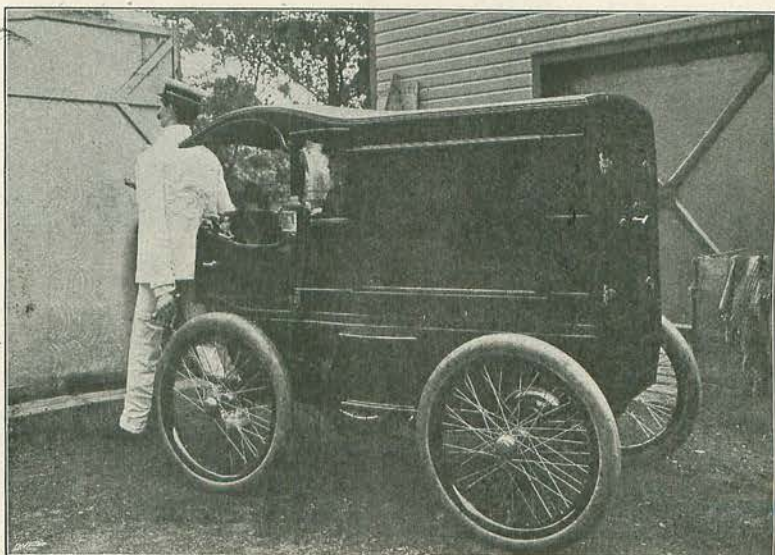
The feet of the machine-man are of gigantic mould. It wears a shoe the size of which is $13\frac{1}{2}$. Within the shoe the feet are composed of inflated rubber.

One of the most striking objects about the man are the hands. They are more true to life than any other portion of the figure. The skin effect is marvellous. The hands are bronzed, as if from exposure and hard work, and

this delusion is still farther carried out in many minute particulars. Ordinarily, these hands are shown grasping metal rings, attached to chains, which in turn are connected with the small waggon which the figure draws.

Seen in a position of rest, the figure of the automaton does not strike one as being especially life-like. It lacks the muscular repose of the human body.

But when this figure is put in motion by



THE BACK VIEW OF AUTOMATON, SHOWING THAT NO CONNECTION EXISTS BETWEEN IT AND THE VAN EXCEPT CHAINS AND METAL TUBE.

From a Photo. by Oscar A. Simon & Bro., Buffalo, N.Y.

means of its interior mechanism the resemblance to a living man is very striking.

At request Mr. Perew, the inventor, put the figure through its "paces." The exhibition took place in a large hall in Tonawanda. At first the automaton took a slightly undecided step, advancing the right foot and bringing it down with a little jolt. This movement was accompanied by a slight whirring noise, as if clockwork had been set in motion. With the right foot planted in advance, the figure then raised itself slightly on the ball of the foot; drew up the left foot, advanced it, and placed it down with a somewhat more easy motion than the first movement. Then the figure began to walk. It walked smoothly, and almost noiselessly. The tread was light, firm, and elastic. Twice the figure made the circumference of the hall without stopping. It was controlled by means of an electric battery. The walk was rapid, and at the end of the journey around the hall the step was as resilient as at the beginning. The inventor of the machine-man said it could keep up that pace for an almost unlimited time. But the figure, on this

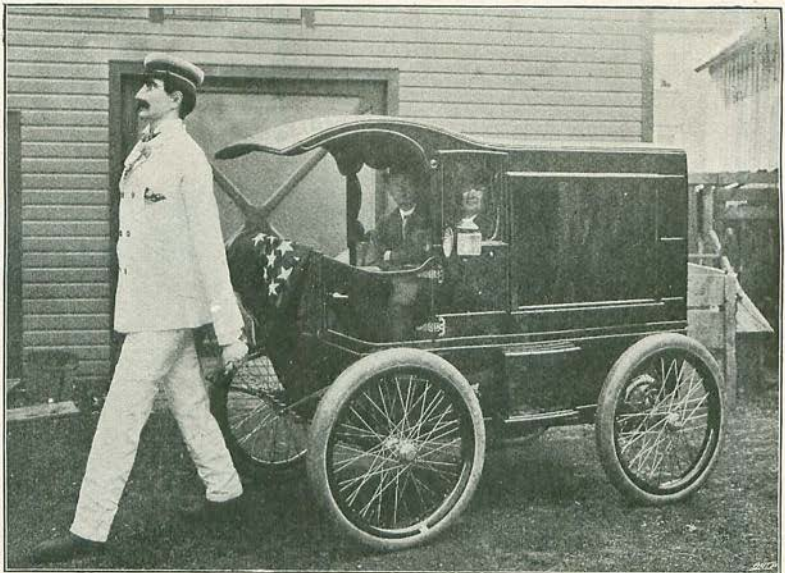
question, spoke for itself. "I am going to walk from New York to San Francisco," it said, distinctly, in a deep, clear voice. The voice sounded as if it proceeded from a megaphone. Within the bosom of the automaton is concealed a talking machine. Perew's man may be taught to say anything.

The boast of the strange creation of the inventor's mind is said to be a perfectly reasonable one. It has been announced by the United States Automaton Company that, before long, they intend starting the figure out on its walk across the Continent. It will draw behind it a light waggon, in which will be seated Messrs. Fred Michaels and J. A. Deschinger.

The inventor claims that he can make the figure move at the rate of twenty miles an

hour, or 480 miles for the day's run. This twenty-mile-an-hour rate of speed allows for three stoppages out of each day, an hour's time being allowed for each stop. A fast train between New York and San Francisco accomplishes the 3,250 miles between the two points in 124½ hours. The automatic man, travelling the same distance, would take 162½ hours—or only thirty-eight hours slower than the fastest train. Not a bad record for a pedestrian, by the way!

When the automaton had been made to walk around the hall in which it is kept the inventor caused it to do some feats which, to an ordinary onlooker, seemed impossible for the performance of an insensate thing.



THE AUTOMATON TAKING A MORNING STROLL.
From a Photo. by Oscar A. Simon & Bro., Buffalo, N.Y.

A large block of wood was placed in the path of the machine, and when it came to this obstruction it stopped, rolled its eyes in the direction of the obstacle, as if calculating how it could surmount it. It then deliberately raised the right foot, placed it upon the object, and stepped down on the other side. The motion seemed uncannily realistic. You almost feel like shrinking from before those rolling eyes. The visionless orbs are operated by means of clock-work situated within the head.

Inventor Perew has closely concealed from view the interior mechanism of his automatic man. The skin of the man, however, is made of aluminium, this metal being chosen on account of its lightness. The man is supported within by a strong steel frame-

work, and the interior doubtless contains an electric storage battery. In the small of the back of the figure is a small metal tube about one-half inch in diameter. Into this tube, which connects with the operator seated in the automobile waggon behind the figure, runs the current which guides the figure through its various movements. No connection between the figure and the automobile exists—other than the chains already mentioned and the little tube. The power in the figure is supplied within itself.

Were the inventor of the strange mechanical man a crank, and all of his ideas only on

paper, little attention might be paid to his fantastic notions. But Mr. Perew seems eminently practical. Besides, he has associated with him in his enterprise a number of level-headed business men who would not spend a penny unless they were able to see the money coming back to them at no distant time, and with increased interest.

The turning out of automatons of the same build and construction as the first model will soon be in progress. Perew has already realized a decided triumph, so far as mechanical detail goes. The utility of the project now remains to be demonstrated.

III.—PHOTOGRAPHING THROUGH A MAN'S BODY.

DR. J. W. KIME, of Fort Dodge, Iowa, has succeeded in taking photographs by a camera, part of which is composed of a human body. The doctor began experimenting several years ago upon the theory that such photographs could be obtained, but did not succeed in producing his first

pass through the body as what are known as the X-rays do in medical examinations. I was successful in transmitting these rays, and then conceived the idea of making photographs through a man's body. Making arrangements with a local photographer for the use of his rooms, I secured a



TAKING A PHOTOGRAPH THROUGH THE BODY. SHOWING THE REFLECTOR THROWING THE RAYS UPON THE SUBJECT'S CHEST. [Photograph.]

pictures until August last. Here is his story as told for the readers of THE STRAND:—

“I began making experiments with the view of ascertaining if what are known as the actinic or chemical rays of the sun would

‘subject’ in a man weighing about 150lb. and in fairly good health. He was taken into the dark room and the ‘camera’ made up as follows: A transparency of a scene in one of the Klondike valleys was